

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Application of Southern California Gas Company
(U 904 G) and San Diego Gas & Electric Company
(U 902 G) For Authority To Recover North-South
Project Revenue Requirement In Customer Rates
And For Approval Of Related Cost Allocation And
Rate Design Proposals

Application 13-12-013

**PROPONENT'S ENVIRONMENTAL ASSESSMENT
NORTH-SOUTH PROJECT
(VOLUME 1 OF 2)**

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LIST OF ACRONYMS AND ABBREVIATIONS

Acronym	Definition
µg/L	micrograms/liter
AB	Assembly Bill
ACOE	U.S. Army Corps of Engineers
amsl	above mean sea level
API	American Petroleum Institute
APM	Applicant Proposed Measures
AQMP	Air Quality Management Plan
ATCM	Airborne Toxic Control Measure
BCAP	Biennial Cost Allocation Proceeding
BLM	U.S. Bureau of Land Management
BTS	Backbone Transportation Service
CAAQS	California Ambient Air Quality Standards
CAFÉ	Corporate Average Fuel Economy
Cal/OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CGS	California Geological Survey
CMP	Congestion Management Plan
CO	carbon monoxide
CO ₂	carbon dioxide
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CVMSHCP	Coachella Valley Multiple Species Habitat Conservation Plan
CVAG	Coachella Valley Association of Governments
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DBH	diameter at breast height
District	San Bernardino County Flood Control District
DTSC	Department of Toxic Substances Control
EIC	Eastern Information Center
EIR	environmental impact report
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
FPPA	Farmland Protection Policy Act
GHG	greenhouse gas
GIS	geographic information system
GWP	global warming potential

Acronym	Definition
HCA	high consequence area
HCP	habitat conservation plan
HDD	horizontal directional drilling
HFC	hydrofluorocarbon
HFHSZ	high fire hazard severity zone
HP	horsepower
I-	Interstate
ICC	International Code Council
IFC	International Fire Code
ITP	incidental take permit
Ldn	day/night average sound level
Leq	equivalent sound level over a given time period
MAOP	Maximum Allowable Operating Pressure
MBTA	Migratory Bird Treaty Act
MDAB	Mojave Desert Air Basin
MDAQMD	Mojave Desert Air Quality Management District
MFHSZ	moderate fire hazard severity zone
mg/kg	milligrams/kilogram
MILC	Memorandum in Lieu of Contract
MMcfd	million cubic feet per day
mpg	miles per gallon
mph	miles per hour
MRZ	Mineral Resource Zone
MMT CO2E	million metric tons of carbon dioxide equivalent
MT CO2E	metric tons of carbon dioxide equivalent
N2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NF3	nitrogen trifluoride
NHD	National Hydrography Dataset
NHTSA	National Highway Traffic Safety Administration
NOAA	National Oceanic and Atmospheric Administration
NO2	nitrogen dioxide
NOx	oxides of nitrogen
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O3	ozone
OFO	Operation Flow Order
OHP	California Office of Historic Preservation
OSHA	Occupational Safety and Health Administration
PCE	tetrachlorethene
PEA	Proponent's Environmental Assessment
PFC	perfluorocarbon
PG&E	Pacific Gas & Electric Company
PM2.5	fine particulate matter

Acronym	Definition
PM10	coarse particulate matter
psig	pounds per square inch gauge
RCRA	Resource Conservation and Recovery Act
RFO	request for offers
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SBAIC	San Bernardino Archaeological Information Center
SCAB	South Coast Air Basin
SCADA	supervisory control and data acquisition
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison Company
SDG&E	San Diego Gas & Electric Company
SF6	sulfur hexafluoride
SKR HCP	Stephens' Kangaroo Rat Habitat Conservation Plan
SoCalGas	Southern California Gas Company
SONGS	San Onofre Nuclear Generation Station
SR	State Route
SSAB	Salton Sea Air Basin
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
U.S.C.	United States Code
USA	Underground Service Alert
USDA	U.S. Department of Agriculture
USFS	U.S. Forest Service
USGS	U.S. Geological Survey
UWMP	urban water management plan
VHFHSZ	very high fire hazard severity zone
VOC	volatile organic compound
WRCMSHCP	Western Riverside County Multiple Species Habitat Conservation Plan

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1 PEA SUMMARY

This Proponents Environmental Assessment (PEA) has been prepared by the Southern California Gas Company (SoCalGas) and San Diego Gas & Electric (SDG&E) (SoCalGas and SDG&E are collectively referred to as “Applicant”) to the California Public Utilities Commission (CPUC) in response to the CPUC’s Scoping Memo and Ruling dated May 5, 2014. This PEA includes the information required by the State of California Public Utilities Commission Information and Criteria List, including Appendix B, Section V.

1.1 Background

SoCalGas and SDG&E are proposing to construct the North–South Project (Proposed Project) to maintain reliability and alleviate the potential for curtailments of customers served by a portion of the Applicant’s transmission system known as the “Southern System” due to a potential discrepancy between customer demand and the volume of flowing supplies delivered to the Southern System to meet that demand. Unlike other parts of SoCalGas’ system, the Southern System requires minimum flow volumes at the Blythe and/or Otay Mesa receipt points to maintain service to its customers in the Imperial Valley and San Diego load centers and other communities in San Bernardino and Riverside Counties. The Proposed Project would create a pipeline interconnection allowing the Applicant to efficiently transport 800 million cubic feet per day (MMcfd) of natural gas supplies into the Southern System from interstate and intrastate receipt points located outside of the Southern System. These additional receipt points include North Needles, South Needles, Kramer Junction, Wheeler Ridge, and Kern River Station (as shown on Figure 1-1) and storage supplies from the SoCalGas Honor Rancho natural gas storage facility.

1.2 Project Description

The primary components of the Proposed Project include the construction a 36-inch-diameter transmission pipeline comprised of the Adelanto to Moreno pipeline and the Moreno to Whitewater pipeline and the rebuilding of the Adelanto Compressor Station. Total pipeline length for the Adelanto to Moreno pipeline and the Moreno to Whitewater pipeline would be approximately 95 miles. The pipeline would be primarily constructed within existing public and private rights-of-way (for a depiction of the pipeline alignment, see Figure 1-2). The Adelanto to Moreno pipeline would be approximately 63 miles in length and would begin at the Adelanto Compressor Station in the high desert city of Adelanto and would proceed in a southerly direction through the Cajon Pass and the San Bernardino National Forest, terminating at the Moreno Pressure Limiting Station in the City of Moreno Valley. A second pipeline section, approximately 32 miles in length, would continue eastward from the Moreno Pressure Limiting Station, terminating at the Whitewater Pressure Limiting Station in the City of Palm Springs. The Adelanto Compressor Station would be rebuilt with approximately 30,000 horsepower (HP) of compression in order to accommodate the design throughput. Additional Proposed Project components include: (i) installation of additional pressure limiting equipment at Moreno Pressure Limiting Station and Whitewater Pressure Limiting Station and (ii) upgrades to existing pressure limiting equipment at the Shaver Summit Pressure

1 PEA Summary

Limiting Station near the City of Indio and at the Desert Center Compressor Station near the community of Desert Center.

The Applicant anticipates that the Proposed Project would include construction activities within the following cities and counties: Adelanto, Victorville, San Bernardino, Colton, Loma Linda, Moreno Valley, Beaumont, Banning, Palm Springs, San Bernardino County and Riverside County. Construction would also occur on lands subject to U.S. Forest Service (USFS) and U.S. Bureau of Land Management (BLM) jurisdiction. The Applicant anticipates that environmental review for the Proposed Project would include the preparation of an environmental impact report / environmental impact statement (EIR/EIS) in accordance with the California Environmental Quality Act (CEQA) and NEPA. A summary Proposed Project schedule is set forth in Figure 1-3 and is consistent with the timelines and requirements set forth in the Scoping Memo dated May 5, 2014.

1.3 Purpose and Need

The Applicant has evaluated a number of potential non-physical solutions to the supply-related Southern System cost and reliability issues.¹ However, none of these potential non-physical solutions provide the same level of reliability as the Proposed Project. The Applicant's customers would continue to be at risk of curtailment if supply interruptions occur on one or more of the interstate pipelines connected to the utilities system. Currently, interruptions with upstream supplies on the El Paso pipeline system could result in curtailments for Southern System customers, including electric generation customers. Access to supplies from SoCalGas' storage and other receipt points to the Southern System would only be achieved through physical upgrades, as proposed in the North-South Project.

1.4 Environmental Impacts

This PEA evaluates the environmental impacts of the Proposed Project in accordance with the CPUC's Information and Criteria List. A summary of the potential environmental impacts associated with the Proposed Project is provided in Table 1-1

¹ While cost is a factor being considered by the Applicant in A.13-12-013, it is not the primary consideration for the Proposed Project.

**Table 1-1
Summary of Potential Environmental Impacts**

Environmental Topic	Impact Before Applicant Proposed Measure(s)	Applicant Proposed Measure(s)	Level of Significance After Applicant Proposed Measures
<i>Aesthetics/Visual Resources</i>			
a. Scenic vista effects	Potentially Significant	APM-AES-1, Implementation of Revegetation and Restoration Plan APM-AES-2, Block Valve Locations	Less than Significant
b. Scenic resource damage	Potentially Significant	APM-AES-1, Implementation of Revegetation and Restoration Plan APM-AES-2, Block Valve Locations	Less than Significant
c. Visual quality/character degradation	Potentially Significant	APM-AES-1, Implementation of Revegetation and Restoration Plan APM-AES-2, Block Valve Locations	Less than Significant
d. New source of light or glare	Less than Significant	None	N/A
<i>Agricultural Resources</i>			
a. Convert farmland shown in Farmland Mapping and Monitoring Program maps to non-agricultural use	No Impact	None	N/A
b. Conflict with existing agricultural zoning or a Williamson Act contract	No Impact	None	N/A
c. Conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland production zones	No Impact	None	N/A
d. Loss of forest land or conversion of forest land to a non-forest use	No Impact	None	N/A
e. Changes in existing environment resulting in conversion of farmland or forest land	No Impact	None	N/A
<i>Air Quality</i>			
a. Conflict with or obstruct implementation of air quality plan	Less than Significant	None	N/A
b. Violate air quality standards or contribute substantially to an existing or projected air quality violation	Potentially Significant	APM-AIR-1, Construction Fugitive Dust Control Plan APM-AIR-2, Construction Emissions Analysis APM-AIR-3, Existing Operational Emissions of the Adelanto Compressor Station	Potentially Significant
c. Cumulatively considerable net increase in criteria pollutants for which the project region is in non-attainment under an applicable federal or state ambient air quality standard	Potentially Significant	APM-AIR-2, Construction Emissions Analysis APM-AIR-3, Existing Operational Emissions of the Adelanto Compressor Station	Potentially Significant
d. Expose sensitive receptors to substantial pollutant concentrations	Potentially Significant	APM-AIR-3, Existing Operational Emissions of the Adelanto Compressor Station APM-AIR-4, Sensitive Receptors	Less than Significant
e. Objectionable odors	Less than Significant	None	N/A
<i>Greenhouse Gases</i>			
a. Generate greenhouse gas emissions that may have a significant impact on the environment	Potentially Significant	APM-AIR-2, Construction Emissions Analysis APM-AIR-3, Existing Operational Emissions of the Adelanto Compressor Station	
b. Conflict with applicable plans, policies, or regulations adopted to reduce greenhouse gas emissions	Potentially Significant	APM-AIR-5, Local Climate Action Plans	
<i>Biological Resources</i>			
a. Substantial adverse effect on a species identified as a candidate, sensitive, or special status species by local, state, or federal plans and policies	Potentially Significant	APM-BIO-1, Biological Surveys APM-BIO-2, Preconstruction Surveys APM-BIO-3, Biological Monitoring APM-BIO-4, Minimize Disturbance to Native Vegetation APM-BIO-5, Establish Environmentally Sensitive Areas APM-BIO-6, Avoidance of Vernal Pools APM-BIO-7, Revegetation of Temporarily Disturbed Areas	Less than Significant

**Table 1-1
Summary of Potential Environmental Impacts**

Environmental Topic	Impact Before Applicant Proposed Measure(s)	Applicant Proposed Measure(s)	Level of Significance After Applicant Proposed Measures
		APM-BIO-8, Avoidance and Minimization of Impacts to Jurisdictional Waters APM-BIO-9, BMPs for Avoidance and Minimization of Impacts to Special-status Wildlife Species APM-BIO-10, Worker Environmental Awareness Program (WEAP) APM-BIO-13, Nesting Bird Management Plan APM-BIO-14, Preconstruction Plant Surveys APM-BIO-15, Arroyo Toad Avoidance APM-BIO-16, Condor Avoidance APM-BIO-17, Mohave Ground Squirrel Avoidance APM-BIO-18, Listed Kangaroo Rat Avoidance APM-BIO-19, Coastal California Gnatcatcher Avoidance APM-BIO-20, Riparian Birds Avoidance APM-BIO-21, Avoidance of Desert Tortoise APM-BIO-22, Endangered Species Permits APM-BIO-23, Avoidance of Special-Status Plants APM-BIO-24, Burrowing Owl Avoidance and Mitigation APM-BIO-25, Raptor Nest Avoidance APM-BIO-26, Avoidance of Other Special-status Wildlife APM-BIO-27, Compensation for Sensitive Vegetation Communities, Habitat, and Plants	
b. Substantial adverse effect on riparian habitats or other sensitive natural communities identified in local, state, or federal plans and policies	Potentially Significant	APM-BIO-1, Biological Surveys APM-BIO-4, Minimize Disturbance to Native Vegetation APM-BIO-5, Establish Environmentally Sensitive Areas APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-27, Compensation for Sensitive Vegetation Communities, Habitat, and Plants	Less than Significant
c. Substantial adverse effect on federally protected wetlands	Potentially Significant	APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-8, Avoidance and Minimization of Impacts to Jurisdictional Waters APM-BIO-27, Compensation for Sensitive Vegetation Communities, Habitat, and Plants	Less than Significant
d. Interfere substantially with movement of native resident or migratory species or with established wildlife corridors, or impede the use of native wildlife nursery sites	Potentially Significant	APM-BIO-13, Nesting Bird Management Plan	Less than Significant
e. Conflict with local policies protecting biological resources, such as a tree ordinance	Potentially Significant	APM-BIO-1, Biological Surveys APM-BIO-5, Establish Environmentally Sensitive Areas APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-8, Avoidance and Minimization of Impacts to Jurisdictional Waters APM-BIO-11, Treat Cut Tree Stumps with Sporax APM-BIO-12, Weed Control Plan APM-BIO-28, Regulated Trees	Less than Significant
f. Conflict with provisions of an adopted local, regional, or state habitat conservation plan	Potentially Significant	APM-BIO-1, Biological Surveys APM-BIO-2, Preconstruction Surveys APM-BIO-3, Biological Monitoring APM-BIO-4, Minimize Disturbance to Native Vegetation APM-BIO-5, Establish Environmentally Sensitive Areas APM-BIO-6, Avoidance of Vernal Pools APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-8, Avoidance and Minimization of Impacts to Jurisdictional Waters APM-BIO-9, BMPs for Avoidance and Minimization of Impacts to Special-status Wildlife Species	Less than Significant

**Table 1-1
Summary of Potential Environmental Impacts**

Environmental Topic	Impact Before Applicant Proposed Measure(s)	Applicant Proposed Measure(s)	Level of Significance After Applicant Proposed Measures
		APM-BIO-10, Worker Environmental Awareness Program (WEAP) APM-BIO-11, Treat Cut Tree Stumps with Sporax APM-BIO-12, Weed Control Plan APM-BIO-13, Nesting Bird Management Plan APM-BIO-14, Preconstruction Plant Surveys APM-BIO-15, Arroyo Toad Avoidance APM-BIO-16, Condor Avoidance APM-BIO-17, Mohave Ground Squirrel Avoidance APM-BIO-18, Listed Kangaroo Rat Avoidance APM-BIO-19, Coastal California Gnatcatcher Avoidance APM-BIO-20, Riparian Birds Avoidance APM-BIO-21, Avoidance of Desert Tortoise APM-BIO-22, Endangered Species Permits APM-BIO-23, Avoidance of Special-Status Plants APM-BIO-24, Burrowing Owl Avoidance and Mitigation APM-BIO-25, Raptor Nest Avoidance APM-BIO-26, Avoidance of Other Special-status Wildlife APM-BIO-27, Compensation for Sensitive Vegetation Communities, Habitat, and Plants APM-BIO-29, Urban/Wildlands Interface Guidelines APM-BIO-30, Consistency with Habitat Conservation Plans	
<i>Cultural Resources</i>			
a. Substantial adverse change in the significance of a historical resource as defined in §15064.5	Potentially Significant	APM-CUL-1, Coordination with Native Americans tribes and individuals APM-CUL-2, Consultation with local historical societies and other repositories of information regarding cultural resources of the historical period APM-CUL-3, Cultural Resources Survey APM-CUL-4, Evaluation of Identified Cultural Resources APM-CUL-5, Access Effects of the Project on Historical Resources APM-CUL-6, Treatment Plan of Historical Resources APM-CUL-7, Unanticipated Discovery Plan for Cultural Resources APM-CUL-8, Treatment of Human Remains	Less than Significant
b. Substantial adverse change in the significance of an archaeological resource to §15064.5	Potentially Significant	APM-CUL-1, Coordination with Native Americans tribes and individuals APM-CUL-2, Consultation with local historical societies and other repositories of information regarding cultural resources of the historical period APM-CUL-3, Cultural Resources Survey APM-CUL-4, Evaluation of Identified Cultural Resources APM-CUL-5, Access Effects of the Project on Historical Resources APM-CUL-6, Treatment Plan of Historical Resources APM-CUL-7, Unanticipated Discovery Plan for Cultural Resources APM-CUL-8, Treatment of Human Remains	Less than Significant
c. Directly or indirectly destroy a unique paleontological resource or site or unique feature	Potentially Significant	APM-CUL-9, Paleontological Literature Review and Records Search APM-CUL-10, Paleontological Mitigation Plan	Less than Significant
d. Disturb human remains	Potentially Significant	APM-CUL-1, Coordination with Native Americans tribes and individuals APM-CUL-2, Consultation with local historical societies and other repositories of information regarding cultural resources of the historical period	Less than Significant

Table 1-1
Summary of Potential Environmental Impacts

Environmental Topic	Impact Before Applicant Proposed Measure(s)	Applicant Proposed Measure(s)	Level of Significance After Applicant Proposed Measures
		APM-CUL-3, Cultural Resources Survey APM-CUL-4, Evaluation of Identified Cultural Resources APM-CUL-5, Access Effects of the Project on Historical Resources APM-CUL-6, Treatment Plan of Historical Resources APM-CUL-7, Unanticipated Discovery Plan for Cultural Resources APM-CUL-8, Treatment of Human Remains	
<i>Geology, Soils, and Seismicity</i>			
ai. Rupture of a known earthquake	Potentially Significant	APM-GEO-1, Geotechnical Investigation APM-GEO-2, Determination of active or potentially active faults	Less than Significant
aii. Strong seismic ground shaking	Potentially Significant	APM-GEO-1, Geotechnical Investigation APM-GEO-3, Appropriate design ground motion values	Less than Significant
aiii. Seismic-related ground failure, including liquefaction	Potentially Significant	APM-GEO-1, Geotechnical Investigation APM-GEO-4, Appropriate design features to prevent or limit liquefaction	Less than Significant
aiv. Landslides	Potentially Significant	APM-GEO-1, Geotechnical Investigation APM-GEO-5, Appropriate design features to prevent or limit landslide/slop instability	Less than Significant
b. Substantial soil erosion or the loss of topsoil	Less than Significant	APM-GEO-6, Soil Erosion or Loss of Topsoil	Less than Significant
c. Located on a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse	Potentially Significant	APM-GEO-1, Geotechnical Investigation APM-GEO-7, Appropriate design features to prevent or limit damage to the pipeline and appurtenant structures on unstable geologic unit or soil	Less than Significant
d. Located on expansive soil creating substantial risks to life or property	Potentially Significant	APM-GEO-8, Appropriate design and construction recommendations to prevent or limit expansive material damage to the pipeline and appurtenant structures	Less than Significant
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water	No Impact	None	N/A
<i>Hazards and Hazardous Materials</i>			
a. Significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials	Potentially Significant	APM-HAZ-1, Project-Specific Hazardous Materials Management and Hazardous Waste Management Program APM-HAZ-2, Proper Handling for the Transport of Hazardous Materials APM-HAZ-3, Procedures for Fueling and Maintenance of Construction Equipment APM-HAZ-4, Emergency Response Plan APM-HAZ-5, Containment and Disposal of HDD Drilling Waste APM-HAZ-6, Spill Prevention, Countermeasure, and Control Plan and Hazardous Materials Business Plan	Less than Significant
b. Significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment	Potentially Significant	APM-HAZ-7, Hazardous Materials Contingency Plan APM-HAZ-8, Construction Management Plan APM-HAZ-9, Safety and Reliability Study APM-HAZ-10, Emergency Response Plan	Less than Significant
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school	Potentially Significant	APM-HAZ-9, Safety and Reliability Study	Less than Significant
d. Located on a site that is included on a list of hazardous materials sites and as a result would create a significant hazard to the public or the environment	Potentially Significant	APM-HAZ-7, Hazardous Materials Contingency Plan APM-HAZ-8, Construction Management Plan APM-HAZ-11, Additional Hazardous Materials Research	Less than Significant
e. Located within an airport land use plan, or within two miles of a public airport or public use airport that would result in a safety hazard for people residing or working in the project area	Potentially Significant	APM-TRF-1, Construction Traffic Control Plan	Less than Significant

**Table 1-1
Summary of Potential Environmental Impacts**

Environmental Topic	Impact Before Applicant Proposed Measure(s)	Applicant Proposed Measure(s)	Level of Significance After Applicant Proposed Measures
f. Located within the vicinity of a private airstrip that would result in a safety hazard for people residing or working in the project area	Potentially Significant	APM-TRF-1, Construction Traffic Control Plan	Less than Significant
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan	Potentially Significant	APM-HAZ-10, Emergency Response Plan	Less than Significant
h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires	Potentially Significant	APM-HAZ-9, Safety and Reliability Study APM-HAZ-12, Fire Protection Plan	Less than Significant
<i>Hydrology and Water Quality</i>			
a. Violate any water quality standards or waste discharge requirements	Potentially Significant	APM-HYDRO-1, Construction SWPPP APM-HYDRO-2, Equipment Maintenance and Refueling Near Sensitive Areas APM-HYDRO-3, Consultation with the RWQCB to determine if an individual discharge permit is required for dewatering APM-HYDRO-4, Frac-Out Contingency Plan APM-HAZ-6, Spill Prevention, Countermeasure, and Control Plan and Hazardous Materials Business Plan	Less than Significant
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level	Potentially Significant	APM-HYDRO-5, Water Reuse Plan	Less than Significant
c. Substantially alter the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation on- or off-site	Potentially Significant	APM-BIO-1, Biological Surveys APM-BIO-4, Minimize Disturbance to Native Vegetation APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-8, Avoidance and Minimization to Jurisdictional Waters APM-BIO-27, Compensation for Sensitive Vegetation Communities, Habitats, and Plants	Less than Significant
d. Substantially alter the existing drainage pattern of the site or area in a manner which would result in flooding on- or off-site	Potentially Significant	APM-AES-1, Implementation of Revegetation and Restoration Plan	Less than Significant
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff	Less than Significant	None	N/A
f. Substantially degrade water quality	Potentially Significant	APM-HYDRO-1, Construction SWPPP APM-HYDRO-2, Equipment Maintenance and Refueling Near Sensitive Areas APM-HYDRO-4, Frac-Out Contingency Plan APM-HAZ-6, Spill Prevention, Countermeasure, and Control Plan and Hazardous Materials Business Plan APM-BIO-1, Biological Surveys APM-BIO-4, Minimize Disturbance to Native Vegetation APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-8, Avoidance and Minimization to Jurisdictional Waters APM-BIO-27, Compensation for Sensitive Vegetation Communities, Habitats, and Plants APM-AES-1, Implementation of Revegetation and Restoration Plan	Less than Significant
g. Place housing within a 100-year flood hazard area	No Impact	None	N/A
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows	No Impact	None	N/A
i. Expose people or structures to a significant risk of loss, injury or death involving flooding	Less than Significant	None	N/A
j. Inundation by seiche, tsunami, or mudflow	Less than Significant	None	N/A

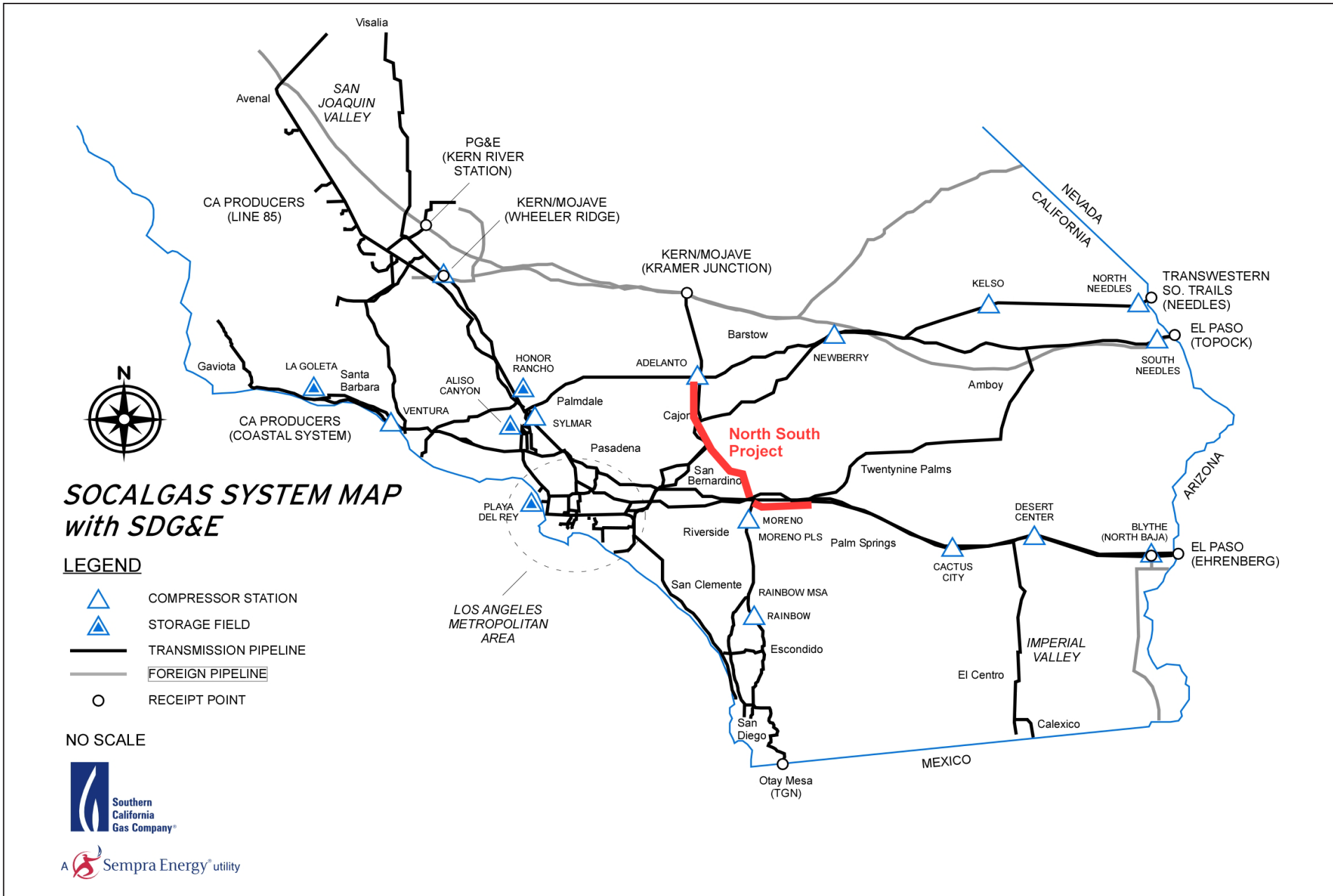
**Table 1-1
Summary of Potential Environmental Impacts**

Environmental Topic	Impact Before Applicant Proposed Measure(s)	Applicant Proposed Measure(s)	Level of Significance After Applicant Proposed Measures
<i>Land Use and Planning</i>			
a. Physically divide an established community	No Impact	None	N/A
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect	Less than Significant	None	N/A
c. Conflict with any applicable habitat conservation plan or natural community conservation plan	Potentially Significant	APM-BIO-30, Consistency with Habitat Conservation Plans	Less than Significant
<i>Mineral Resources</i>			
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state	Less than Significant	None	N/A
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan	Less than Significant	None	N/A
<i>Noise</i>			
a. Exposure of persons to or generation of noise levels in excess standards established in the local general plan or noise ordinance, or applicable standards of other agencies	Potentially Significant	APM-NOI-1, Noise Mitigation and Monitoring Plan – Adelanto Compressor Station Operation APM-NOI-2a, Construction Noise Mitigation Plan APM-NOI-2b, Notification Prior to Construction	Potentially Significant
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels	Potentially Significant	APM-NOI-2a, Construction Noise Mitigation Plan APM-NOI-2b, Notification Prior to Construction	Less than Significant
c. Substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project	Potentially Significant	APM-NOI-1, Noise Mitigation and Monitoring Plan – Adelanto Compressor Station Operation APM-NOI-3, Noise Mitigation and Monitoring Plan – Pipeline Operation	Less than Significant
d. Substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project	Potentially Significant	APM-NOI-1, Noise Mitigation and Monitoring Plan – Adelanto Compressor Station Operation APM-NOI-2a, Construction Noise Mitigation Plan APM-NOI-2b, Notification Prior to Construction APM-NOI-3, Noise Mitigation and Monitoring Plan – Pipeline Operation	Potentially Significant
e. Located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public us airport that would expose people residing or working in the project area to excessive noise levels	Less than Significant	None	N/A
f. Located within the vicinity of a private airstrip that would expose people residing or working in the project area to excessive noise levels	No Impact	None	N/A
<i>Population and Housing</i>			
a. Induce substantial population growth in an area, either directly or indirectly	No Impact	None	N/A
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere	No Impact	None	N/A
c. Displace substantial numbers of people necessitating the construction of replacement housing elsewhere	No Impact	None	N/A
<i>Public Services</i>			
a. Substantial adverse physical impacts associated with new or physically altered governmental facilities or the need for new or physically alternated facilities, the construction of which could cause significant environmental impacts, in order to maintain performance objectives for any of the public services:			
Fire protection	Less than Significant	None	N/A
Police protection	Less than Significant	None	N/A
Schools	No Impact	None	N/A
Parks	Less than Significant	None	N/A

**Table 1-1
Summary of Potential Environmental Impacts**

Environmental Topic	Impact Before Applicant Proposed Measure(s)	Applicant Proposed Measure(s)	Level of Significance After Applicant Proposed Measures
Other public facilities	Less than Significant	None	N/A
<i>Recreation</i>			
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated	Less than Significant	None	N/A
b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment	No Impact	None	N/A
<i>Transportation and Traffic</i>			
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation	Potentially Significant	APM-TRF-1, Construction Traffic Control Plan	Less than Significant
b. Conflict with an applicable congestion management program for designated roads or highways	Potentially Significant	APM-TRF-1, Construction Traffic Control Plan	Less than Significant
c. Result in a change in air traffic patterns that would result in substantial safety risks	No Impact	None	N/A
d. Substantially increase hazards due to a design feature or incompatible uses	No Impact	None	N/A
e. Result in inadequate emergency access	Potentially Significant	APM-TRF-1, Construction Traffic Control Plan	Less than Significant
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities	Potentially Significant	APM-TRF-1, Construction Traffic Control Plan	Less than Significant
<i>Utilities and Service Systems</i>			
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board	Less than Significant	APM-HYDRO-5, Water Reuse Plan	Less than Significant
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	No Impact	None	N/A
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	No Impact	None	N/A
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed	Less than Significant	APM-HYDRO-5, Water Reuse Plan	Less than Significant
e. Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments	Less than Significant	None	N/A
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs	Less than Significant	None	N/A
g. Comply with federal, state, and local statutes and regulations related to solid waste	Less than Significant	None	N/A

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SOURCE: SoCalGas 2014

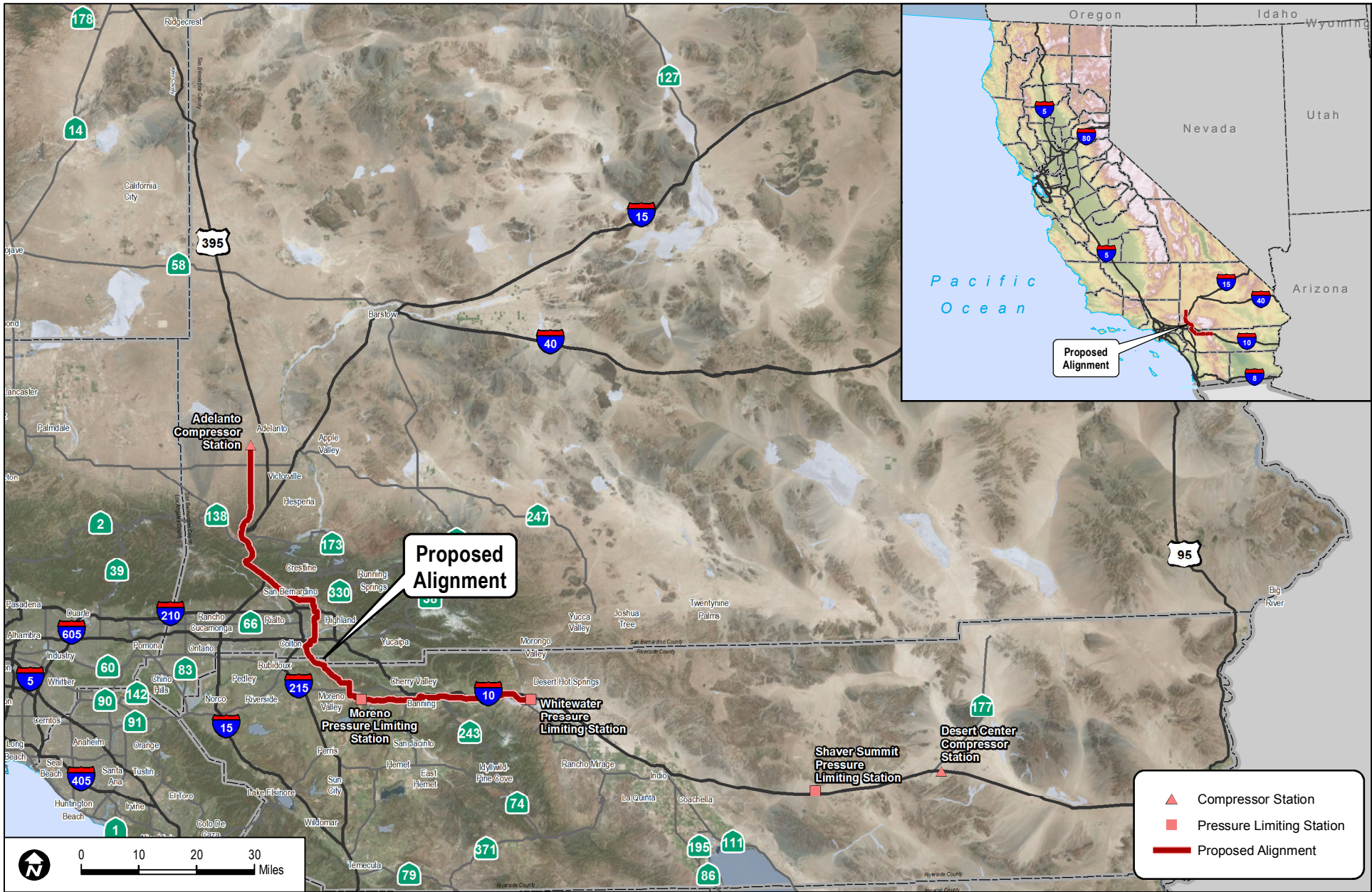
FIGURE 1-1
Southern California Gas System



North-South Project

1 PEA Summary

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SOURCE: BING Maps 2014; Southern California Gas Company 2014

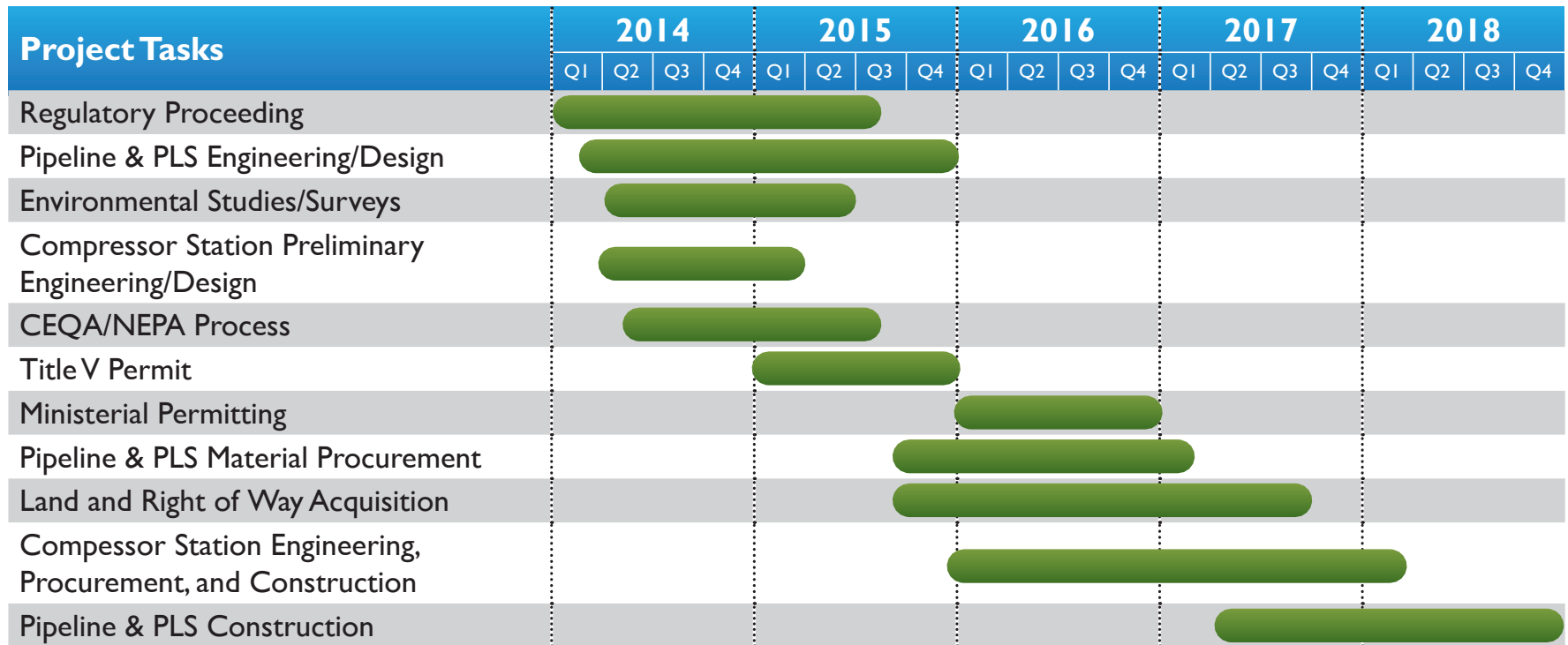


North South Project

FIGURE 1-2
Project Location Map

1 PEA Summary

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SOURCE: SoCalGas 2014

North-South Project

FIGURE 1-3
Proposed Project Schedule

1 PEA Summary

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2 PROJECT PURPOSE, NEED, AND OBJECTIVES

2.1 Purpose and Need

As natural gas utility providers regulated by the CPUC, SoCalGas and SDG&E have an obligation to provide safe and reliable natural gas service to all natural gas customers in their service territory. SoCalGas and SDG&E own and operate an integrated gas transmission system consisting primarily of pipelines, compressor stations, storage facilities and other appurtenant facilities. With a network of transmission pipelines, compressor stations, and four interconnected storage fields, SoCalGas and SDG&E deliver natural gas to over five million residential and business customers.

The service provided by the Applicant includes providing comprehensive transportation and natural gas procurement service for residential, small commercial and industrial customers, and transportation-only service for large customers, such as large electric generators. These large customers procure their own natural gas, which primarily comes from producing areas in the Southwest and Rocky Mountain states (see Figure 2-1). Transportation service for the out-of-state natural gas to load areas within Southern California is provided by SoCalGas and SDG&E. These large customers can have their purchased natural gas delivered to any receipt point within the Applicant's system (see Figure 1-1). This customer-friendly arrangement is made possible by the interconnected design of SoCalGas and SDG&E's pipelines and SoCalGas' substantial storage assets. These physical assets enable Applicant to receive gas at one location and deliver like volumes to a location hundreds of miles away, notwithstanding physical flows that may prevent gas supplies from actually being exchanged between these two particular points.

One portion of SoCalGas' and SDG&E's interconnected transmission system—SoCalGas' Southern Transmission System (Southern System)—requires minimum flowing supplies of natural gas from receipt points in the Southern System each day. This is because the Southern System can currently only receive a relatively small amount of flowing supplies from other parts of the SoCalGas and SDG&E system, and no supplies from storage. Without these minimum supplies, reliability is compromised if there is not enough natural gas supply in the Southern System to provide all customers with their load requirements. Load demand on the Southern System may increase, and available supplies at the receipt points may decrease. Consequently, customers on the Southern System may face supply-based curtailments on a regular basis. "Curtailments" often cause a shutdown of customer operations when natural gas becomes unavailable, resulting in lost customer production, financial losses, potential loss of jobs, and for large electric generator customers, can lead to electrical blackouts. This situation creates unique and challenging operational and reliability issues for the Southern System.

Most of the flowing supplies that arrive at Southern System receipt points are sourced from one pipeline: El Paso Natural Gas Company's El Paso South Mainline (El Paso). Southern System customers have faced reliability problems in the past because of this situation, including a Southern System curtailment in

2 Project Purpose, Need, and Objectives

February of 2011 brought about by force majeure conditions upstream of the SoCalGas system, several recent supply-related near misses, and operational issues that have created reliability concerns.

These reliability concerns have been heightened by the closure of the San Onofre Nuclear Generating Station (SONGS). Since the SONGS outage began in early 2012, SoCalGas and SDG&E have seen increased demand on the Southern System by electric generators of 80–100 MMcfd. There are additional gas-fired generation projects proposed within SoCalGas and SDG&E service territories. Although some of the available 2,150 megawatts of lost SONGS power will be met by out-of-state generation, expected increases in overall electric generation demand indicate that Southern System demand will not decline below 2012/2013 levels (CPUC et al. 2013; CEC 2013).² In addition, exports from the United States to Mexico are likely to substantially increase within the next decade and many of these exports would be delivered over the El Paso South Mainline. As deliveries to Mexico from the El Paso system increase, supplies into Blythe would become more scarce and expensive. This decrease in available supplies at Blythe would make it more difficult to find supplies when problems occur in the supply basins or on interstate pipelines serving Southern California.

2.2 Project Objectives

SoCalGas and SDG&E have identified the following Project Objectives for meeting the North–South Project purpose and need:

- Provide safe and reliable gas service, in a timely and cost effective manner to Southern System customers.
- Maintain Southern System reliability and alleviate the potential for curtailments of customers on the Southern System due to the discrepancy between customer demand and the volume of flowing supplies delivered to the Southern System to meet that demand.
- Resolve supply-related risks to the Southern System by providing Southern System customers with access to storage supplies and more receipt points located outside of the Southern System (Topock, Needles, Wheeler Ridge, Kern River Station, and Kramer Station).
- Provide an interconnection allowing the Applicant to efficiently transport 800 MMcfd of natural gas supplies into the Southern System from interstate and intrastate receipt points located outside of the Southern System.

² Estimates for incremental electric generation need in 2020 are as high as 920 megawatts in SDG&E's service territory and 4,600 megawatts in Southern California Edison's service territory, including repowered plants and renewables (CEC 2013).

2 Project Purpose, Need, and Objectives

- Provide Southern System natural gas customers (including electric generators) located on the Southern System with the same level of reliability that customers receive elsewhere on SoCalGas and SDG&E's integrated transmission system.
- Complete the Proposed Project as soon as possible to mitigate the risk of curtailments caused by (i) increased demand in the Southern System caused by the decommissioning of SONGS and (ii) future projects that are expected to decrease available supplies at the Southern System receipt point.

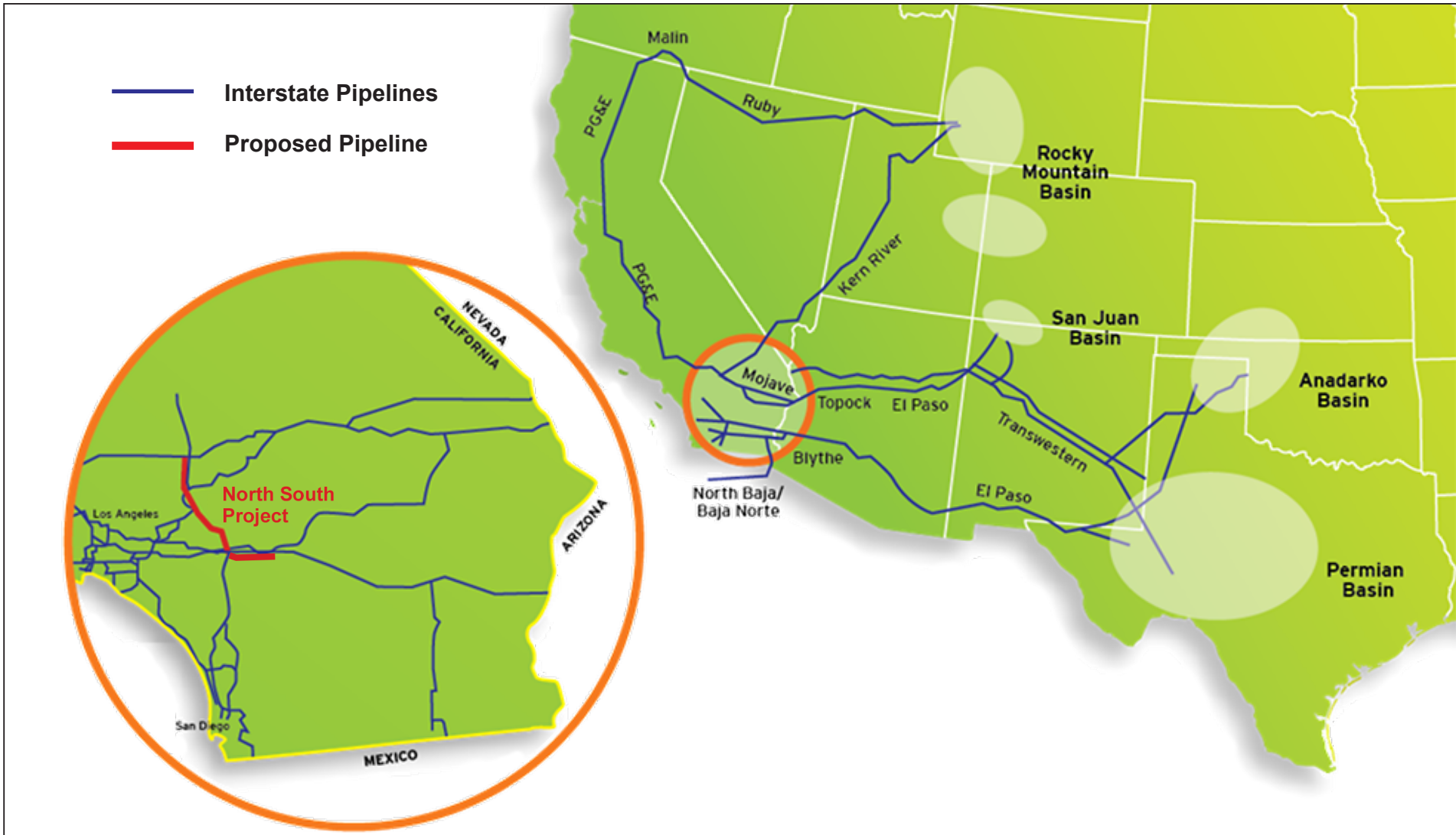
2.3 References

CPUC, CEC, and CAISO (California Public Utilities Commission, California Energy Commission, and California Independent System Operator). 2013. *Preliminary Reliability Plan for LA Basin and San Diego*. Draft. August 30, 2013

CEC (California Energy Commission). 2013. "Summary of Studies of Southern California Infrastructure." August 21, 2013 (updated from August 9 version).

2 Project Purpose, Need, and Objectives

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— Interstate Pipelines
 — Proposed Pipeline

SOURCE: SoCalGas 2014



North-South Project

FIGURE 2-1
 Regional Natural Gas System

2 Project Purpose, Need, and Objectives

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3 PROJECT DESCRIPTION

The following sections describe the primary components of the Proposed Project, which include infrastructure modifications at the Adelanto Compressor Station and construction of a new approximately 95-mile natural gas pipeline (Adelanto to Moreno pipeline (approximately 63 miles) and Moreno to Whitewater pipeline (approximately 32 miles)). This chapter also describes the Proposed Project location, anticipated construction methodology, route selection and evaluation process, right-of-way requirements, and operations and maintenance requirements associated with the Proposed Project. In addition, Applicant Proposed Measures (APMs) are listed in this section.

3.1 Project Location and Description of Existing Facilities

The section below provides an overview of the location of the Proposed Project, a description of key locations, and a summary of the existing SoCalGas facilities that would be affected by the Proposed Project.

3.1.1 Project Location

As shown in Figure 1-2, the Proposed Project originates in the southern portion of the Mojave Desert and extends for 95 miles to the south and east through the Cajon Pass (a mountain pass between the San Gabriel and San Bernardino Mountain Ranges), across the San Bernardino Valley, through the foothills of the San Jacinto Mountains and San Gorgonio Pass into the eastern Coachella Valley. The pipeline passes through a number of jurisdictions along its route, which are listed in Table 3-1. The pipeline alignment would be located within existing SoCalGas right-of-way, other existing utility corridors, public right-of-way (i.e., public roads), and new SoCalGas right-of-way.

Certain key locations related to existing facilities that would be affected by the Proposed Project are noted below.

- Adelanto Compressor Station: An approximately 3.2-acre site located generally 0.1 miles east of the intersection of Koala Road and Rancho Road in the City of Adelanto.
- Moreno Pressure Limiting Station: An approximately 1-acre site located generally 1,500 feet south of the intersection of Virginia Street and Alessandro Street in the City of Moreno Valley.
- Whitewater Pressure Limiting Station: An approximately 0.5-acre site located generally 2,000 feet south of Interstate 10 (I-10) and generally 1,500 feet west of Kellogg Road in the County of San Bernardino.
- Shaver Summit Pressure Limiting Station: An approximately 0.25-acre site located generally 2,500 feet north of I-10 and generally 2.5 miles east of Cottonwood Springs Road in the County of San Bernardino.

3 Project Description

- Desert Center Compressor Station: An approximately 4-acre site located generally 300 feet south of I-10 and generally 1 mile east of the community of Desert Center at Desert Center Rice Road in the County of San Bernardino.

Table 3-1 notes the jurisdictions that would be affected by the Proposed Project.

**Table 3-1
Affected Jurisdictions**

Affected Jurisdiction	Length (mi.) ¹	Project Component		
		Adelanto Compressor Station	Adelanto to Moreno Pipeline	Moreno to Whitewater Pipeline
City of Adelanto	2.2	X	X	
City of Victorville	1.4		X	
U.S. Forest Service	9.9		X	
Unincorporated San Bernardino County	19.0		X	
City of San Bernardino	14.6		X	
City of Colton	2.0		X	
City of Loma Linda	0.8		X	
City of Moreno Valley	8.0		X	X
Unincorporated Riverside County	28.2		X	X
City of Beaumont	1.5			X
City of Banning	6.4			X
U.S. Bureau of Land Management	0.2			X
City of Palm Springs	1.8			X
Total	95			

¹All mileages are approximate.

3.1.2 Description of Existing Facilities

This section describes the existing facilities that would be affected by the Proposed Project.

Adelanto Compressor Station

The Adelanto Compressor Station contains a single natural gas turbine-driven compressor that was installed in the early 1970s. There are five pipelines that intersect at the Adelanto Compressor Station; the compressor can compress gas supply west toward the City of Palmdale or south toward the Cajon Pass. Valves can be operated to control flows of natural gas into particular pipelines. Supporting equipment includes:

- Filter separator: cleans the natural gas that enters the turbine and compressor by removing particulate matter and liquid to prevent equipment damage.
- Natural gas coolers: cool the compressed natural gas to a specific temperature range prior to entering the pipeline.

3 Project Description

- Compressor oil coolers: cool oil to manufacturer's specifications prior to re-entering the gas compressor.
- Control room: contains electric switch gear, supervisory control and data acquisition (SCADA) equipment and local control panels for operating the turbine and monitoring station.
- Natural gas generator (845 HP): provides electricity to the turbine. The generator is housed in a non-combustible building with water cooling equipment outside the building.
- Emergency blowdown stack and oil separator: safety equipment that allow for rapid depressurization of station piping.
- Electric air compressor (10 HP): provides air for utilities.
- Restroom building: provides restroom facilities, which are connected to the public sewer system.
- Vessels and drums storage areas: contain unused and used oil stored in vessels or drums in two primary storage areas, one for the compressor and one for the generator. Each storage area sits on a concrete pad surrounded by concrete walls for spill containment.
- Water storage tank: provides 12,000 gallons of storage capacity for fire suppression equipment.
- In-line inspection launchers/receivers: enable internal inspection of three of the four pipelines. There are two in-line inspection tool launchers and one in-line inspection tool receiver.
- Pressure limiting station: regulates natural gas pressure entering the station from a pipeline with higher Maximum Allowable Operating Pressure (MAOP).
- Cathodic protection system: protects the station piping from corrosion.

Moreno Pressure Limiting Station

The Moreno Pressure Limiting Station consists of existing above- and below-grade piping, valves, blowdown facilities, pressure limiting equipment, concrete supports, concrete pads and perimeter fencing. Three pipelines enter the station and connect to existing station piping, valves, and pressure limiting equipment. Pressure limiting equipment regulates natural gas pressure entering the station from three pipelines with higher MAOP to two pipelines with lower MAOP. Those two pipelines exit the station to the west towards Los Angeles, while three pipelines exit the station to the south toward San Diego without pressure regulation. There is currently one in-line inspection tool launcher and one in-line inspection tool receiver to enable in-line inspection of two pipelines. This station has one small enclosure for communications equipment, commercial power and a radio antenna.

White Water Pressure Limiting Station

The White Water Pressure Limiting Station consists of existing above- and below-grade piping, valves, blowdown facilities, pressure limiting equipment, concrete supports, concrete pads and perimeter

3 Project Description

fencing. Three pipelines enter the station from the east and interconnect with existing station piping, valves and pressure limiting equipment. Pressure limiting equipment regulates natural gas pressure entering the station from pipelines with higher MAOPs to three pipelines with lower MAOPs; these three pipelines then exit the station to the west. There is currently one in-line inspection tool launcher and one in-line inspection tool receiver to enable in-line inspection of one pipeline. This station has one small enclosure for communications equipment, solar power equipment and radio antenna.

Shaver Summit Pressure Limiting Station

The Shaver Summit Pressure Limiting Station consists of existing above- and below-grade piping, valves, blowdown facilities, pressure limiting equipment, concrete supports, concrete pads and perimeter fencing. Three pipelines enter the station from the east and interconnect with existing station piping, valves and pressure limiting equipment. Pressure limiting equipment regulates natural gas pressure entering the station from pipelines with higher MAOP to three pipelines with lower MAOP; these three pipelines then exit the station to the west. This station has one small enclosure for communications equipment, solar power equipment and radio antenna.

Desert Center Compressor Station

The Desert Center Compressor Station consists of an existing compressor building, natural gas coolers, control building, above- and below-grade piping, valves, blowdown facilities, concrete supports, concrete pads and perimeter fencing. Three pipelines enter the station from the east and interconnect with valves. Over-pressure protection equipment protects the connected pipelines. Three pipelines exit the station to the west.

3.2 Existing System

SoCalGas and SDG&E own and operate an integrated gas transmission system consisting of pipeline and storage facilities. With a network of transmission pipelines and four interconnected storage fields, SoCalGas and SDG&E deliver natural gas to over five million residential and business customers.

A map of the SoCalGas transmission system is shown on Figure 1-1. The transmission system extends from the Colorado River on the eastern end of SoCalGas' approximately 20,000-square-mile service territory to the Pacific Coast on the western end and from Tulare County in the north to the U.S./Mexico border in the south (excluding parts of Orange County and San Diego County).

The SoCalGas transmission system was initially designed to receive and deliver gas from the east to the load centers in the Los Angeles basin, Imperial Valley, San Joaquin Valley, north coastal areas, and San Diego County. As SoCalGas and SDG&E's customers sought to access new supply sources in Canada and the Rocky Mountain region, the system was modified to concurrently accept deliveries from the north.

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As a result, the system can now accept up to 3,875 MMcfd of interstate and local California supplies on a firm basis.

As illustrated in Figure 2-1, primary supply sources are the southwestern United States, the Rocky Mountain region, and California on- and off-shore production. Other supply sources include basins in Canada. The interstate pipelines that supply the SoCalGas transmission system are El Paso Natural Gas Company (El Paso), North Baja Pipeline (North Baja), Transwestern Pipeline Company (Transwestern), Kern River Gas Transmission Company (Kern River), Mojave Pipeline Company (Mojave), Questar Southern Trails Pipeline Company (Southern Trails), and Gas Transmission Northwest (GTN) via the intrastate system of Pacific Gas and Electric Company (PG&E). The SoCalGas transmission system interconnects with El Paso at the Colorado River near Needles and Blythe, with North Baja near Blythe, and with Transwestern and Southern Trails near Needles. SoCalGas also interconnects with the common Kern/Mojave pipeline at Wheeler Ridge in the San Joaquin Valley and at Kramer Junction in the high desert. At Kern River Station in the San Joaquin Valley, SoCalGas maintains a major interconnection point with the PG&E intrastate pipeline system and receives PG&E/GTN deliveries at that location.

SoCalGas also operates four storage fields that interconnect with its transmission system. These storage fields—Aliso Canyon, Honor Rancho, La Goleta, and Playa del Rey—are located near the primary load centers of the SoCalGas system. Together they have a combined inventory capacity of 137.1 billion cubic feet, a combined firm injection capacity of 850 MMcfd, and a combined firm withdrawal capacity of 3,195 MMcfd. Upon completion of the Aliso Canyon Turbine Replacement Project authorized under CPUC Decision D. 13-11-023, the combined firm injection capacity will be 995 MMcfd.

The SDG&E gas transmission system consists primarily of two high-pressure, large-diameter pipelines that extend south from Rainbow Meter Station, located at the Riverside/San Diego County border. Both pipelines terminate at the San Diego metropolitan area. The pipelines are interconnected approximately at their midpoint and again near their southern terminus. The northern cross-tie runs between Carlsbad and Escondido, with the southern cross-tie running through Miramar. A large diameter pipeline also extends from the cross-tie at Miramar to Santee. At Santee, another large diameter pipeline extends to the Otay Mesa metering station at the U.S./Mexico border. At Otay Mesa, the SDG&E system interconnects with the Transportadora de Gas Natural de Baja, California, S.de R.L. de C.V. (TGN) pipeline, providing another receipt point for supplies into the SoCalGas/SDG&E system. A small-diameter, lower-pressure pipeline owned by SoCalGas also extends south from Orange County down to San Diego. SDG&E's Moreno Compressor Station, located in Moreno Valley, boosts pressure into the SoCalGas transmission lines serving Rainbow Meter Station. SDG&E has no storage fields in its service territory.

Southern System

The SoCalGas Southern System is a subset of the Applicant's entire natural gas transmission system, and consists primarily of three high-pressure pipelines extending west from the Colorado River near Blythe to the Moreno Pressure Limiting Station in the City of Moreno Valley. Five pipelines exit the Moreno

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Pressure Limiting Station. Two high-pressure pipelines exit the Moreno Pressure Limiting Station and extend west into the Los Angeles Basin. Three high-pressure pipelines extend south from the Moreno Pressure Limiting Station to the SDG&E gas transmission system.

The Southern System was primarily designed to receive gas from the El Paso pipeline at the Colorado River near Blythe and to deliver it to load centers in the Inland Empire, Imperial Valley, San Diego and the Los Angeles Basin. The pipelines' operating pressures are higher at the Blythe receipt point and lower near the load centers. The Southern System can receive limited supplies from other pipelines within the SoCalGas transmission system through the use of two valve stations, Chino Station and Prado Station, which are located along each of the two high-pressure pipelines extending west from Moreno Pressure Limiting Station.

Since 2008, supplies can also be received into the Southern System at the Otay Mesa receipt point in San Diego County. However, the volume of supplies received at Otay Mesa has generally been minimal due to the cost of transportation from North Baja to Otay Mesa.

SoCalGas also has the ability to transport up to 80 MMcf of supply from its Northern System to the Southern System via Transmission Line 6916.

Southern System Minimum Flow Requirements

Unlike other portions of the combined SoCalGas/SDG&E transmission system, the Southern System requires minimum flows at the Blythe or Otay Mesa receipt points to maintain service to customers in the Imperial Valley and San Diego load centers and to customers and communities in San Bernardino and Riverside Counties. While supplies from the Chino and Prado Stations can flow eastward, these stations cannot meet the demand of the Southern System.³ As a result, additional supply must be delivered at the Blythe or Otay Mesa receipt points to maintain service to customers on the Southern System and to maintain system integrity.

The minimum flow requirements on the Southern System vary with the demand on the system. As demand increases, the minimum flow requirements increase, and vice versa.

³ Due to the telescoping operating pressures of the pipelines, higher operating pressures of the pipelines east of Moreno Station restrict further eastward flow. In other words, supplies delivered from Chino and Prado Stations generally arrive at Moreno Station at pressures lower than the operating pressures east of Moreno Station.

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Responsibility for Maintaining Southern System Minimum Flow Requirements

In D.07-12-019 the CPUC approved, in part, proposals by SoCalGas, SDG&E, and Southern California Edison Company (SCE) to implement a range of provisions pertaining to the natural gas operations and service offerings of SoCalGas and SDG&E, which were related to core operations, unbundled storage, and expansion of storage capacities. One of the provisions adopted by D.07-12-019 was the transfer of the responsibility for managing minimum flow requirements for system reliability from SoCalGas' Gas Acquisition Department to the System Operator.⁴ SoCalGas' Gas Acquisition Department had previously provided flowing supplies using core customer assets. When the Gas Acquisition department needed to purchase additional spot supplies to meet minimum flow requirements at Blythe beyond 355 MMcfd, its incremental costs to do so were recorded in a memorandum account. The allocation of the costs in that memorandum account was determined in the SoCalGas Biennial Cost Allocation Proceeding (BCAP).

In response to the SoCalGas/SDG&E/SCE Application to transfer this responsibility from the Gas Acquisition Department, D.07-12-019 directed the System Operator to take over the responsibility for managing these minimum flows as of April 1, 2009.

Past and Current Efforts by SoCalGas to Maintain Southern System Minimum Flow Requirements

In D.07-12-019, the CPUC also adopted the request by SoCalGas, SDG&E, and SCE for System Operator tools for maintaining system reliability.⁵ These tools are as follows:

- a The ability of the System Operator to buy and sell gas on a spot basis, as needed, to maintain system reliability.
- b Authority to conduct requests for offers (RFO) or open season process consistent with the System Operator needs.

⁴ D.07-12-019 mimeo, at 116 (Ordering Paragraph No. 15). Although the decision refers to "Gas Acquisition Department," tariffs filed in that proceeding and later proceedings use the phrase "Utility Gas Procurement Department." Both terms refer to the same group. Note that the System Operator is broadly defined to constitute the SoCalGas departments responsible for the operation of its transmission system, including storage, hub services, pooling services receipt point access, off-system deliveries, and system reliability. It does not include Gas Acquisition. See D.07-12-019, mimeo., at 58. See also SoCalGas Rule 41(2).

⁵ D.07-12-019, mimeo., at 67 and 112 (Ordering Paragraph No. 16).

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- c Authority to approve an expedited Advice Letter approval process for contracts that result from an RFO or open season process.⁶

The System Operator regularly uses its ability to buy and sell spot gas to maintain minimum flows on the Southern System. These purchases and sales are discussed in detail in annual advice filings by SoCalGas.

The System Operator has used the RFO process to enter into baseload contracts for Southern System support, and SoCalGas has sought and obtained authorization for additional System Operator tools to help maintain Southern System minimum flows, including the ability to move supply from Blythe, California, to Otay Mesa, California,⁷ and a series of CPUC authorized Memorandums in Lieu of Contract (MILCs) between the System Operator and the Gas Acquisition Department. Under these MILCs, the bundled core agrees to deliver a share of the Southern System minimum flow requirement, and in return is relieved from Southern System support costs incurred by the SoCalGas System Operator. SoCalGas has discounted Backbone Transportation Service (BTS) to encourage shippers to bring gas into the Southern System.

In late 2012, SoCalGas put a pipeline into service, Line 6916, that enables additional supplies delivered at South Needles to reach the Southern System, providing another source of supply to the Southern System.

3.3 Project Objectives

As described in Section 2.2, the Applicant has identified the following Project Objectives for the Proposed Project:

- Provide safe and reliable gas service, in a timely and cost effective manner to Southern System customers.
- Maintain Southern System reliability and alleviate the potential for curtailments of customers on the Southern System due to the discrepancy between customer demand and the volume of flowing supplies delivered to the Southern System to meet that demand.
- Resolve supply-related risks to the Southern System by providing Southern System customers with access to storage supplies and more receipt points located outside of the Southern System (Topock, Needles, Wheeler Ridge, Kern River Station, and Kramer Station).

⁶ D.07-12-019, mimeo., at 112 (Ordering Paragraph No. 16).

⁷ See Resolution G-3474.

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- Provide an interconnection allowing the Applicant to efficiently transport 800 MMcfd of natural gas supplies into the Southern System from interstate and intrastate receipt points located outside of the Southern System.
- Provide Southern System natural gas customers (including electric generators) located on the Southern System with the same level of reliability that customers receive elsewhere on SoCalGas and SDG&E's integrated transmission system.
- Complete the Proposed Project as soon as possible to mitigate the risk of curtailments caused by (i) increased demand in the Southern System caused by the decommissioning of SONGS and (ii) future projects that are expected to decrease available supplies at the Southern System receipt point.

3.4 Overview of Proposed Project

As further described below, the Proposed Project consists of the following main components:

- Replacement of existing infrastructure and installation of new infrastructure at the Adelanto Compressor Station, including the natural gas turbine and compressors, exhaust emission treatment equipment, gas and oil cooling equipment, filter separator, auxiliary buildings, blowdown stack, lubrication oil tanks (for unused and used oil), cathodic protection system, and generators
- Installation of approximately 30,000 HP of natural gas compression, new emission control equipment, and in-line inspection tool launcher at the Adelanto Compressor Station
- Construction of the approximately 63-mile-long Adelanto to Moreno pipeline, segmented as follows:
 - Segment 1 – Adelanto Compressor Station to the San Bernardino National Forest Boundary
 - Segment 2 – San Bernardino National Forest
 - Segment 3 – Swarthout Canyon Road along U.S. Route 66 to Reche Canyon Road
 - Segment 4 – Reche Canyon Road to Moreno Pressure Limiting Station
- Construction of the approximately 32-mile-long Moreno to Whitewater pipeline, segmented as follows:
 - Segment 5 – Moreno Pressure Limiting Station to State Highway 79
 - Segment 6 – State Highway 79 to Sunset Avenue
 - Segment 7 – Sunset Avenue to Whitewater Pressure Limiting Station
- Station piping modifications and installation of additional pressure limiting and communications equipment at the Moreno Pressure Limiting Station

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- Station piping modifications and installation of additional pressure limiting and communications equipment at Whitewater Pressure Limiting Station
- Modification of existing station piping and installation of pressure limiting and communications equipment at Shaver Summit Pressure Limiting Station
- Modification of existing station piping and installation of pressure limiting and communications equipment at Desert Center Compressor Station.

An overview of the Proposed Project within the Southern System is shown on Figure 1-1. Each of the primary Proposed Project components listed above is also depicted on Figure 3-1.

3.5 Proposed Project Components

The following section describes the components of the Proposed Project.

3.5.1 Adelanto Compressor Station Infrastructure Replacement

The Proposed Project would require approximately 30,000 HP of compression to be provided by three new natural gas-fueled compressors. Combined, the new compressor units would be capable of delivering 800 MMscfd of natural gas at 850 pounds per square inch gauge (psig). The compressor station operating range would vary from 75 MMscfd to 800 MMscfd, with a minimum station suction pressure of 475 psig and a maximum station discharge pressure of 850 psig. The design for the compressor station would provide full performance at all expected operating conditions up to 110°F. An overall station layout is depicted in Figure 3-2.

A selective catalytic reduction emission system would be installed on the exhaust of the gas turbines to comply with Mojave Desert Air Quality Management District (MDAQMD) emissions requirements. An ammonia tank would be installed on a concrete pad surrounded by concrete walls for spill containment. Ammonia would support the selective catalytic reduction system.

The compressor station would be equipped with an emergency shut-down system. The emergency shut-down system would consist of an air compressor and conditioning vessels for compressed air, automatic series valves and manual trip valves. Sensors in the compressor building and elsewhere in the Adelanto Compressor Station can automatically trip the emergency shut-down system, as can the manual trip valves. In an emergency, the emergency shut-down system would automatically activate and close valves that supply natural gas to the turbine and compressors, open bypass valves around the station to allow natural gas to flow through the pipeline system (bypassing the natural gas turbines and compressors), and open blowdown valves that would allow rapid depressurization of the station through a blowdown stack.

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Three new natural gas-fueled generators would be installed to provide electricity for the station while the gas turbines are operating. When not operating, electricity would be provided by Southern California Edison, the local power provider. No major electrical infrastructure improvements would be required and upgrades would be limited to on-site electrical facilities.

Equipment for supporting the gas turbines at the modified station would be similar to that of the existing station, as described in Section 3.1.

Buildings

Three new buildings, described below, are proposed as part of the Adelanto Compressor Station infrastructure replacement. Buildings would be constructed of non-combustible material (i.e., non-reflective steel, concrete masonry) and would meet applicable building code requirements.

Compressor Building

The compressor building would house the natural gas turbine-driven compressors. The building would be approximately 65 feet wide, 120 feet long, and 30 feet high at the eaves.

Auxiliary Building

The auxiliary building would house the control room, master control center, electric switch gear, a parts room, workshop and an equipment room. It would be approximately 40 feet wide, 80 feet long, and 16 feet high.

Generator Building

A generator building would house three natural-gas-fueled generators. The building would be approximately 30 feet wide, 50 feet long, and 15 feet high at the eaves.

Landscaping/Screening

Landscaping would be provided to screen the perimeter of the Adelanto Compressor Station. Plant species would be non-invasive and drought tolerant and would meet applicable fuel modification plan requirements. The compressor station would be fenced with a masonry block wall that would be up to 8 feet in height.

Tanks and Vessels

Tanks and vessels for operation of the compressor facility would be installed to meet the needs of the facility. Tanks and vessels would have spill containment features in accordance with applicable regulations and industry standard best management practices (BMPs).

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3.5.2 Pipelines

The Proposed Project would include the construction of a 36-inch pipeline in various segments manufactured in accordance with American Petroleum Institute (API) specification 5L and designed with a MAOP of 1,100 psig. The pipeline would be coated with fusion bonded epoxy. A two-part epoxy would be applied to all pipeline field joints. The pipeline would be cathodically protected and would have pneumatically operated/remotely monitored block valves with automatic-line-break controls. The pipeline would be designed to allow internal inspection tools to pass through for long-term operations and maintenance activities. The pipeline segments are shown on Figure 3-1 and are described in Table 3-3. Detailed 1,000-scale map sheets showing the pipeline alignment are provided in Figure 3-3.

**Table 3-3
Pipeline Segment Descriptions**

Segment	Approx. Mile Posts	Jurisdictions	Existing Parallel Pipeline Facilities	Figure No.
1 Adelanto Compressor Station to the San Bernardino National Forest Boundary	Start: AM-0 End: AM-12	City of Adelanto City of Victorville	SoCalGas Pipeline 1185	Figures 3-3a through 3-3e
2 San Bernardino National Forest	Start: AM-12 End: AM-23	U.S. Forest Service	SoCalGas Pipeline 1185	Figures 3-3e through 3-3h
3 Swarthout Canyon Road along U.S. Route 66 to Reche Canyon Road	Start: AM-23 End: AM-49	Unincorporated San Bernardino County City of San Bernardino City of Colton City of Loma Linda	SoCalGas Pipeline 4000 SoCalGas Pipeline 4002	Figures 3-3h through 3-3o
4 Reche Canyon Road to Moreno Pressure Limiting Station	Start: AM-49 End: AM- 63	City of Loma Linda City of Moreno Valley Unincorporated Riverside County		Figures 3-3p through 3-3u
5 Moreno Pressure Limiting Station to State Highway 79	Start: MW-0 End: MW-9	City of Moreno Valley Unincorporated Riverside County	SoCalGas Pipeline 5000 SoCalGas Pipeline 2000 SoCalGas Pipeline 2001	Figures 3-3u through 3-3x
6 State Highway 79 to Sunset Avenue	Start: MW-9 End: MW-14	City of Beaumont City of Banning	SoCalGas Pipeline 5000 SoCalGas Pipeline 2000	Figures 3-3x through 3-3y
7 Sunset Avenue to Whitewater Pressure Limiting Station	Start: MW-14 End: MW-32	Unincorporated Riverside County U.S. Bureau of Land Management City of Palm Springs	SoCalGas Pipeline 5000 SoCalGas Pipeline 2000	Figures 3-3y through 3-3ee

3.5.3 Pressure Limiting Stations

Infrastructure replacement and modifications would occur at three Pressure Limiting Stations and one compressor station: Moreno Pressure Limiting Station, Whitewater Pressure Limiting Station, Shaver

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Summit Pressure Limiting Station, and Desert Center Compressor Station. The replacements and modifications are described below.

Moreno Pressure Limiting Station

Modifications would be required at the existing Moreno Pressure Limiting Station, and new pressure limiting equipment and SCADA communications equipment would be installed at the facility. The new pressure limiting equipment would connect the Adelanto to Moreno pipeline to the existing pipelines at the Moreno Pressure Limiting Station. The Moreno Pressure Limiting Station would allow natural gas from the new Adelanto to Moreno pipeline to flow into any of the existing pipelines at the Moreno Pressure Limiting Station. A new in-line inspection tool receiver facility and blowdown would be installed on the Adelanto to Moreno pipeline and a launcher facility and blowdown would be installed on the Moreno to Whitewater pipeline. These devices would be used for internal inspection and depressurization of the pipelines for maintenance or in response to an emergency. The existing station footprint would require the acquisition of new land (approximately 100 feet wide and 150 feet long) to accommodate the new facilities. Figure 3-4 depicts the Moreno Pressure Limiting Station modification.

Whitewater Pressure Limiting Station

Modifications would be required at the existing Whitewater Pressure Limiting Station, and new pressure limiting equipment and SCADA communications equipment would be installed at the facility. The new pressure limiting equipment would connect to the Moreno to Whitewater pipeline to provide pressure control into the other lines at the Whitewater Pressure Limiting Station. A new in-line inspection tool receiver facility and blowdown would be installed on the Moreno to Whitewater pipeline for internal inspection and depressurization of the pipeline for maintenance or in response to an emergency. The existing station footprint would require the acquisition of a 100-foot by 150-foot area to accommodate the new facilities. Figure 3-5 depicts the Whitewater Pressure Limiting Station modification.

Shaver Summit Pressure Limiting Station

Modifications would be required at the existing Shaver Summit Pressure Limiting Station, and new pressure limiting equipment and SCADA communications equipment would be installed at the facility. The new pressure limiting equipment would be installed on an existing pipeline with a higher MAOP and would be used to provide pressure control into the other pipelines at the Shaver Summit Pressure Limiting Station. Proposed modifications to the station would require the acquisition of an approximately 75-foot-wide by 100-foot-long right-of-way.

Desert Center Compressor Station

Modifications would be required at the existing Desert Center Compressor Station, and new pressure limiting equipment and SCADA communications equipment would be installed at the facility. The new

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pressure limiting equipment would be installed on an existing pipeline with a higher MAOP and would be used to provide pressure control into other pipelines at the Desert Center Compressor Station. Proposed modifications to the station would require the acquisition of an approximately 100-foot-wide by 150-foot-long area.

3.5.4 Block Valves

A series of block valves would be installed in the new Adelanto to Moreno and Moreno to Whitewater pipelines at intervals of 5 to 8 miles along the pipeline. The block valves isolate pipeline segments for maintenance or in response to an emergency. They would be installed in accordance with Department of Transportation CFR Part 192, G.O. 112E; and also allow SoCalGas to meet or exceed its criteria for isolation and depressurization of designated sections of the pipeline in less than 30 minutes in the event of a pipeline failure. Block valve locations would be designed to support remote operation by the Applicant's Gas Control Department and/or automatic closure without operator intervention in the event of a pipeline rupture. Reduced valve spacing intervals would be employed across active earthquake faults.

The valve actuators would reside above ground and would operate using gas pressure provided from the pipeline, supported by pneumatic and electronic controls. The block valves would be 36 inches in diameter and full-opening in design to allow for the passage of internal inspection devices. Each block valve location would have a blowdown valve installed on each side of the block valve to allow for depressurization of either of the adjoining pipe segments. A blowdown line would be installed between each blowdown valve and blowdown stack. The blowdown stacks would be 12 inches in diameter and would extend 5 to 7 feet abovegrade. SCADA equipment would be installed at each block valve location requiring installation of communications equipment (powered by solar or existing commercial power), above-grade radio antenna up to 40 feet in height, and equipment housing. Each block valve location would require an approximately 50-foot-wide by 75-foot-long area and would have security fencing installed around the perimeter and gravel installed within the fenced area.

3.5.5 Cathodic Protection System, Intrusion Monitoring, and Leak Detection

The cathodic protection system consists of cathodic protection rectifiers, buried anodes, and test stations that would be situated along the pipeline. Two rectifiers are anticipated and would be installed at locations to be determined once final design of the pipeline is complete. The cathodic protection rectifier can be located anywhere along the pipeline where an electric power drop is available. The site would require a utility pole, an electrical meter, and a rectifier. The rectifier and electric meter would be mounted on the power pole. The anode bed would be below grade near the above-ground power pole. The anode bed is normally a deep well anode installed by drilling a hole into the earth to a prescribed depth and then inserting the anodes into the hole. Each anode would have a coated wire lead that would be connected to the rectifier. The anode bed would be located in close proximity to the pipeline

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and rectifier. The rectifier then would be connected to the pipeline to establish protection. Cathodic protection test stations would be established at approximately 2,000-foot intervals. Wires would be connected to the pipeline and brought to the surface to an above-grade test pole in open land. In urban areas, a street surface access road cover would be used.

Consistent with SoCalGas' Pipeline Safety Enhancement Plan and applicable industry BMPs related to methane emission reductions, the pipeline would be equipped throughout its routing with right-of-way intrusion detection/monitoring systems to provide early warning when digging, drilling, boring, cutting, compacting, or unplanned vehicle operations pose a threat to pipeline integrity. The systems would also continuously monitor for ground movement and temperature gradients associated with a release of gas from the pipeline and would potentially provide added features such as long-range sensing capability, location accuracy, and detection of multiple simultaneous events. The monitoring systems would consist of fiber optic cabling buried above and/or adjacent to the pipeline during construction and system monitoring stations co-located with SCADA and control assets at up to four block valve locations. The monitoring stations would require a maximum of 1 kilowatt and would be located where utility power can be secured. The monitoring systems would enhance pipeline safety and would improve existing safety systems where possible.

To further support the early detection and management of potential gas releases, gas detection sensors would be employed at key locations along the alignment. These sensors are particularly important where the alignment would be situated near earthquake faults or in proximity to facilities that pose special consideration for evacuation and/or commerce impact in the event of a pipeline incident. Up to 30 monitoring locations would be installed. Each monitoring location would employ a small footprint not exceeding 36 square feet allocated along the planned right-of-way. It is anticipated that these locations would employ solar or commercial power, supplemented by battery backup. Equipment would be located in a secure panel, mounted on pole 2 to 4 inches in diameter and less than 10 feet in height. The systems would provide near-real time alarm notification to operations personnel when gas concentration levels indicate a potential gas release.

3.6 Facility Route Selection and Evaluation Process

SoCalGas considered and analyzed, among other things, engineering, environmental, and land use factors to identify potential pipeline route alternatives, including

- Ability to meet the basic objectives of the Proposed Project
- Cost and schedule
- Impacts to environmentally sensitive resources
- Ground topography and slope steepness

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- Line route distance
- Geotechnical evaluation in support of hazard avoidance, safety, and long-term integrity of the pipeline
- Constructability
- Traffic impacts
- Impact on existing land use
- Use of existing SoCalGas right-of-way, other existing utility corridors, public right-of-way (i.e., public roads)
- Minimization of permanent impacts, including access roads
- Ease of operations and maintenance activities

Several alternatives for the Proposed Project were considered as part of the evaluation process. Further discussion of alternatives, including alignments that were eliminated from further consideration, as well as pipeline segment alternatives, are discussed in Chapter 7.

3.7 Right-of-Way Requirements

Outside of the public right-of-way, the Applicant generally requires a 50-foot-wide permanent right-of-way to accommodate the operation, inspection, and maintenance of a pipeline. For Proposed Project construction, additional temporary property rights would be required in certain locations to allow construction access, pipeline installation, and other activities. Easements along private lands would contain covenants and restrictions to prevent encroachment of surface development that may adversely affect the pipeline and to minimize the potential for damage to the pipeline if other ground-disturbing activities occur within the vicinity of the pipeline. The right-of-way requirements for the Proposed Project have been identified and are described below. Given that the Applicant is in a preliminary stage of project design and engineering, this alignment is subject to further adjustment.

Adelanto to Moreno Pipeline

- **Mile Post AM-0 to AM-13:** This section begins at the Adelanto Compressor station (Mile Post AM-0) and extends for approximately 13 miles to Mile Post AM-13. Between Mile Post AM-0 and AM-11, the pipeline alignment parallels SoCalGas' 36-inch-diameter pipeline known as Line 1185 and would be located within SoCalGas' existing 50-foot private right-of-way where possible. Portions of the SoCalGas right-of-way overlap with roadways subsequently dedicated for public use (Koala Road and Baldy Mesa Road). Temporary property rights may be required along this segment if the 50-foot width is insufficient to accommodate construction activities. Access would be acquired for the railroad crossing near Mile Post AM-10. This section exits the

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existing 50-foot private right-of-way after Mile Post AM-11 and follows an existing dirt road southwester through private properties requiring new right-of-way acquisitions before entering San Bernardino National Forest. Several 50-foot-wide pipeline easements would be acquired from private landowners. The combined length of new right-of-way in this segment would be approximately 2 miles, encompassing private and railroad properties.

- **Mile Post AM-13 to AM-21:** This section traverses through San Bernardino National Forest generally following alignments of the proposed CalNev 16-inch pipeline,⁸ other existing pipelines, and SoCalGas' 36-inch-diameter pipeline known as Line 4000. Existing access roads are in place for the majority of the proposed alignment within the San Bernardino National Forest boundary. As this alignment leaves the San Bernardino National Forest, it transitions into public right-of-way at Swarthout Road, and thereafter into public right-of-way of U.S. Route 66 / Cajon Boulevard. The Applicant would secure permits with municipalities and responsible permitting agencies as required for portions of the alignment within dedicated public roads and highways. A Special Use Permit would be acquired from the USFS for the installation of this section within the forest boundaries. License agreements with railroads would also be acquired for three railroad crossings within the forest boundaries. The combined length of new right-of-way in this segment would be approximately 8 miles, encompassing U.S. government land and railroad properties.
- **Mile Post AM-21 to AM-50:** After leaving San Bernardino National Forest, the proposed alignment would be installed in public right-of-way of city and county roads, including Cajon Boulevard, Kendall Drive, Palm Avenue, 40th Street, Harrison Street, Marshall Boulevard, Golden Avenue, Highland Avenue, Del Rosa Avenue, Baseline Street, Tippecanoe Avenue, Redlands Boulevard, Gardena Street, Steele Road, Wier Road, Washington Street, and Reche Canyon Road, for approximately 29 miles. SoCalGas has franchise rights to install facilities within the public right-of-way, but would secure encroachment and traffic control permits with municipalities as required for portions of the alignment within dedicated public roads. Near Mile Post AM-46, the proposed alignment crosses railroad and private property, requiring new right-of-way acquisitions. A railroad license agreement, as well as a 50-foot-wide pipeline easement, would be acquired from the private landowners. The combined length of new right-of-way in

⁸ The CalNev pipeline is a proposed pipeline by Kinder Morgan. It is approximately 550 miles long and will transport gasoline, diesel, and jet fuel from Los Angeles, California, refineries and marine terminals through parallel 14- and 8-inch-diameter pipelines that originate in Colton, California, and extend to terminals in Barstow, California, and Las Vegas, Nevada. The pipeline system also serves the Nellis Air Force Base in Las Vegas, McCarran International Airport in Las Vegas, and Edwards Air Force Base in the Mojave Desert in southeastern California.

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this segment would be approximately 360 feet, encompassing one railroad property and two private properties.

- **Mile Post AM-50 to AM-63:** This section enters Riverside County near Mile Post AM-50, continuing in the public right-of-way of Reche Canyon Road for approximately 5 miles before traversing through private properties between Mile Post AM-54 and AM-56, after which this section enters the City of Moreno Valley and stays within public right-of-way of city streets, including Reche Canyon Road, Locust Avenue, Redlands Boulevard, Cottonwood Road, Theodore Street, Alessandro Boulevard, and Virginia Street, until it terminates past Mile Post AM-63 at SoCalGas' Moreno Pressure Limiting Station. SoCalGas has franchise rights to install facilities within the public right-of-way, but would secure encroachment and traffic control permits with municipalities as required for portions of the alignment within dedicated public roads. A 50-foot-wide pipeline easement would be acquired from private landowners, as needed, in areas where the pipeline traverses private property. The combined length of new right-of-way in this segment would be approximately 2 miles, encompassing nine private properties.

Moreno to Whitewater Pipeline

- **Mile Post MW-0 to MW-11:** At Mile Post MW-0 (SoCalGas' Moreno Pressure Limiting Station), the pipeline continues east and up to Mile Post MW-11. This section of the proposed alignment generally parallels SoCalGas' 36-inch-diameter pipeline known as Line 5000 and would generally be located within SoCalGas' existing private right-of-way of varying widths ranging from 10 to 50 feet wide. Portions of the pipeline would be installed within existing rights-of-way that do not allow for multiple pipelines or that are less than 50 feet wide would require new right-of-way acquisitions. Additional easement rights to accommodate the pipeline would be acquired from private landowners as needed. SoCalGas estimates that the total length of new right-of-way in this section would be approximately 3 miles, encompassing private properties.
- **Mile Post MW-11 to MW-26:** This section leaves the existing Line 5000 right-of-way near Mile Post MW-11 and enters into public rights-of-way within city and county roads, including Highland Springs Avenue, Sun Lakes Boulevard, Westward Avenue, 12th Street, Lincoln Street, Hargrave Street, Barbour Street, and Hathaway Street, for approximately 7 miles. Between Mile Post MW-18 and MW-20, this section traverses through several private properties requiring new right-of-way acquisitions, before heading back into the public right-of-way of Bonita Avenue. This section would stay within Bonita Ave, traveling east for approximately 2 miles before turning north on a dirt road near Mile Post MW-22. Around this point, the proposed alignment would cross private properties, a Riverside County flood channel, and a railroad. After the railroad crossing, this section would be installed in the public right-of-way of Railroad Avenue for approximately 3 miles before heading south and crossing the railroad again. The proposed alignment would then re-enter the existing right-of-way of Line 5000 before Mile Post MW-26. SoCalGas has franchise rights to install facilities within the public right-of-way but would secure

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encroachment and traffic control permits with municipalities as required for portions of the alignment within dedicated public roads. License agreements would be acquired for the two railroad crossings, and 50-foot-wide pipeline easements would be acquired from private landowners. The combined length of new right-of-way in this segment would be approximately 2.5 miles, encompassing private property and railroad properties.

- **Mile Post MW-26 to MW-32:** This section joins the Line 5000 right-of-way near Mile Post MW-26, following the same alignment as Line 5000 and staying within the existing right-of-way until the proposed alignment terminates past Mile Post MW-32 in SoCalGas' Whitewater Pressure Limiting Station. Near Mile Post MW-31, the proposed alignment would cross federal land under the jurisdiction of the BLM, requiring application for a new right-of-way grant. For portions of this section that would be installed within existing right-of-way less than 50 feet wide, new pipeline easements would be acquired from private landowners. The combined length of new right-of-way in this segment is approximately 1.5 miles, encompassing private property and U.S. government land.

3.8 Construction

This section describes construction elements of each major Proposed Project component, including activities at the Adelanto Compressor Station, the natural gas pipelines, pressure limiting stations, and block valves. This section also describes staging and access requirements, construction schedules, and personnel and equipment requirements. The Applicant would use environmentally responsible construction practices to the extent possible. These practices would be identified in Applicant's construction plans.

3.8.1 Preconstruction Preparation

Prior to undertaking construction activities for the Proposed Project, the Applicant would secure all required permits from agencies with jurisdiction over the right-of-way along the proposed alignment. Private right-of-way would be secured from property owners. Construction-related permits required by local agencies would be approved and issued prior to the start of construction, including traffic control plan approval, excavation permits, third-party crossing permits, etc.

Landowners, permittees, and business owners along the right-of-way would be notified prior to construction activities. Notification to landowners would be via mail or email. Tenants would be notified in person a few days ahead of construction. Other notification would be made by various means, including signs at road crossings installed prior to construction. Emergency response providers near the proposed route would be notified in advance of construction locations, road closure schedules, if required, and potential alternate routes. Businesses and residents directly affected would be given ample notice and information to plan for alternative site access. Signage would be provided to direct motorists to alternate routes. The selected contractor would work with local police and traffic engineers

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to plan appropriate access alternatives for temporary street closures and traffic disruptions. The proposed alignment would then be staked and flagged by the project surveyor, and Underground Service Alert (USA) would be notified. Pre-construction meetings with the affected agencies' inspection personnel would be scheduled and completed.

Substructures

Substructures at the Adelanto Compressor Station and along the proposed alignment would be identified and protected in place during construction activities. A thorough substructure review would be performed during the planning process for all known substructures and proposed future substructures from both private and public sources. Substructures identified would be accurately shown on the construction drawings from the substructure drawings and maps provided by each owner. The proposed pipeline would be designed to provide adequate horizontal and vertical separation for construction and future operation and maintenance of the existing substructure and new pipeline.

The Applicant and the contractor would utilize the USA. USA is a "one call" system that provides a single toll-free number for contractors and individuals to call prior to digging in the vicinity of pipelines and other substructures. Upon notification that a contractor or property owner is intending to perform work in the vicinity of the pipeline, substructure owners are required to locate and mark the horizontal location of substructure facilities within 48 hours of request.

Prior to excavation with equipment, crews would hand-dig areas around all substructures crossing the proposed alignment and would record their actual location and depth. Parallel substructures within close proximity to the proposed alignment would be hand potholed to verify the actual horizontal and vertical alignment for adequate clearance before excavation. Substructures within close proximity to the alignment and substructures crossing the alignment would be protected in place in accordance with the specifications of the substructure owner. The proposed pipeline would be vertically separated from substructures by a minimum of one foot. Additional vertical separation may be required to provide adequate space for future operation and maintenance. Adequate separation for construction, operation, and maintenance would be determined in the final design of the pipeline, the encroachment permit process, and reviews with substructure owners.

Substructures that have cathodic protection within close proximity to the pipeline would be reviewed by the Applicant and the substructure owner to determine if a cathodic protection bond should be installed to prevent inference between the two cathodically protected systems. If a bond is not required, a dielectric material may be installed between the pipeline and the substructure as a preventative measure to prohibit any possible interference. Substructures damaged during construction would be repaired or replaced in accordance with the specifications of the substructure owner prior to backfill.

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Erosion and Sediment Control

Erosion and sediment control would be conducted in accordance with industry BMPs and a Stormwater Pollution Prevention Plan (SWPPP) that would be filed with the Regional Water Quality Control Board (RWQCB). BMPs may include such measures as:

- Consider the degree to which pollutants may be exposed to and mobilized by contact with stormwater.
- Consider the direct and indirect pathways that pollutants may be exposed to stormwater.
- Confirm retention of visual observation/inspection records.
- Confirm effectiveness of existing BMPs to reduce or prevent pollutants in stormwater discharges.
- Preserve existing vegetation where required and when feasible.
- Apply temporary erosion control, straw rolls, and silt fences to active and non-active areas as described by the California Storm Water BMPs Handbook – Construction and Industry BMPs. Maintain as necessary to retain effectiveness.
- Implement temporary erosion control measures at regular intervals to achieve and maintain disturbed soil.
- Stabilize (e.g., by using hydroseeding, straw, mulch) non-active areas as soon as feasible after the cessation of construction activities.
- Control erosion in concentrated flow paths by applying erosion control blankets and lining swales.
- At the completion of construction, apply permanent erosion control to all remaining disturbed soil areas as needed.

3.8.2 Adelanto Compressor Station Construction

Work on the Adelanto Compressor Station would occur primarily outside and south of the fenceline of the existing Adelanto Compressor Station. Construction activities would take place entirely on SoCalGas fee-owned property. More than two-thirds of the site outside the Adelanto Compressor Station existing fenceline has been previously disturbed

Construction activities would include clearing and grading; overexcavation and recompaction for equipment and building foundations; installation of drainage control facilities, equipment, and facility lighting; installation of natural gas-driven compressors and the compressor building; installation of supporting equipment and piping; and installation of electrical and control instrumentation.

Once the replacement activities are complete, the existing compressor station would be decommissioned. Liquids from existing equipment such as the compressor, gas turbine, generator, oil storage tank, and filter

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separator would be drained and properly disposed. Electrical wires, cables, and signal wires going to automatically controlled equipment, valves, and pressure/flow measurement devices would also be disconnected. Abandoned natural gas pipelines would be purged with nitrogen and sealed. Equipment to be retired in place would be identified once final engineering for the Proposed Project is complete.

Temporary Construction Yard

A temporary construction yard would be required for construction activities and would be located near the compressor station. The dimension of the construction yard would be approximately 400 feet by 500 feet. The construction yard would be cleared of vegetation if necessary, and crushed rock would be used to stabilize soil to create a temporary entry road, temporary parking, and temporary fabrication areas. Soil excavated during construction may be stockpiled, if feasible, at the construction yard until it has been determined that it would not be needed for structural fill or backfill. Equipment, material, temporary office space, and construction equipment would be staged in the temporary construction yard.

Water Use and Hydrostatic Testing

For dust control, soil compaction, and equipment and roadway wash down, water use is estimated to be up to 5,000 gallons per day. Reclaimed water would be used, if available and practicable. Portable restroom facilities would be used during construction, which would require a negligible amount of water.

Compressor station natural gas piping would undergo hydrostatic testing prior to operation using water obtained from a local municipal water source, such as a fire hydrant. The hydrostatic test water would be pumped into the test sections, pressurized to the design test pressure, and maintained at that pressure for a minimum of 8 hours in accordance with Department of Transportation requirements and CPUC General Order (GO 112-E). Approximately 50,000 gallons of water would be required to perform the test. Reclaimed water would be used if available and practicable. Once the test sections have been completed, the used water would be discharged as approved by the RWQCB and any impacted landowners. All hydrostatic testing water would be discharged in accordance with all applicable permits and in a manner that would minimize erosion.

Equipment and Material for Compressor Station Construction

The anticipated equipment requirements for construction of the compressor station are provided in Table 3-4. These estimates are representative of the type and size of construction equipment to be used on this component of the Proposed Project. All construction equipment would be fitted with appropriate mufflers and all engines would be maintained regularly. Welding machines would use diesel or unleaded fuel. Equipment would be mounted on 18-wheel trucks for delivery to the site. The equipment would be deployed and set up for work in approximately one week once site civil work (i.e., access road and grading activities, if required) has been completed.

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**Table 3-4
Equipment Requirements for Compressor Station Construction**

Equipment Type ¹	Number Required
Pickup truck	4
Side boom	2
Welding rig	7
Gang truck	1
Compressor	2
Water truck	1
Back hoe	3
Track hoe	1
Dozer	1
Scraper	1
Loader	2
Trencher	1
Dump truck	2
Flatbed truck	2
Truck tractor and float trailer	1
Boom truck	2
Wacker/compactor	3
Steam roller	1
Pipe hauling truck	2
Fuel truck	1
Diesel test pump (hydro test)	1
Light plant	2
Crane	2
Forklift	1

¹ Not all equipment would be on site at the same time.

3.8.3 Natural Gas Pipeline and Pressure Limiting Station Construction

A pipeline construction project looks much like a moving assembly line. A large project typically is broken into manageable lengths called “spreads” and utilizes highly specialized and qualified workgroups. Each spread is composed of various crews, each with its own responsibilities. As one crew completes its work, the next crew would move into position to complete its piece of the construction process. Each spread may be up to 15 miles in length in open lands, with the front of the spread clearing the right-of-way and the back of the spread restoring the right-of-way. In urban areas each spread may be up to 2 miles in length with the front end managing traffic, posting no-parking notices, and saw cutting roadways and the back end restoring the trench and conducting paving and restriping. Typical steps in the construction process are as follows:

- Pre-construction preparation (described above)
- Ditching/trenching

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- Pipe stringing
- Lowering of pipe sections and welding
- Pipeline crossings
- Coating of pipe and welds
- Backfilling, compaction, and paving
- Cleanup of the pipeline right-of-way and final street resurfacing
- Hydro testing and startup operations.

The methods of pipeline construction would vary, depending on the location of the construction activities. For example, pipeline construction activities within paved roadways would require pavement breaking, plating, and other activities that would not be required in undeveloped areas. Conversely, pipeline construction in undisturbed areas would vary, depending on topography, proximity to sensitive environmental resources, and other factors. The majority of the proposed alignment would be situated within existing Applicant right-of-way, along other existing utility corridors, and/or along existing paved roads. Illustrations of typical pipeline construction activities that would occur for the Proposed Project are provided on Figure 3-6, Figure 3-7, and Figure 3-8. A detailed discussion of the typical steps in the pipeline construction process is also discussed below.

Right-of-Way Clearing and Ditching/Trenching

As applicable, USA would notify service providers who would then mark their existing utilities, enabling the contractor to avoid conflict between proposed pipeline and existing below-ground infrastructure. Any required traffic control measures would be installed. Ditching/trenching operations would then begin.

Prior to work in undeveloped areas, surveyors would establish the location of the pipeline and necessary width of the work area by staking and flagging. Clearing would then take place and would involve cutting and removing brush, removing topsoil where possible, and grading the right-of-way to prepare the work area. Topsoil typically would be stockpiled along the edge of the right-of-way. Once the work area has been established, trenching operations would begin.

A typical trench would be 7 to 8 feet deep and 60 inches wide. The total required construction width could be up to 50 feet wide within urbanized areas/paved roadways and up to 300 feet wide within remote rural areas. The ditch would be excavated using backhoes, trenching machines, and track hoes. An exception to the mechanical excavation would be hand digging to locate buried utilities, such as other pipelines, cables, water mains, and sewers.

Fugitive dust emissions at the construction site during earthmoving operations would be controlled by water trucks equipped with fine spray nozzles.

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Spoils from excavations, including those from street excavations, would typically be used as shading (six inches of native fill free of rocks) and backfill materials at the site of origin. Excess spoil material along unpaved right-of-way areas in open lands would be spread along the right-of-way. When used for backfill, spoils from the trenches within paved roadways would be hauled to previously disturbed sites for temporary storage and screening, if required, to remove any large rocks or debris and then returned to the trench for backfilling. Spoil material that is unsuitable for backfill use and economically unusable for other purposes would be disposed of in available landfills in accordance with local requirements. Any contaminated soil or waste encountered during trenching would be assessed and then removed and disposed of in the nearest available licensed landfills in accordance with applicable regulations.

Pipe Stringing

Pipe-stringing trucks would be used to transport the pipe in 40- to 80-foot lengths from the shipment point or a pipe storage yard to the construction sites. Where sufficient room exists, trucks would carry the pipe along the right-of-way, and side boom tractors would unload the joints of pipe from the stringing trucks and lay them end to end beside the ditch line for future line-up and welding. The pipe would be bent by a portable bending machine to fit the contour of the ditch both vertically and horizontally to accommodate crossing substructures or topography. Pipeline fittings would be used when pipe bends are not feasible.

Lowering of Pipe Sections and Welding

In open lands, pipe sections are normally welded above the trench in pipe strings. The welded pipe strings would be lifted and lowered into the ditch by side boom tractors spaced so that the weight of unsupported pipe would not cause mechanical damage. Cradles with rubber rollers or padded slings would be used so the tractors could lower the pipe without damage as they travel along the ditch line. Laying the pipe would involve the use of line-up clamps that would hold the pipe sections in position until the first welding pass is completed.

In urban areas ditch welds are required whenever the ditch line is obstructed by other utilities and substructures crossing the pipe ditch. These welds would usually be made in the ditch at the final elevation, and each weld would require pipe handling for line-up. Following the line-up crew, the welding crew would apply the remaining weld passes to complete the weld.

Blasting

Pipeline installation may require blasting in certain areas, which would be planned only during daylight hours. A blast plan would be developed to address specifications for the following items: use of explosives; blasting; notification; transportation of blasting material; methods for limiting ground vibrations; air-overpressure levels; records requirements and safety and warning programs; and vibration predictions based on project parameters. The U.S. Department of Labor's Occupational

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Safety and Health Administration has detailed safety requirements for each blasting event to ensure worker safety.

Pipeline Crossings

Outlined below are the potential construction techniques that may be required in areas where in the proposed alignment would extend over, under, or around riparian areas, culturally sensitive areas, or existing facilities (freeways, roads, railroad tracks, etc.) along the pipeline alignment. Table 3.5 provides information on the estimated number of crossings that would be required for installation of the pipeline.

Directional Drilled Crossings

A typical directional drill work area is illustrated on Figure 3-9. Directional drills typically require a shallow entry and exit pit for each bore. These pits are approximately 10 to 15 feet wide, up to 30 feet long, and 10 feet deep. The work area is usually about 400 feet by 200 feet for the entry pit and 100 feet by 200 feet for the exit pit. Spoils from the excavation would be placed alongside the pits. Spoils would be used as backfill, and wet spoils would be placed in detention basins if uncontaminated and otherwise suitable. The narrative below describes the process used in directional drilling.

To start the bore, a directional drilling rig is positioned at the entry pit and a pilot hole is formed at the beginning of the directional drill crossing. The pilot hole is formed either by excavation or jetting. Depending on the condition of the soil, the pilot is drilled along a predetermined alignment. The typical pilot hole for a pipeline of this size would be approximately 4 inches but can vary depending on the soil conditions and rig size. Drilling fluid is pumped through the drill pipe to the drill head and then jetted through. The end of the drill pipe is used to core the pilot hole. The drill fluid lubricates the drill stem and carries the cuttings to the surface. The entry pit doubles as a capture pit for the returned drilling fluid. The fluid is pumped through a treatment system that separates the cuttings from the fluid and reprocesses the fluid for reuse. The drill fluid is then recycled and re-injected into the drill stem. The pilot process can take several weeks, depending on soil conditions, and may require changing of the drill stem or drill head.

Once the pilot hole has been completed, the second pass would take place with a reamer, or hole opener. The type of opener used depends on soil conditions and soil density. A fly cutter is typically used in good ground conditions. The reaming pass may take several steps depending on the size of the hole. The reamer is attached to the drill string and is rotated and pushed or pulled while rotating, and drill fluid is pumped to the reamer through the drill pipe. The excavated soil is suspended in the drill fluid and then brought to the surface and recycled. When the reamer is attached to the drill string, there would always be a drill pipe on both sides of the reamer, allowing for the drill steel to be in the hole at all times. Several reaming passes may be required.

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After the desired hole has been achieved and the reamer has passed through it completely, a mud pass or packer reamer would be performed to ensure that the hole is clear of all excavated material and that the drill fluid has filled the hole completely to allow for a smooth lubricated pull-back of the pipe.

The final step is to pull the pipe into the reamed hole. A weld cap is installed on the pipe and a swivel is placed attaching the drill string, thus prohibiting rotation of the pipeline. The pipe is pulled backward into the reamed hole. Completion of the directional drill, demobilization, and cleanup then takes place.

Bored Crossings

There would be bored crossing under railroad right-of-way, freeways, flood control channels, drainages, and some roadways depending on final design and on city and state planning review. Either a cased bore or a slick bore technique would be used for the bored crossings. In both types of crossings, a pit is excavated on each side of the facility to be crossed. These pits are typically 10 to 15 feet wide, up to 50 feet long, and 30 feet deep. The work area typically required is approximately 200 feet by 100 feet for the entry pit and 100 feet by 100 feet for the exit pit. Depth of the pits would depend on final pipeline depth.

For a cased bore, a steel casing would be used to encase the bored pipeline. The casing would be carbon steel pipe and would be coated and electrically isolated from the pipeline cathodic protection system. The method of installation would involve a horizontal boring machine with augers placed within the casing pipe as it is pushed into the opening made by the boring machine. Casing sections would be welded and inspected in the pit prior to boring. The carrier pipe would be inserted into the casing pipe after the casing is completed.

For a slick bore, the method of installation would involve use of the carrier pipe as temporary casing as it is pushed into the opening made by the boring machine. The temporary carrier pipe is replaced with the final carrier pipe once the hole is completed, eliminating the need for a casing. Examples of typical boring cross sections are shown on Figures 3-10 and 3-11.

Bridge Crossings

Installing the proposed pipeline across bridge would require expanding and reinforcing existing openings or cutting and reinforcing new openings in the bridge abutments and lateral diaphragms. At the bridge abutments, casing would be installed to allow for seismic movement between the bridge and the ground.

The pipeline would be installed between the bridge girders and would typically be situated on rollers connected to steel braces that would be attached to the bridge girders. The rollers would be used to aid in the installation of the pipeline and would hold the pipeline in place after installation. Review of the original bridge drawings and preliminary engineering indicate that supporting the pipelines from the existing bridges and providing the necessary reinforcement to each bridge would be feasible. Plans for

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individual bridge crossings would take place in the detailed engineering and design phase of the Proposed Project.

Open Cut Water Crossings

The open cut method would require a trench to be cut across the waterbody from bank to bank. This would require equipment such as backhoes, bulldozers, and draglines to prepare the ditch. The trench would be deep enough to allow the pipe to be placed below the anticipated scour depth of the waterbody. The waterbody would be crossed during the dry season or period of low flow if possible. The waterbody would be returned as to its original configuration to the extent practicable, substrate would be replaced, and banks would be stabilized and re-vegetated as necessary. It is anticipated that a U.S. Army Corps of Engineers (ACOE) Nationwide Permit No. 12 (Utility Line Discharges) would be obtained for these crossings.

Major Street Crossings

Major streets often contain belowground infrastructure. Thus, where the proposed pipeline would cross major streets, boring may be required to allow the pipeline to pass under or across the street. The use of boring for street crossings would be determined during final design and review with permitting agencies (see the “Bored Crossings” section). Street crossings are listed in Table 3-5.

**Table 3-5
Known Pipeline Crossing**

Location	Type of Installation	Crossing Feature
Palmdale Road and Baldy Mesa Road	Casing Bore	State Route (SR)18
Baldy Mesa Road and 4th Street	Slick Bore	Water Aqueduct
Baldy Mesa Road and Hollister Road	Casing Bore	Railroad Track
I-15 southbound north of SR138	Casing Bore	I-15
I-15 north of SR 138 northbound	Casing Bore	I-15
North of SR 138	Casing Bore	Two Railroad Tracks
North of SR 138	Casing Bore	Railroad Track
SR 138 east of I-15	Casing Bore	SR 138
South of Cleghorn Drive and East of U.S. Route 66	Open Cut	Cleghorn Creek
I-15 south of Cleghorn Drive	Casing Bore	I-15
40th Street and North Harrison Street	Horizontal Directional Drill	East Twin Creek
North Tippecanoe Avenue and north of East 9th Street	Casing Bore	Storm Channel
South Tippecanoe Avenue and south of East Palm Meadows Drive	Horizontal Directional Drill	Santa Ana River
Gardena Street south of Redlands Boulevard.	Casing Bore	Railroad tracks
South Waterman Avenue north of Barton Road	Casing Bore	Waterman Avenue Intersection
East Redlands Avenue and east of Gardena Street	Span	Road Bridge
SR 60 and Redlands Boulevard	Casing Bore	SR 60
Gilman Springs Road so Alessandro Road	Slick Bore	County Road
SR 79 south of 1st Street	Casing Bore	SR 79

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**Table 3-5
Known Pipeline Crossing**

Location	Type of Installation	Crossing Feature
Westward Avenue East of Highland Home Road	Open cut	Earthen Drainage Channel
San Gorgonia Avenue and Lincoln Street	Casing Bore	SR 243
East Westward Avenue east of South Hathaway Street	Horizontal Directional Drill	River 1st crossing
East Westward Avenue east of South Hathaway Street	Horizontal Directional Drill	River 2nd crossing
Almond Street and Railroad Avenue	Casing Bore	Railroad Tracks
Rushmore Avenue and Railroad Avenue	Casing Bore	Railroad Tracks
I-10 and west of Cottonwood Road	Casing Bore	I-10
I-10 and Tipton Road	Casing Bore	I-10
Whitewater River east of Tipton Road	Horizontal Directional Drill	Whitewater River

Coating of Pipe and Welds

Fusion-bonded epoxy coating would be applied at the pipe/coating mill before delivery to the construction site. However, field coating would be necessary on all field weld joints made at the site in order to provide a continuous coating along the pipeline. After the pipe has been welded and inspected, field-applied fusion-bonded epoxy or two-part epoxy would be used for protection of pipe joints. Alternately, construction-grade tape and tape primer may be used. Pipe coating for slick bore and horizontal directional drill installations would be coated with a fusion-bonded epoxy coating with additional thickness. This would protect the pipeline from scratches and abrasions during bored installations.

Weld and Pipe Coating Testing and Inspection

All field welding would be performed by qualified welders in accordance with all applicable ordinances, rules, and regulations, including API 1104 (Standard for Welding Pipe Lines and Related Facilities and the rules and regulations of the U.S. Department of Transportation found in 49 CFR 192 (for natural gas pipelines)). As a safety precaution, a minimum of one 20-pound dry chemical unit fire extinguisher would accompany each welding truck on the job.

Radiographs would be recorded and interpreted for acceptability according to requirements of API 1104. All rejected welds would be repaired or replaced as necessary and re-inspected. The test reports as well as a record indicating the location of the field welds would be kept for the life of the pipeline.

Testing would be conducted to locate any coating discontinuities, such as thinning or mechanical defects, which have the potential to allow moisture to reach the pipe. The testing device would be an electronic holiday detector, which develops an electrical potential between the pipe and an electrode in contact with the outside of the coating. Pinholes in the coating of microscopic size can be located using the electrical detector. All coated pipe, including field joints, fittings, and bends would be tested as the pipe is lowered into the trench and repaired as necessary prior to backfilling.

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In addition to the standard pipe mill testing of all pipe and fittings, hydrostatic testing would be performed after construction and prior to startup. Federal regulations (49 CFR 192) mandate hydrostatic testing of new, cathodically protected natural gas pipelines prior to placing the line into operation.

Visual Inspection

The pipeline construction phases would be visually inspected in accordance with U.S. Department of Transportation requirements (49 CFR 192).

Backfilling, Compaction, and Paving

Backfill material would be obtained from the ditch spoils. The pipe would be covered along its sides and its top with a minimum of 6 inches of native fill free of rocks. This area of fill is referred to as the pipeline shading. In certain areas where damage might occur to the pipe coating from abrasive rocky soils in the trench bottom, clean sand or earth backfill would be used to pad the trench. Any additional padding material would be obtained from local commercial sources. The backfill in the remainder of the trench above the padding and shading would be native material excavated during trenching. The backfilled earth would be compacted using hydraulic equipment and tamper for smaller excavations. The trench would be filled with sand/cement slurry where required by local permitting agencies. The slurry would be purchased from a local slurry plant and transported to the site. Steel plates would be used to cover any open trench within traffic lanes, as required by local permitting agencies. The potential volume of contaminated soils that would be encountered is unknown at this stage of the Proposed Project.

Cathodic Protection System

As discussed in Section 3.5.5, a cathodic protection system consisting of cathodic protection rectifiers, buried anodes, and test stations would be installed along the pipeline. This system would prevent external corrosion of the pipeline. It is anticipated that two rectifiers would be installed along the proposed pipeline. Each of the sites where the rectifiers are installed would require a utility pole, an electrical meter, and a rectifier. Buried anodes would be installed by drilling a hole into the earth to a prescribed depth and then inserting the anodes into the hole.

Restoration of the Pipeline Right-of-Way and Final Street Resurfacing

When compaction of the trench has been completed, the pipeline right-of-way would be restored to its original condition to the extent possible. The right-of-way would be cleared of all construction-related materials and equipment. In areas where the pipeline was installed across non-paved surfaces, the ground surface would be returned to the surrounding condition and topsoil removed during grading of the right-of-way would be spread across the work area. If the pipeline route crosses farm land, the landowner would be compensated for any crop loss due to construction of the pipeline. In areas where

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the pipeline would be installed across pavement, the ground surface would be repaved in accordance with standard industry practices.

Water Use and Hydrostatic Testing

Erosion and sediment control would require the use of water to stabilize soil. Water usage for dust control along dirt access roads, right-of-way grading operations, and trench compaction is estimated to be up to 270,000 gallons per day or approximately 6,000,000 gallons per month (22 workdays per month). For other construction activities, water would be used primarily for equipment and road way wash down (up to 20,000 gallons per day or 440,000 gallons per month). Reclaimed water would be used, if available and practicable. Portable restroom facilities would be used during construction, which would require a negligible amount of water.

The pipeline would undergo hydrostatic testing prior to operation using water obtained from local hydrants, canals, aqueducts, or water wells available along the construction route. Reclaimed water would be used, if available and practicable. Non-potable water would be sampled and analyzed prior to use. Agencies or private owners would be contacted and each water source approved prior to establishing connection. The hydrostatic test water would be pumped into the test sections, pressurized to design-test pressure, and maintained at that pressure for a minimum of 8 hours in accordance with Department of Transportation requirements and CPUC General Order (GO 112-E). Approximately 7 to 10.5 million gallons of water would be required to test the Adelanto to Moreno pipeline and approximately 3.5 to 5 million gallons of water would be required to test the Moreno to Whitewater pipeline. Once detailed engineering drawings have been completed, the number and location of the test sections would be accurately determined and the quantity of water needed would be refined. Once the test has been completed on the initial segment, the water would be transferred to the next section of pipe and reused for testing purposes where possible then ultimately discharged in accordance with all applicable permits and landowner approvals and in a manner that would minimize erosion.

3.8.5 Access Roads and Staging and Work Areas

Access Roads

Within undeveloped areas, existing access roads would be used to the extent possible. The existing dirt access roads from the paved roadway accessing the pipeline right-of-way may require additional grading to allow for construction equipment and pipe access. Existing access roads along the Adelanto to Moreno pipeline and the Moreno to Whitewater pipeline routes vary from 8 feet wide to 15 feet wide. Grading of these roads may be required to properly level the road. Additionally, roads would be widened as necessary at sharp turns to accommodate construction equipment and materials. Approximate final width of graded roads would be 15 to 30 feet. Soil removed during grading would be

3 Project Description

stockpiled adjacent to the access road and access roads would be restored to the extent possible following construction.

The proposed Adelanto to Moreno pipeline and Moreno to Whitewater pipeline routes generally follow closely along existing access roads within SoCalGas pipeline right-of-way and other utility corridors. These access roads, where possible, would be used as part of the graded work area of the construction right-of-way, thus reducing the total impact acreage. Upon completion of construction, the existing access roads would then be reestablished within the work area where necessary.

Staging and Work Areas

It is anticipated that three 10-acre staging areas would be required for temporary offices, staging, and laydown for the Adelanto to Moreno pipeline and one 10-acre staging area would be required for temporary offices, staging, and laydown for the Moreno to Whitewater pipeline. Two additional 10- to 15-acre sites would be required for pipe deliveries received from railcar, for temporary storage of the pipes, and for loading the pipes onto trucks for delivery to construction sites. These pipe delivery and loading areas would be sited adjacent to a railroad spur, where possible. Pipe for both pipelines would normally be stockpiled at one facility. Additional staging areas along both pipeline routes would be required for trench soil stockpiling and processing, equipment staging, and material transfer for urban roadway construction. The additional staging areas would be generally located at 5-mile intervals along the construction route. In open lands, staging areas for dirt, equipment, and material would be required at strategic areas and where open space is available. An approximately 200-foot by 200-foot construction work area would be required at each of the pressure limiting stations for parking, laydown, and staging. Existing access roads would provide access to the pressure limiting stations. For pipeline construction activities, temporary alternative vehicle and pedestrian access would also be established, if necessary, in accordance with local regulations and permitting requirements, outside of normal construction periods. Local and emergency access would be maintained. In addition, truck deliveries with oversized loads may be restricted to off-peak hours.

Equipment and Material for Pipeline Construction

The equipment requirements estimated for pipeline construction are given in Table 3-6. These estimates are representative of the type and size of construction equipment to be used during Proposed Project construction. All construction equipment would be fitted with appropriate mufflers and all engines would be maintained regularly. Welding machines would use diesel or unleaded fuel. Equipment would be mounted on 18-wheel trucks for delivery to the site. The equipment would be deployed and set up for work in approximately one week, as soon as access roads have been established and grading activities have been completed, where required.

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Materials that would be truck-transported to the site would include coated pipe sections (40 to 80 feet each), pipe fittings, valve assemblies, valve vaults, trench shoring pile, coating supplies (for weld-joints), welding materials, cement, aggregate, gravel, sand, and slurry (from local plants) for backfill at street crossings, asphalt for repaving, signs and fencing, fuel and lubrication for equipment, drinking water, and water for dust control. The amount of each material needed would depend on the location and activity of the spread at any given time. Anticipated equipment for typical pipeline construction is outlined in Table 3-6.

**Table 3-6
Equipment Requirements for Pipeline Construction (per Spread)**

Equipment Type ¹	Number Required
Pickup truck	6
Side boom	8
Welding rig	14
Gang truck	3
Compressor	3
Water truck	2-5
Back hoe	6
Track hoe	2
Dozer	3
Loader	3
Trencher	1
Bending machine	1
Dump truck	6
Flatbed truck	3
Truck tractor and float trailer	2
Boring machine	1
Boom truck	2
Wacker/compactor	2
Steam roller	1
Pipe hauling truck	5
Fuel truck	1
Diesel test pump (hydro test)	1
Light plant	2
Crane	1
Forklift	1
Water holding tanks	2

¹ Equipment needed may vary depending on construction needs, type of construction, and whether construction would take place in urban or open land.

The Applicant intends to use horizontal directional drilling (HDD) in certain locations to minimize potential impacts to waterways and transportation infrastructure. HDD technology requires certain unique equipment that would not otherwise be used for typical pipeline construction. Table 3-7 depicts

3 Project Description

the equipment typically required for HDD, and an illustration of a typical HDD construction site is shown on Figure 3-9.

**Table 3-7
Equipment Requirements for Each HDD**

Equipment Type ¹	Number Required
Drill rig	1
Mud pumps	2-4
Mud mixing tanks	1-2
Power trailers (to drive rig hydraulics)	2
Hose rack	1
Generator	1
Control van	1
Modular drill pipe and storage rack set	1
Stores container	1
Baker tank	1
Crane	1
Backhoe	1

¹ Equipment needed may vary depending on length and soil and geotechnical characteristics.

3.8.6 Proposed Project Construction Work Hours, Schedule, and Workforce

This subsection provides an overview of the construction schedule for the Proposed Project. Estimated work hours, schedule, and construction workforce are outlined below.

Work Hours

Construction activities on the Adelanto Compressor Station would typically occur Monday through Friday, and some Saturdays, between the hours of 7:00 AM and 7:00 PM or as allowed by the City of Adelanto's zoning ordinance, depending on weather and material delivery. Construction of the pipeline in areas with sensitive receptors would normally take place 5 days per week between the hours of 6:00 AM and 7:00 PM. In undeveloped areas where no sensitive receptors are located nearby, construction of the pipeline would normally take place 6 days per week between the hours of 6:00 AM to 7:00 PM. Night and weekend construction may be necessary in urban areas to minimize impacts to traffic and industrial or commercial business activities but would only occur to the extent that such construction is permitted in accordance with local ordinances. Additionally, during hydrostatic testing and start-up operations, work hours may extend up to 24 hours per day during any day of the week to the extent permitted in accordance with local ordinances. Construction adjacent to sensitive noise receptors such as residences and recreational facilities would be conducted in accordance with local noise ordinances and permit requirements.

3 Project Description

Schedule

Construction and installation of the proposed modifications at the Adelanto Compressor Station would take approximately 18 months to complete. The entire planning and construction process for the Adelanto Compressor Station, including engineering, design, and procurement, is estimated to last 30 months. Construction and installation of the proposed pipeline would take approximately 19 months. The entire planning and construction process, including engineering, design, and procurement, is estimated to last 36 months. Design and construction of the Proposed Project, including mobilization, demobilization, and restoration, is anticipated to take approximately 3 years. Table 3-8 provides an overview of the schedule.

**Table 3-8
Proposed Construction Timeline**

Adelanto Compressor Station	Timeline
Mobilization	1 month
Construction	12 months
Tie-in and startup operations	1 month
Project operational	4 months
Post-construction restoration	1 month
Demobilization	1 month
Adelanto to Moreno Pipeline	Timeline
Mobilization	1 month (multiple spreads)
Dirt right-of-way preparation	6 months (ongoing, multiple spreads)
Pipeline construction open land	7 months (multiple spreads)
Pipeline construction urban areas	13 months (multiple spreads)
Hydrostatic testing	2 months
Tie-in and startup operations	1 month
Project operational	16 months
Post-construction restoration	18 months
Demobilization	1 month
Moreno to White Water Pipeline	Timeline
Mobilization	1 month (multiple spreads)
Dirt right-of-way preparation	10 months (ongoing, multiple spreads)
Pipeline construction open land	11 months (multiple spreads)
Pipeline construction urban areas	7 months (multiple spreads)
Hydrostatic testing	1 months
Tie-in and startup operations	1 month
Project operational	13 months
Post-construction restoration	15 months
Demobilization	1 month
Pressure Liming Stations	Timeline
Mobilization	1 week
Excavation	1 month
Fabrication	2 months

3 Project Description

**Table 3-8
Proposed Construction Timeline**

Adelanto Compressor Station	Timeline
Hydrostatic testing	1 month
Installation, tie-in, and startup operations	4 months
Project operational	8 months
Post-construction restoration	2 weeks
Demobilization	1 week

Note All durations are approximate.

Proposed Project Workforce

The Proposed Project would generate construction-related employment opportunities, especially for skilled workers such as welders. Local workforce would be utilized when possible. Workforce needed may vary depending on construction needs, type of construction, and whether construction would take place in urban or undeveloped land. The Applicant expects direct and indirect economic benefits resulting from job creation and project-related expenditures in the communities affected by the Proposed Project.

Workforce for Compressor Station Construction

It is estimated that approximately 40 people would be employed for construction of the compressor station. Table 3-9 outlines the anticipated labor requirement for the compressor station.

**Table 3-9
Typical Labor Requirements for Compressor Station Construction**

Job Type	Number of Personnel Required
Superintendent	1
Clerk	1
Material clerk	1
Foreman	2
Operator	3
Fitter	2
Welder	7
Welder helper	7
Millwright	3
Electrician	3
Driver	3
Laborer/wrapper	7
Total workers	40

3 Project Description

Workforce for Pipeline Construction

It is estimated that approximately 90 people per spread would be employed for construction of the pipeline. Local qualified workforce would be utilized to the extent available and based upon experience and availability. Table 3-10 outlines the anticipated labor requirement for the pipeline construction.

**Table 3-10
Typical Labor Requirements for Pipeline Construction (per Spread)**

Job Type	Number of Personnel Required
Superintendent	1
Clerk	2
Material clerk	1
Foreman	6
Operator	12
Fitter	14
Welder	14
Welder helper	14
Driver	15
Laborer/wrapper	21
Total Workers Per Spread	90

Workforce for Directional Drilling

A typical crew for a directional drill associated with the Proposed Project would consist of approximately 20 contractor personnel. The personnel required would include a crew for welding and testing of the pipe string, a crew that would operate the drill rig and other equipment, and subcontractors such as radiographic testers. Table 3-11 outlines the anticipated labor requirement for directional drilling (per spread) below.

**Table 3-11
Typical Labor Requirements for Directional Drilling (per Spread)**

Equipment Type	Number Required
Drill rig	1
Mud pumps	2-4
Mud mixing tanks	1-2
Power trailers (to drive rig hydraulics)	2
Hose rack	1
Generator	1
Control van	1
Modular drill pipe and storage rack set	1
Stores container	1
Baker tank	1
Crane	1
Backhoe	1

3 Project Description

3.9 Post-Construction Project Operations

This section describes what activities would occur once the compressor station and pipeline are operational.

Compressor Station and Pressure Limiting Stations

The Adelanto Compressor Station and each pressure limiting station would be unstaffed, except for periodic maintenance activities required for normal operations and maintenance. Aside from maintenance of the air emissions equipment at the Adelanto Compressor Station, no additional activities beyond the existing ongoing, routine operations and maintenance activities at the compressor station or pressure limiting stations would be required.

Pipeline

The pipelines associated with the Proposed Project would be inspected, maintained, and repaired following completion of construction in accordance with Department of Transportation and GO-112E requirements and in a manner consistent with good maintenance and repair practices. This would involve both routine preventative maintenance and emergency procedures to maintain service continuity. Ground inspections of Proposed Project facilities would be performed. Components would be inspected annually, at a minimum, for corrosion and equipment integrity.

The access and spur roads constructed as part of the Proposed Project would be inspected, maintained, and repaired following the completion of construction in a manner consistent with SoCalGas' road maintenance and repair practices. This involves both routine preventative maintenance and emergency response procedures to maintain continuity of access to SoCalGas' transmission facilities. At a minimum, during the annual inspections of the pipeline, the roads would also be inspected for damage.

3.10 Applicant Proposed Measures

The Proposed Project has been designed to minimize environmental impacts while meeting the Proposed Project needs and objectives. The Applicant has identified a number of APMs that would be implemented during construction and/or operation of the Proposed Project to reduce or avoid impacts. These APMs are discussed in Sections 5.1 through 5.16 and are summarized in Table 3-12, Applicant Proposed Measures.

Table 3-12
Applicant Proposed Measures

Issue Area	Applicant Proposed Measures
Aesthetics/Visual Resources	APM-AES-1, Implementation of Revegetation and Restoration Plan APM-AES-2, Block Valve Locations
Agricultural Resources	—

3 Project Description

**Table 3-12
Applicant Proposed Measures**

Issue Area	Applicant Proposed Measures
Air Quality/GHG Emissions	APM-AIR-1, Construction Fugitive Dust Control Plan APM-AIR-2, Construction Emissions Analysis APM-AIR-3, Existing Operational Emissions of the Adelanto Compressor Station APM-AIR-4, Sensitive Receptors APM-AIR-5, Local Climate Action Plans
Biological Resources	APM-BIO-1, Biological Surveys APM-BIO-2, Preconstruction Surveys APM-BIO-3, Biological Monitoring APM-BIO-4, Minimize Disturbance to Native Vegetation APM-BIO-5, Establish Environmentally Sensitive Areas APM-BIO-6, Avoidance of Vernal Pools APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-8, Avoidance and Minimization of Impacts to Jurisdictional Waters APM-BIO-9, BMPs for Avoidance and Minimization of Impacts to Special-status Wildlife Species APM-BIO-10, Worker Environmental Awareness Program (WEAP) APM-BIO-11, Treat Cut Tree Stumps with Sporax APM-BIO-12, Weed Control Plan APM-BIO-13, Nesting Bird Management Plan APM-BIO-14, Preconstruction Plant Surveys APM-BIO-15, Arroyo Toad Avoidance APM-BIO-16, Condor Avoidance APM-BIO-17, Mohave Ground Squirrel Avoidance APM-BIO-18, Listed Kangaroo Rat Avoidance APM-BIO-19, Coastal California Gnatcatcher Avoidance APM-BIO-20, Riparian Birds Avoidance APM-BIO-21, Avoidance of Desert Tortoise APM-BIO-22, Endangered Species Permits APM-BIO-23, Avoidance of Special-Status Plants APM-BIO-24, Burrowing Owl Avoidance and Mitigation APM-BIO-25, Raptor Nest Avoidance APM-BIO-26, Avoidance of Other Special-status Wildlife APM-BIO-27, Compensation for Sensitive Vegetation Communities, Habitat, and Plants APM-BIO-29, Urban/Wildlands Interface Guidelines APM-BIO-30, Consistency with Habitat Conservation Plans
Cultural Resources	APM-CUL-1, Coordination with Native Americans tribes and individuals APM-CUL-2, Consultation with local historical societies and other repositories of information regarding cultural resources of the historical period APM-CUL-3, Cultural Resources Survey APM-CUL-4, Evaluation of Identified Cultural Resources APM-CUL-5, Access Effects of the Project on Historical Resources APM-CUL-6, Treatment Plan of Historical Resources APM-CUL-7, Unanticipated Discovery Plan for Cultural Resources APM-CUL-8, Treatment of Human Remains APM-CUL-9, Paleontological Literature Review and Records Search APM-CUL-10, Paleontological Mitigation Plan

3 Project Description

**Table 3-12
Applicant Proposed Measures**

Issue Area	Applicant Proposed Measures
Geology, Soils, and Seismicity	APM-GEO-1, Geotechnical Investigation APM-GEO-2, Determination of active or potentially active faults APM-GEO-3, Appropriate design ground motion values APM-GEO-4, Appropriate design features to prevent or limit liquefaction APM-GEO-5, Appropriate design features to prevent or limit landslide/slop instability APM-GEO-6, Soil Erosion or Loss of Topsoil APM-GEO-7, Appropriate design features to prevent or limit damage to the pipeline and appurtenant structures on unstable geologic unit or soil APM-GEO-8, Appropriate design and construction recommendations to prevent or limit expansive material damage to the pipeline and appurtenant structures
Hazards and Hazardous Materials	APM-HAZ-1, Project-Specific Hazardous Materials Management and Hazardous Waste Management Program APM-HAZ-2, Proper Handling for the Transport of Hazardous Materials APM-HAZ-3, Procedures for Fueling and Maintenance of Construction Equipment APM-HAZ-4, Emergency Response Plan APM-HAZ-5, Containment and Disposal of HDD Drilling Waste APM-HAZ-6, Spill Prevention, Countermeasure, and Control Plan and Hazardous Materials Business Plan APM-HAZ-7, Hazardous Materials Contingency Plan APM-HAZ-8, Construction Management Plan APM-HAZ-9, Safety and Reliability Study APM-HAZ-10, Emergency Response Plan APM-HAZ-11, Additional Hazardous Materials Research APM-HAZ-12, Fire Protection Plan
Hydrology and Water Quality	APM-HYDRO-1, Construction SWPPP APM-HYDRO-2, Equipment Maintenance and Refueling Near Sensitive Areas APM-HYDRO-3, Consultation with the RWQCB to determine if an individual discharge permit is required for dewatering APM-HYDRO-4, Frac-Out Contingency Plan APM-HYDRO-5, Water Reuse Plan
Land Use and Planning	—
Mineral Resources	—
Noise	APM-NOI-1, Noise Mitigation and Monitoring Plan – Adelanto Compressor Station Operation APM-NOI-2a, Construction Noise Mitigation Plan APM-NOI-2b, Notification Prior to Construction APM-NOI-3, Noise Mitigation and Monitoring Plan – Pipeline Operation
Population and Housing	—
Public Services	—
Recreation	—
Transportation and Traffic	APM-TRF-1, Construction Traffic Control Plan
Utilities and Services Systems	—

3 Project Description

3.11 References

49 CFR 192. Rules and regulations of the U.S. Department of Transportation for natural gas pipelines.

API 1104. Standard for Welding Pipe Lines and Related Facilities.

3 Project Description

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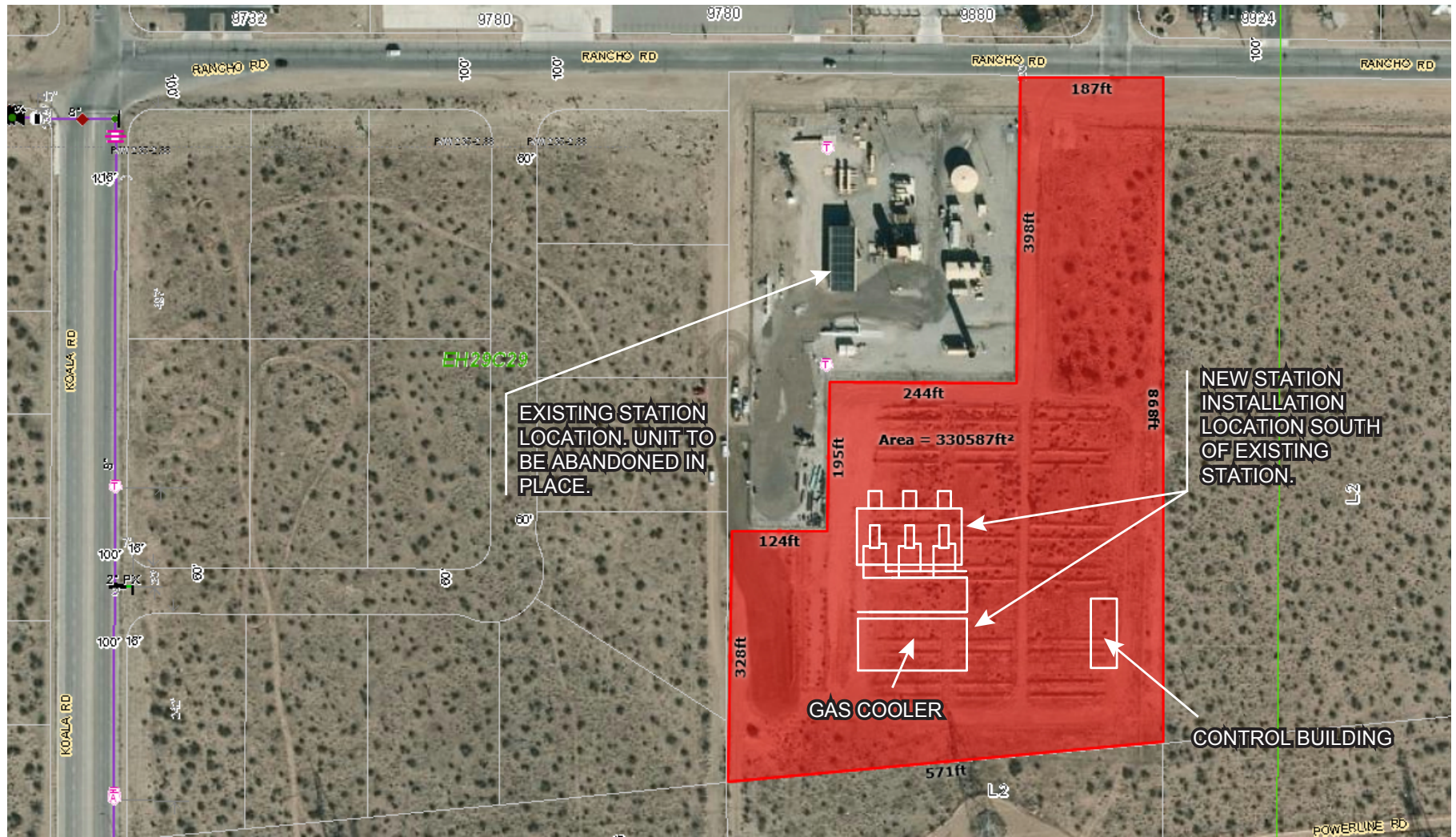


SOURCE: BING Maps 2014; Southern California Gas Company 2014

North South Project

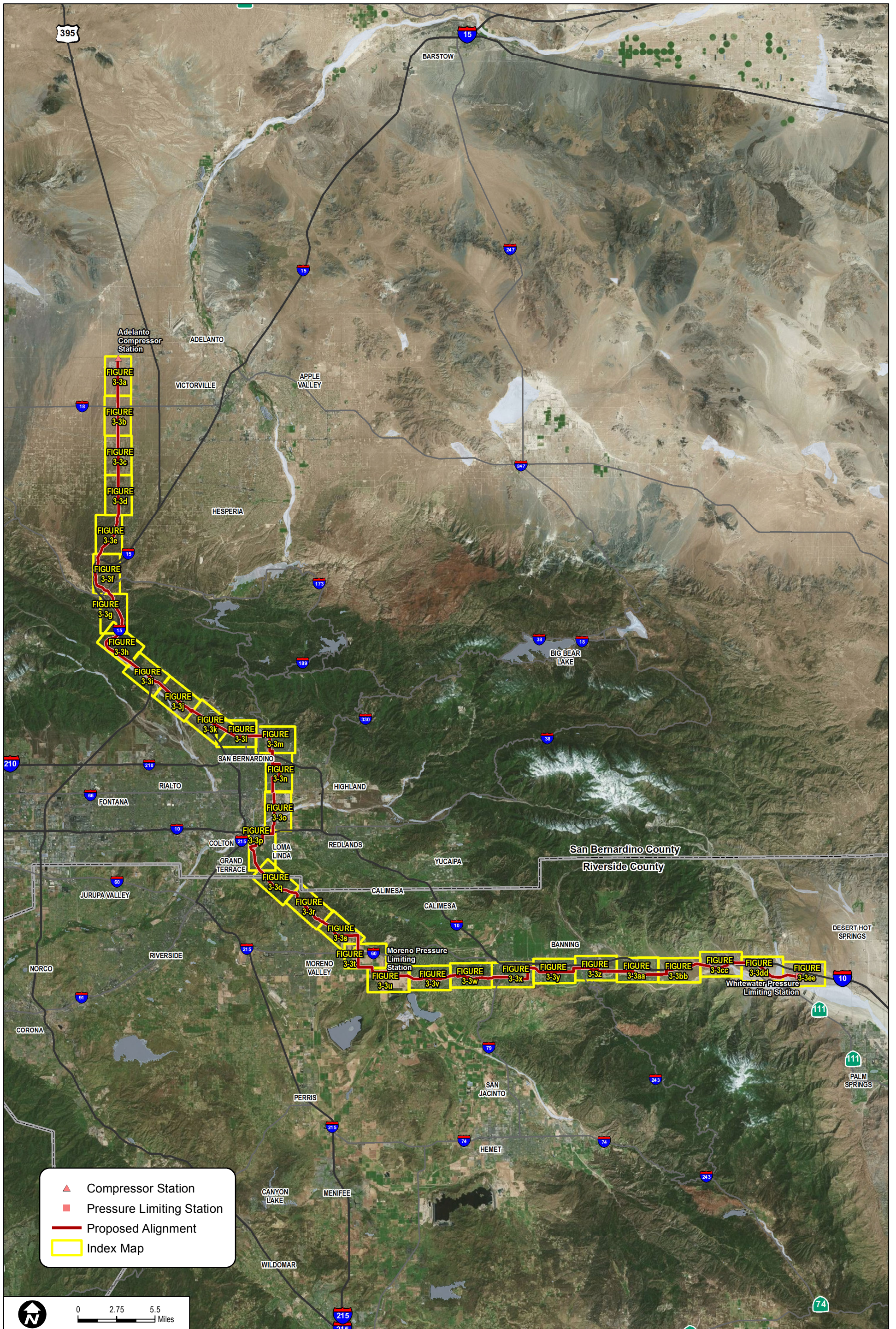
FIGURE 3-1
Project Components

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3 Project Description

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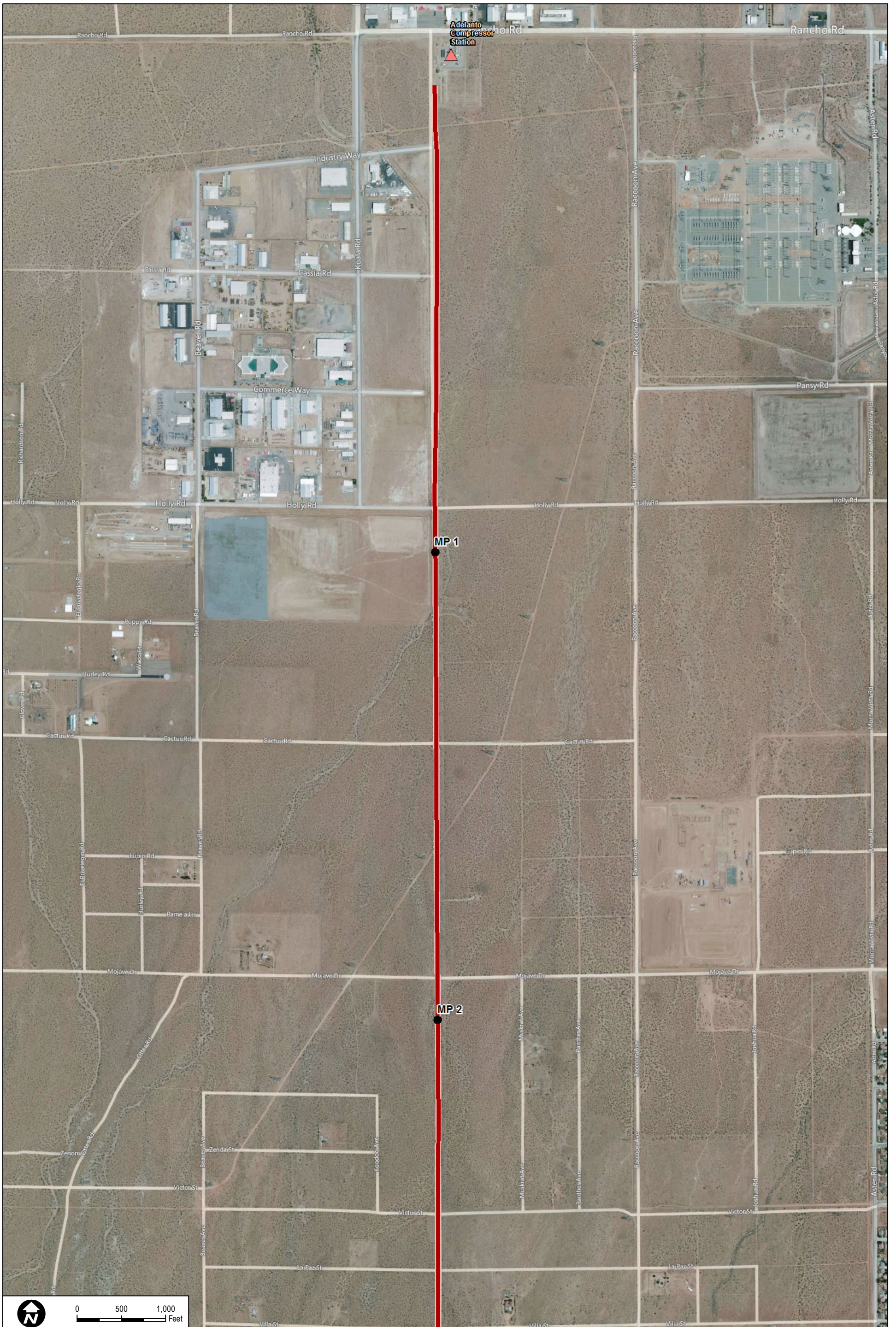
SOURCE: BING Maps 2014; Southern California Gas Company 2014

FIGURE 3-3

Detailed Map Sheets - Index Map



North South Project



Adelanto
Compressor
Station

MP 1

MP 2



0 500 1,000
Feet

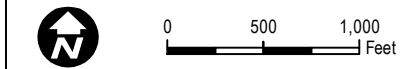
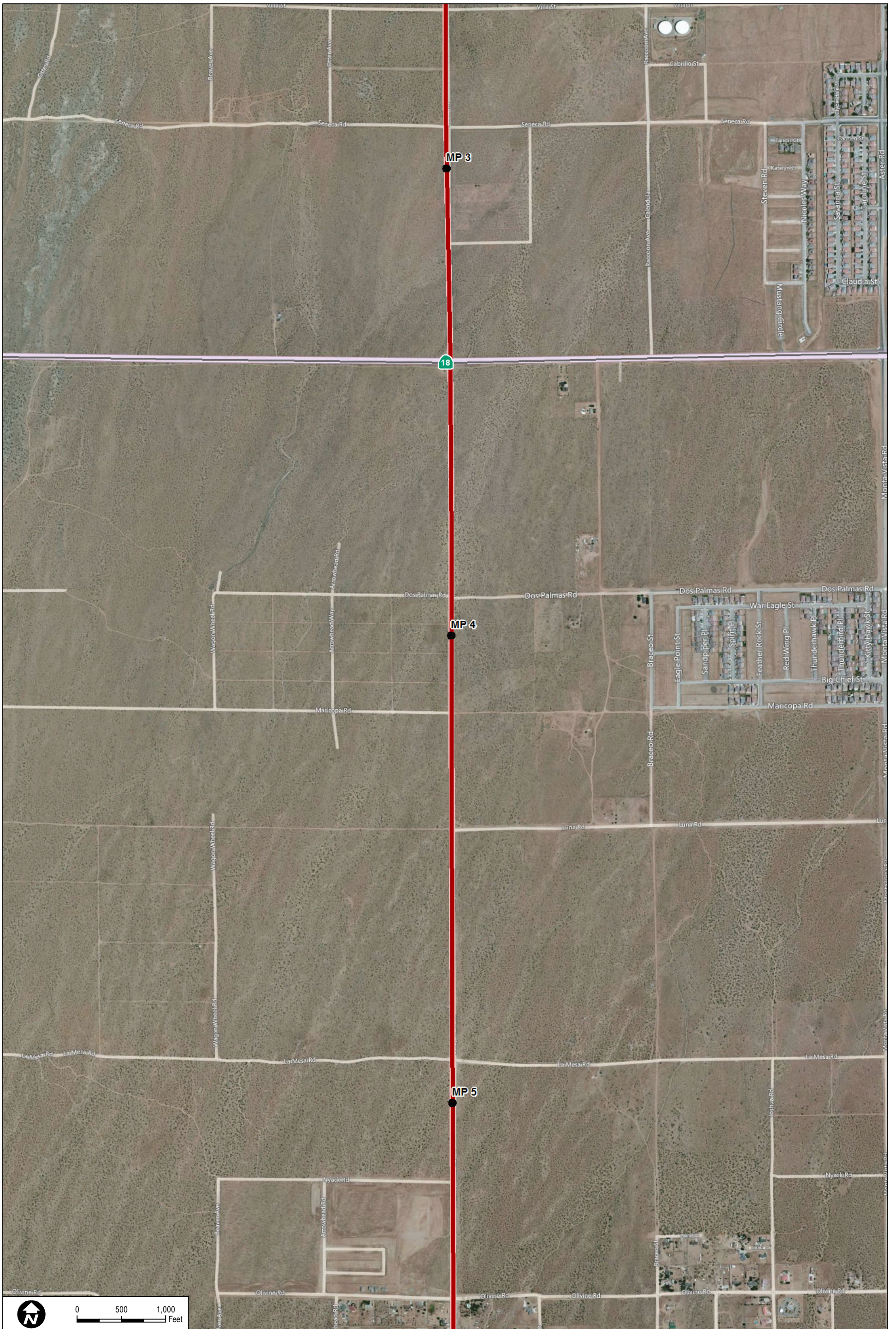


SOURCE: BING Maps 2014; Southern California Gas Company 2014

- ▲ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- Mileposts
- Project Points

North South Project

FIGURE 3-3a
Detailed Map Sheets



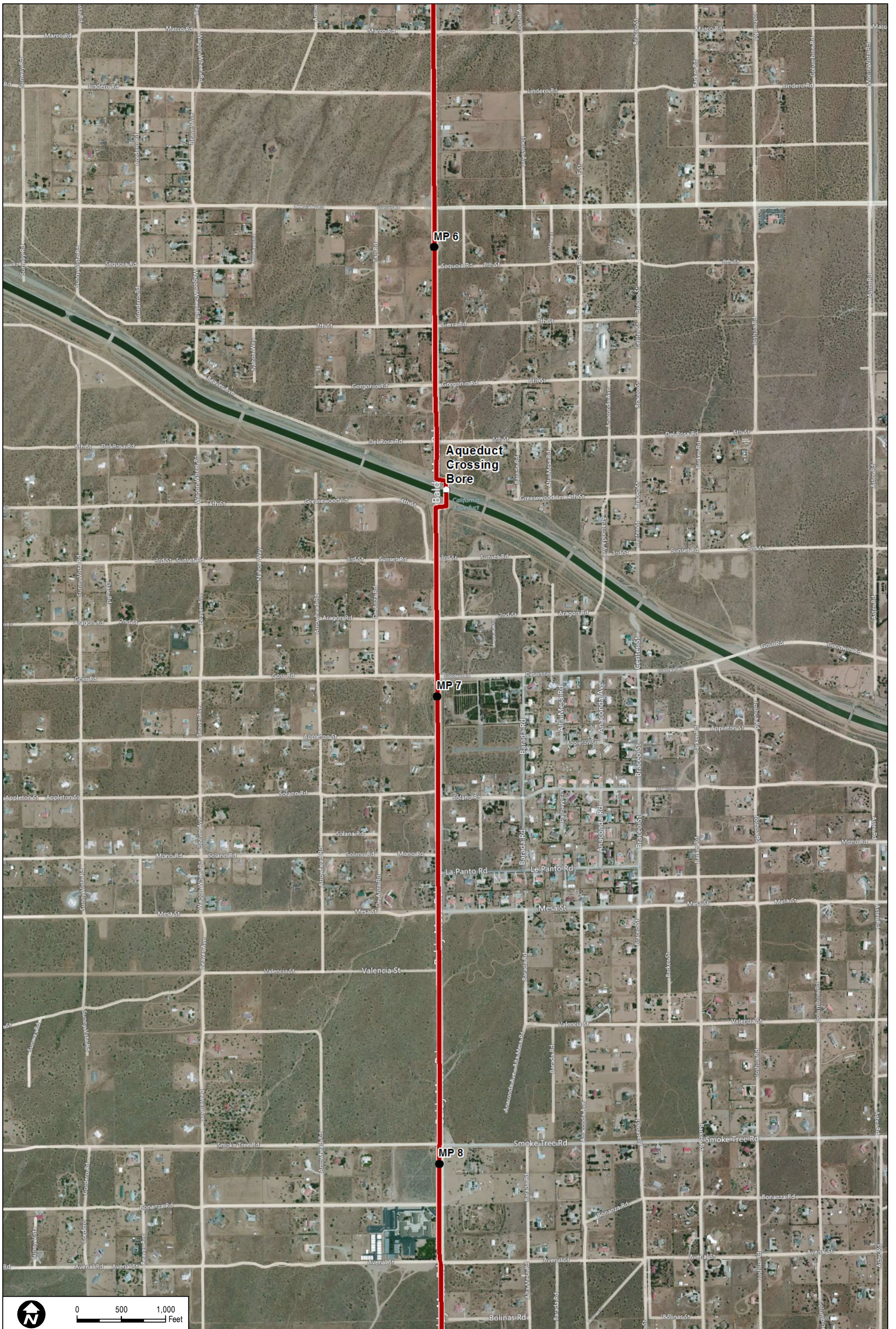
SOURCE: BING Maps 2014; Southern California Gas Company 2014

- ▲ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- Mileposts
- Project Points



North South Project

FIGURE 3-3b
Detailed Map Sheets



MP 6

MP 7

MP 8

Aqueduct
Crossing
Bore

California
Aqueduct



0 500 1,000
Feet

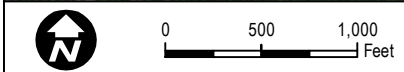
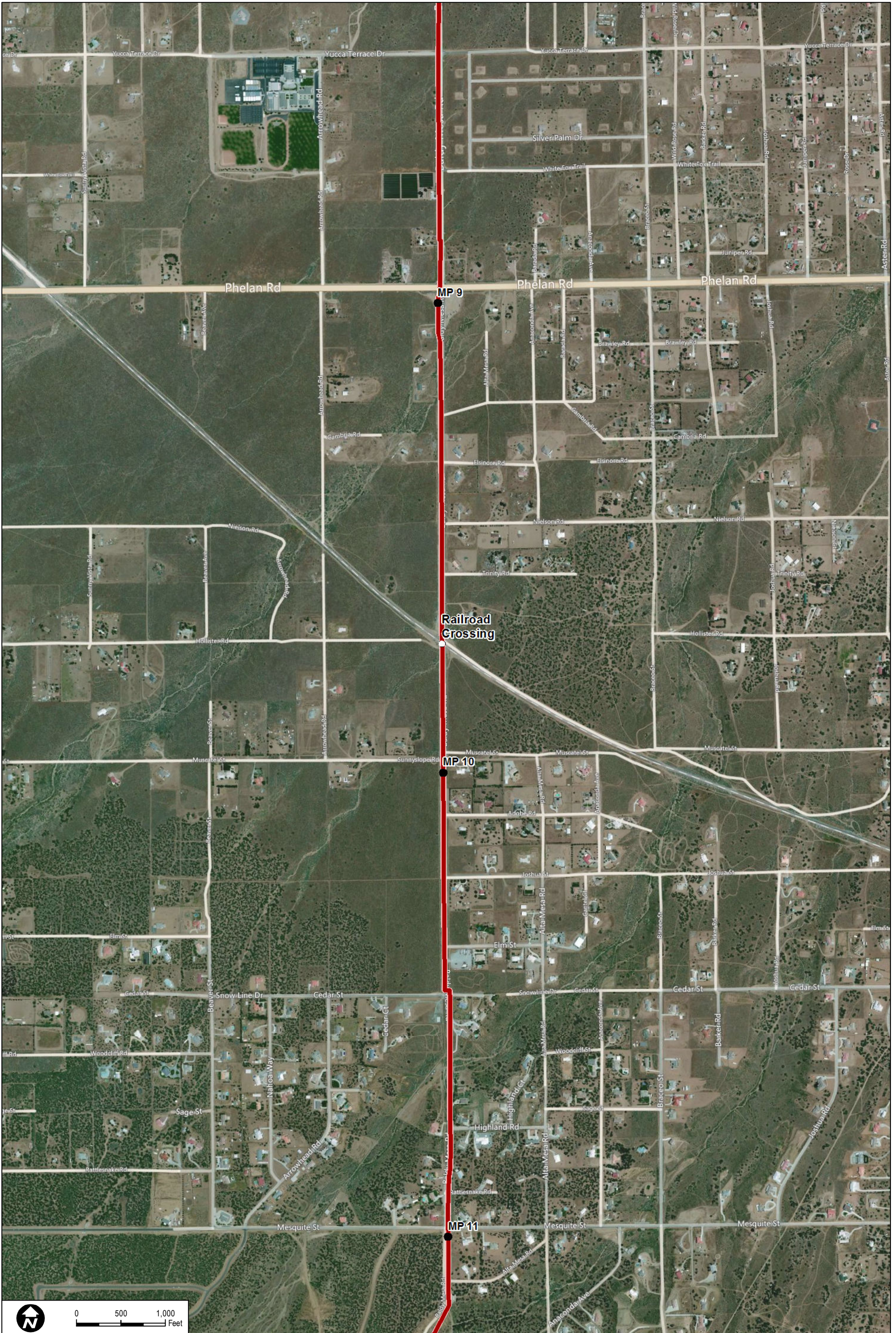


SOURCE: BING Maps 2014; Southern California Gas Company 2014

- ▲ Compressor Station
- Pressure Limiting Station
- Mileposts
- Project Points

North South Project

FIGURE 3-3c
Detailed Map Sheets

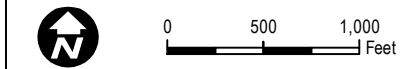
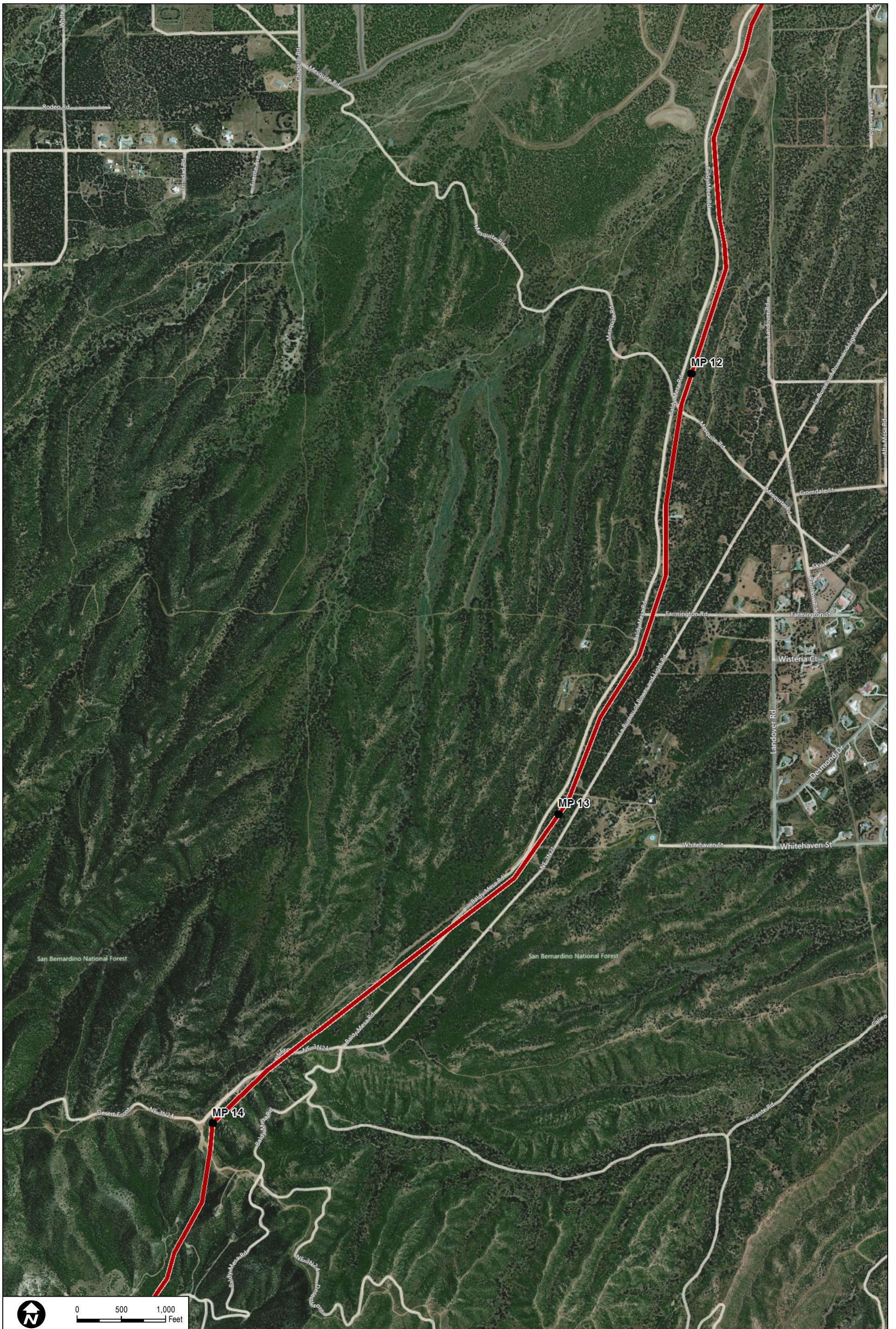


SOURCE: BING Maps 2014; Southern California Gas Company 2014

North South Project

- ▲ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- Mileposts
- Project Points

FIGURE 3-3d
Detailed Map Sheets

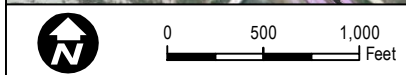
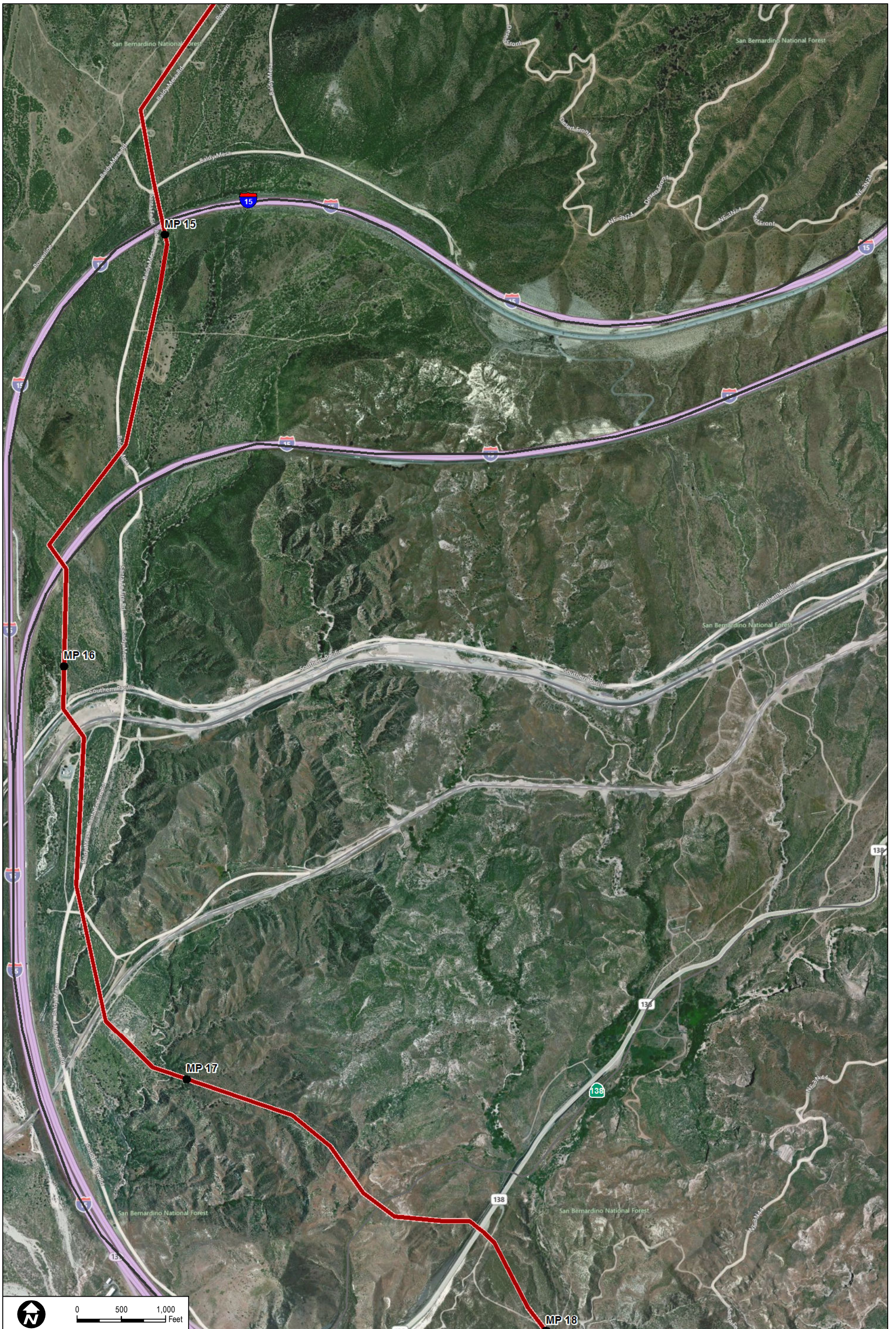


SOURCE: BING Maps 2014; Southern California Gas Company 2014

- ▲ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- Mileposts
- Project Points

North South Project

FIGURE 3-3e
Detailed Map Sheets

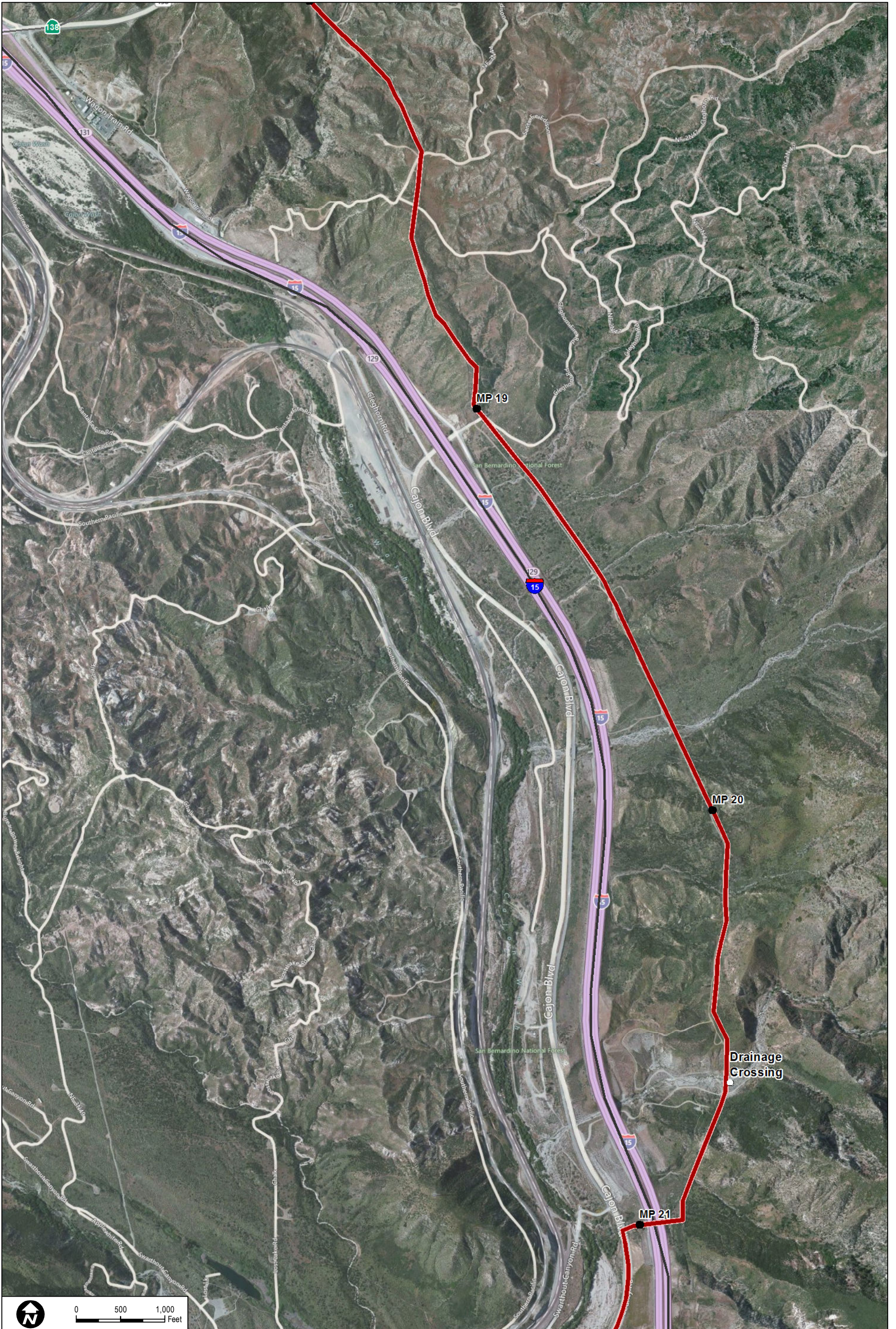


SOURCE: BING Maps 2014; Southern California Gas Company 2014

- ▲ Compressor Station
- Pressure Limiting Station
- Mileposts
- Project Points

North South Project

FIGURE 3-3f
Detailed Map Sheets

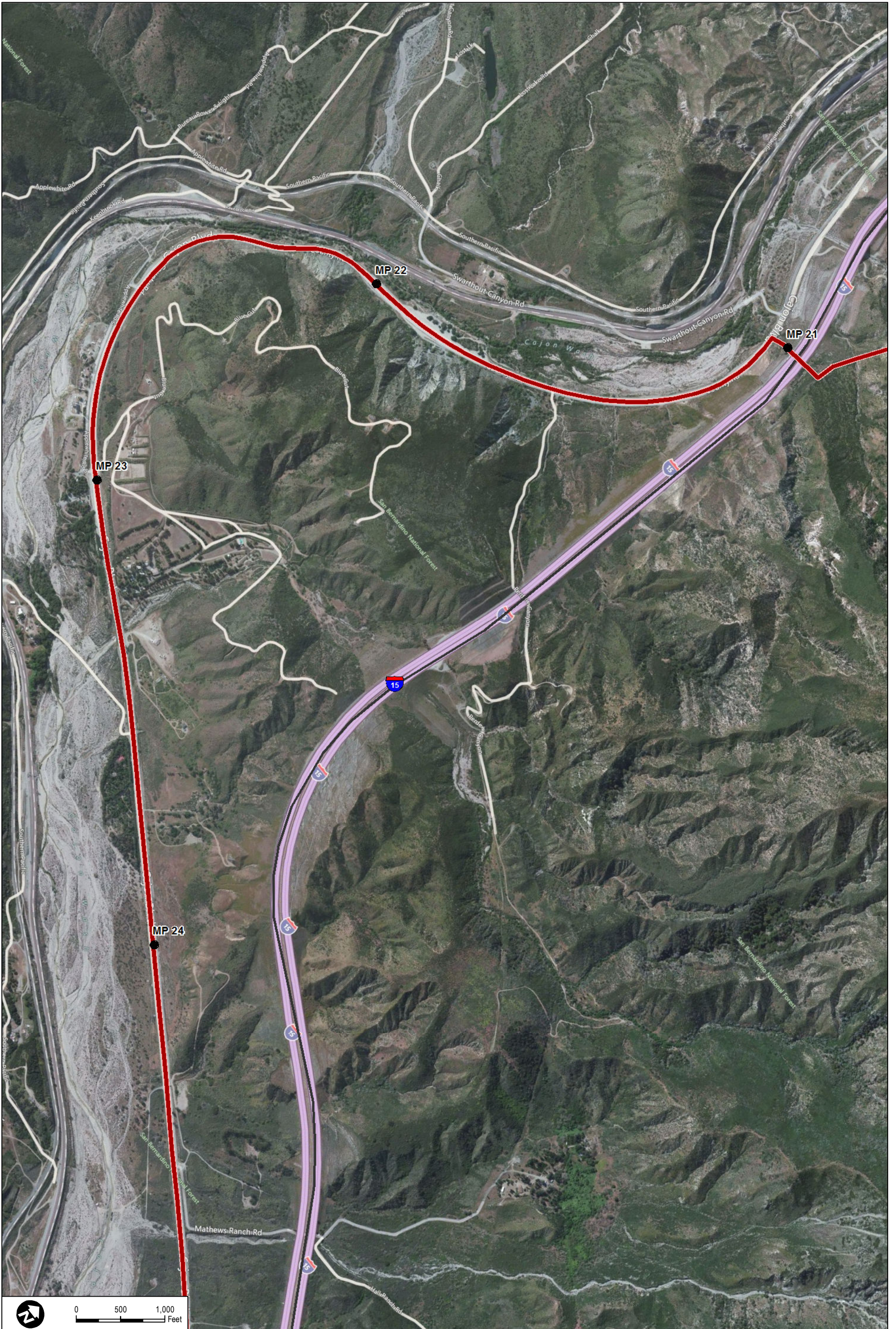


SOURCE: BING Maps 2014; Southern California Gas Company 2014

North South Project

- ▲ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- Mileposts
- Project Points

FIGURE 3-3g
Detailed Map Sheets

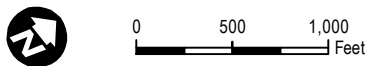
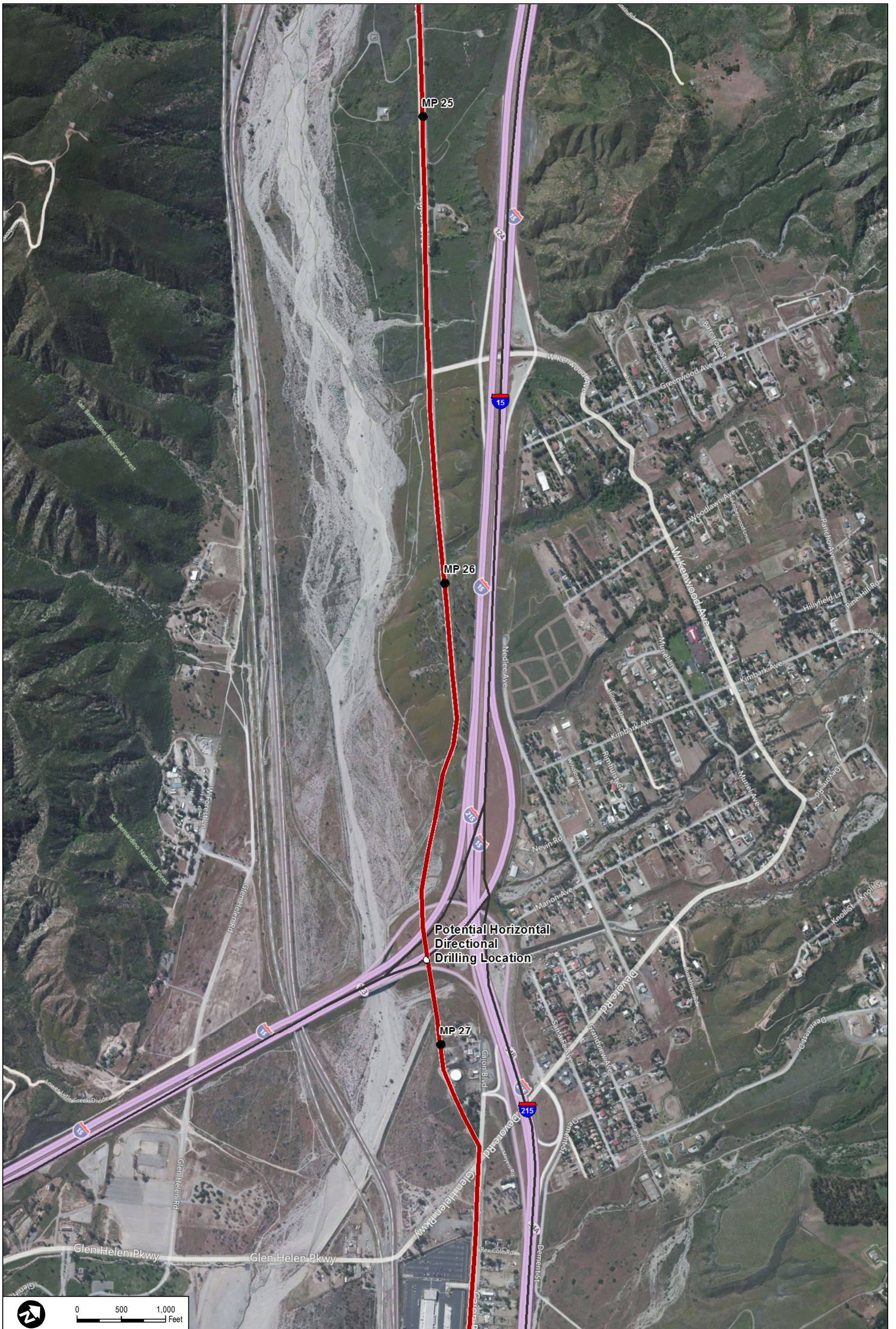


SOURCE: BING Maps 2014; Southern California Gas Company 2014

- ▲ Compressor Station
- Pressure Limiting Station
- Mileposts
- Project Points

North South Project

FIGURE 3-3h
Detailed Map Sheets

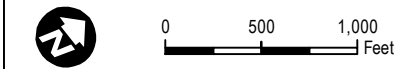


SOURCE: BING Maps 2014; Southern California Gas Company 2014

- ▲ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- Mileposts
- Project Points

North South Project

FIGURE 3-3i
Detailed Map Sheets

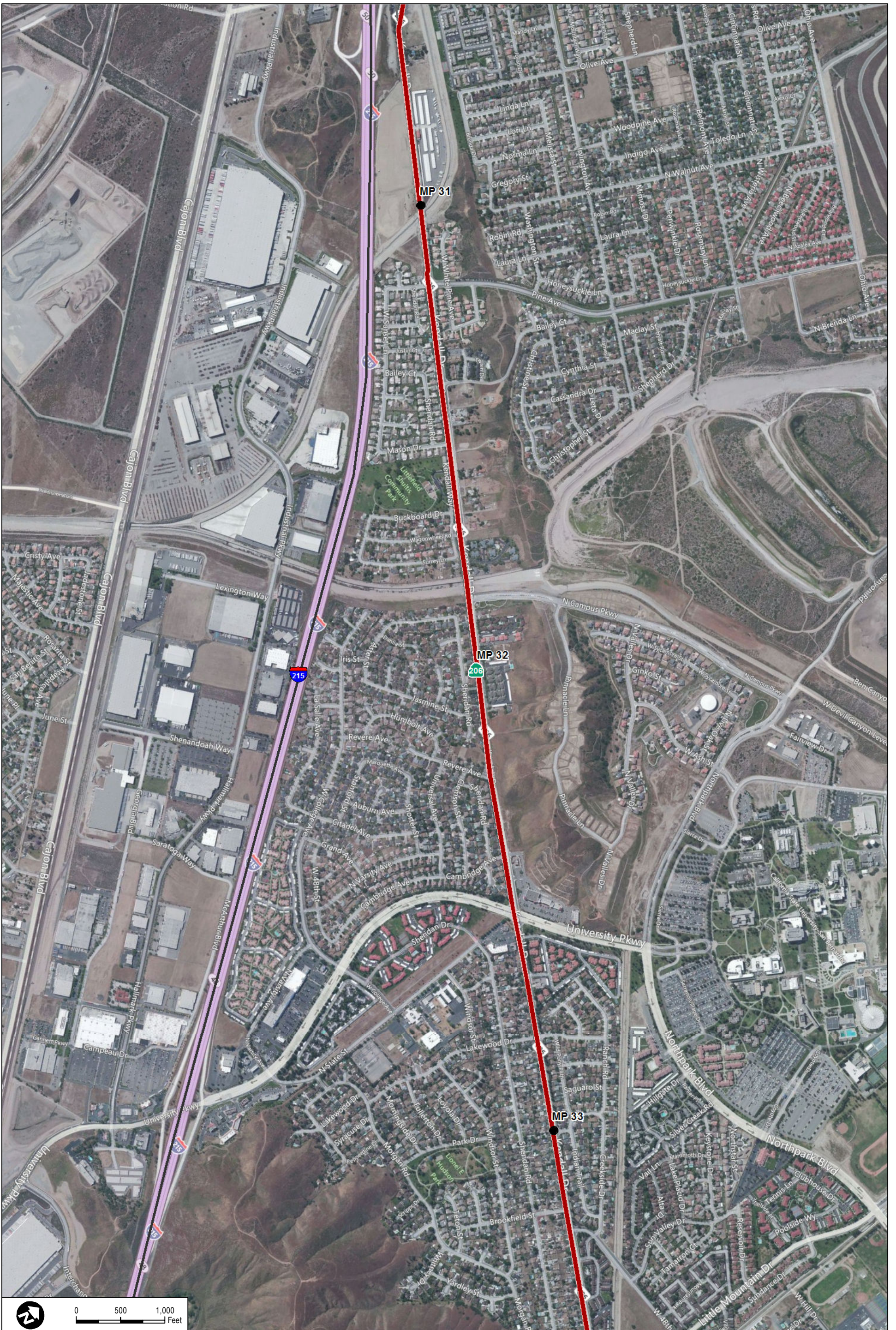


SOURCE: BING Maps 2014; Southern California Gas Company 2014

- ▲ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- Mileposts
- Project Points

North South Project

FIGURE 3-3j
Detailed Map Sheets



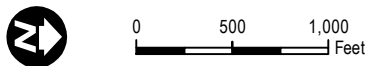
SOURCE: BING Maps 2014; Southern California Gas Company 2014

- ▲ Compressor Station
- Pressure Limiting Station
- Mileposts
- Project Points

FIGURE 3-3K
Detailed Map Sheets



North South Project



SOURCE: BING Maps 2014; Southern California Gas Company 2014

- ▲ Compressor Station
- Proposed Alignment
- Mileposts
- Pressure Limiting Station
- Project Points

FIGURE 3-31
Detailed Map Sheets



North South Project

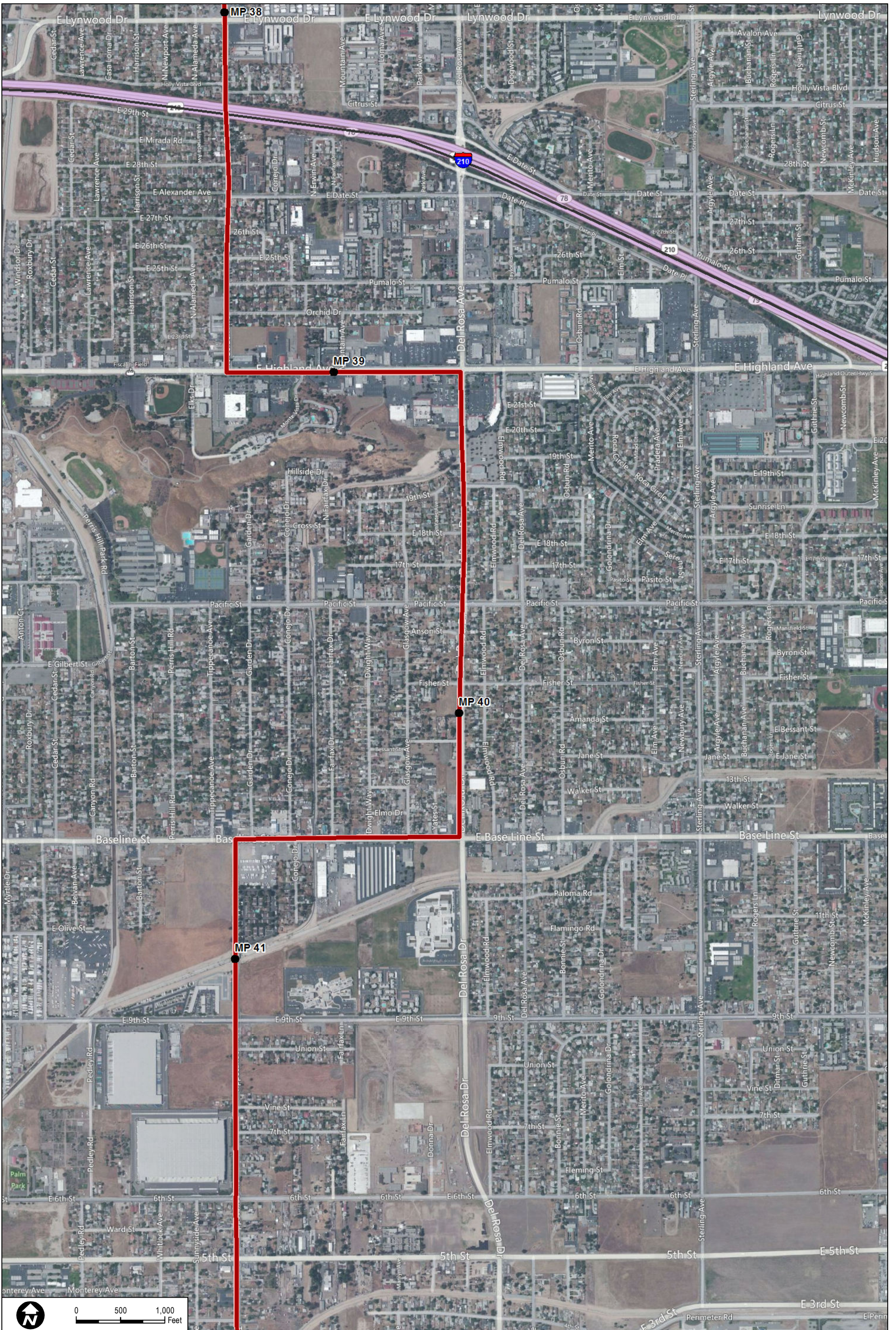


SOURCE: BING Maps 2014; Southern California Gas Company 2014

- ▲ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- Mileposts
- Project Points

North South Project

FIGURE 3-3m
Detailed Map Sheets



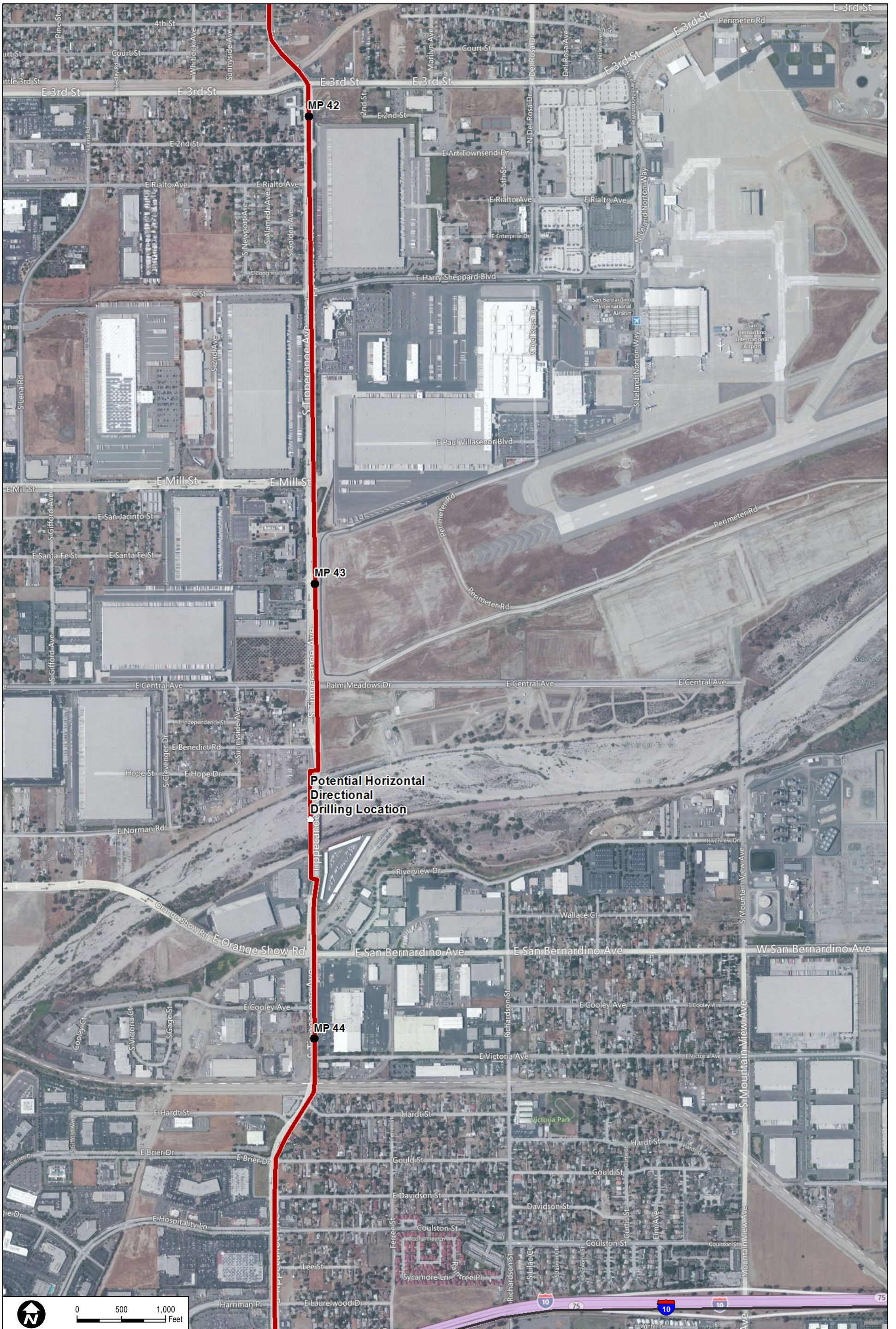
SOURCE: BING Maps 2014; Southern California Gas Company 2014

- ▲ Compressor Station
- Pressure Limiting Station
- Mileposts
- Project Points

FIGURE 3-3n
Detailed Map Sheets



North South Project

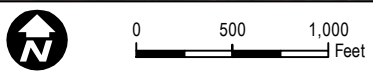
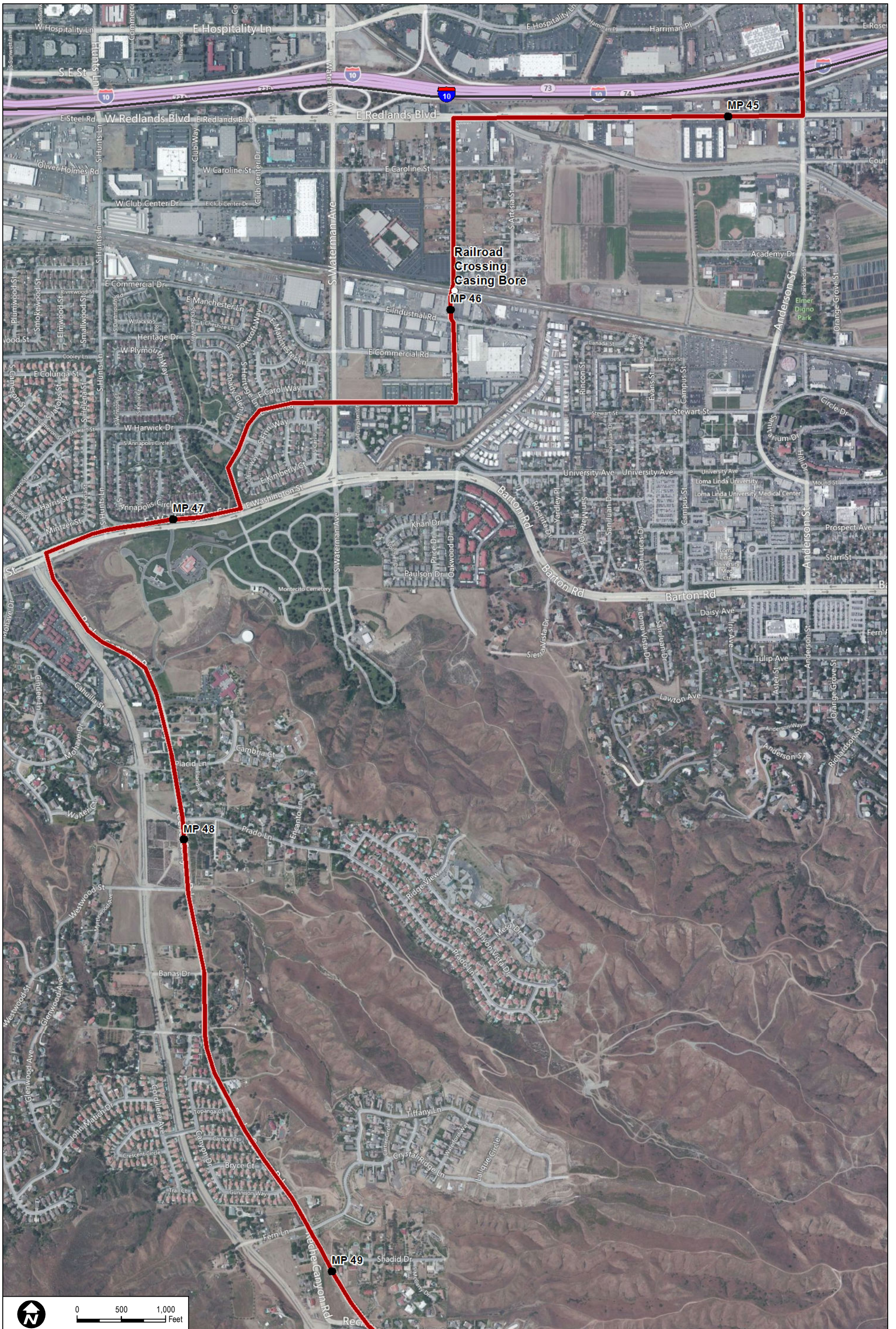


SOURCE: BING Maps 2014; Southern California Gas Company 2014

North South Project

- ▲ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- Mileposts
- Project Points

FIGURE 3-30
Detailed Map Sheets



SOURCE: BING Maps 2014; Southern California Gas Company 2014

- ▲ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- Mileposts
- Project Points

FIGURE 3-3p
Detailed Map Sheets



North South Project



SOURCE: BING Maps 2014; Southern California Gas Company 2014



North South Project

- ▲ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- Project Points
- Mileposts

FIGURE 3-3q
Detailed Map Sheets



SOURCE: BING Maps 2014; Southern California Gas Company 2014



North South Project

- ▲ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- Project Points
- Mileposts

FIGURE 3-3r
Detailed Map Sheets

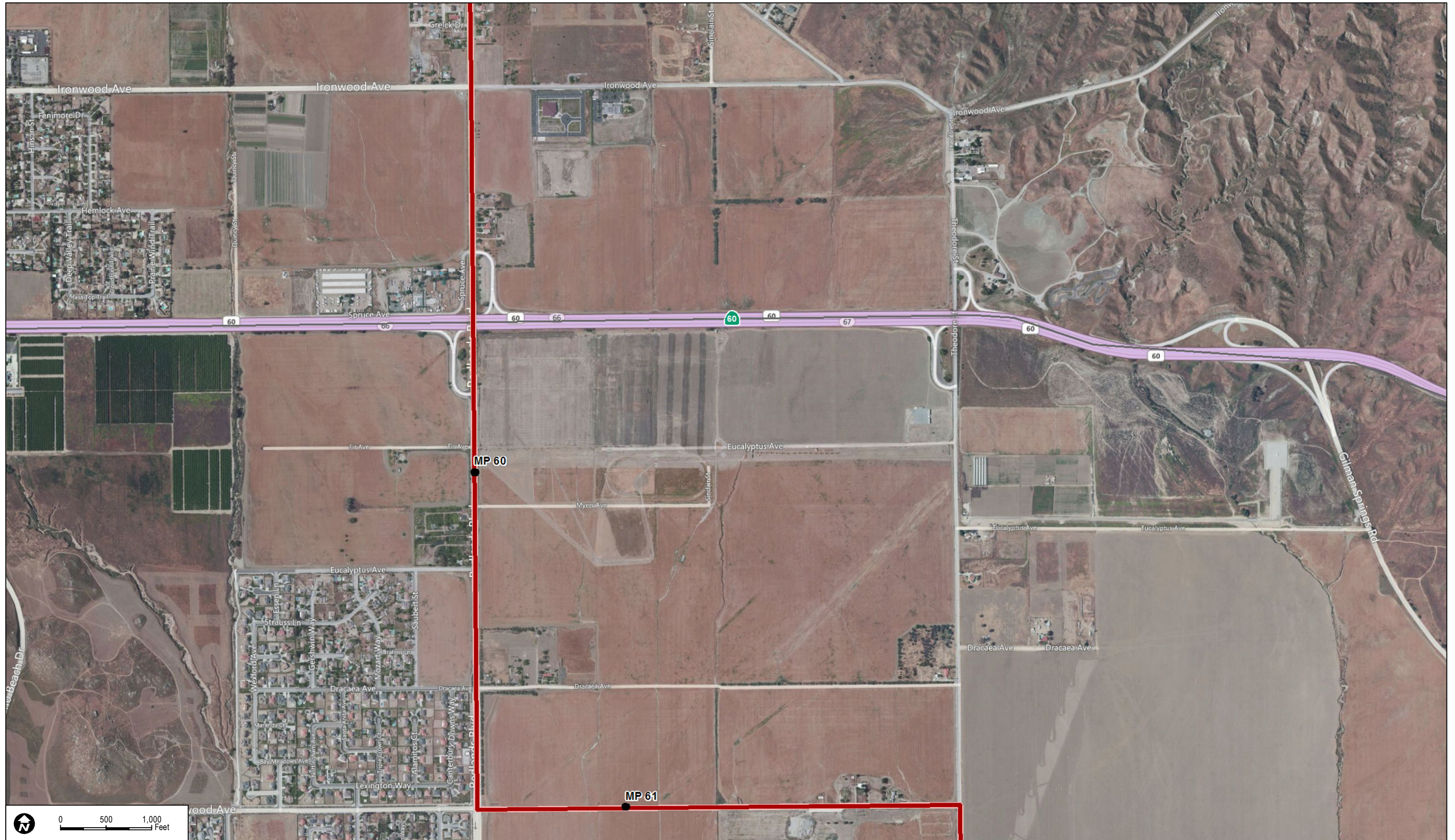


SOURCE: BING Maps 2014; Southern California Gas Company 2014

North South Project

- ▲ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- Project Points
- Mileposts

FIGURE 3-3s
Detailed Map Sheets





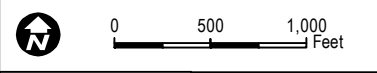
SOURCE: BING Maps 2014; Southern California Gas Company 2014

- ▲ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- Project Points
- Mileposts



North South Project

FIGURE 3-3u
Detailed Map Sheets



SOURCE: BING Maps 2014; Southern California Gas Company 2014

North South Project

- ▲ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- Project Points
- Mileposts

FIGURE 3-3v
Detailed Map Sheets

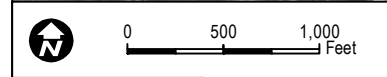
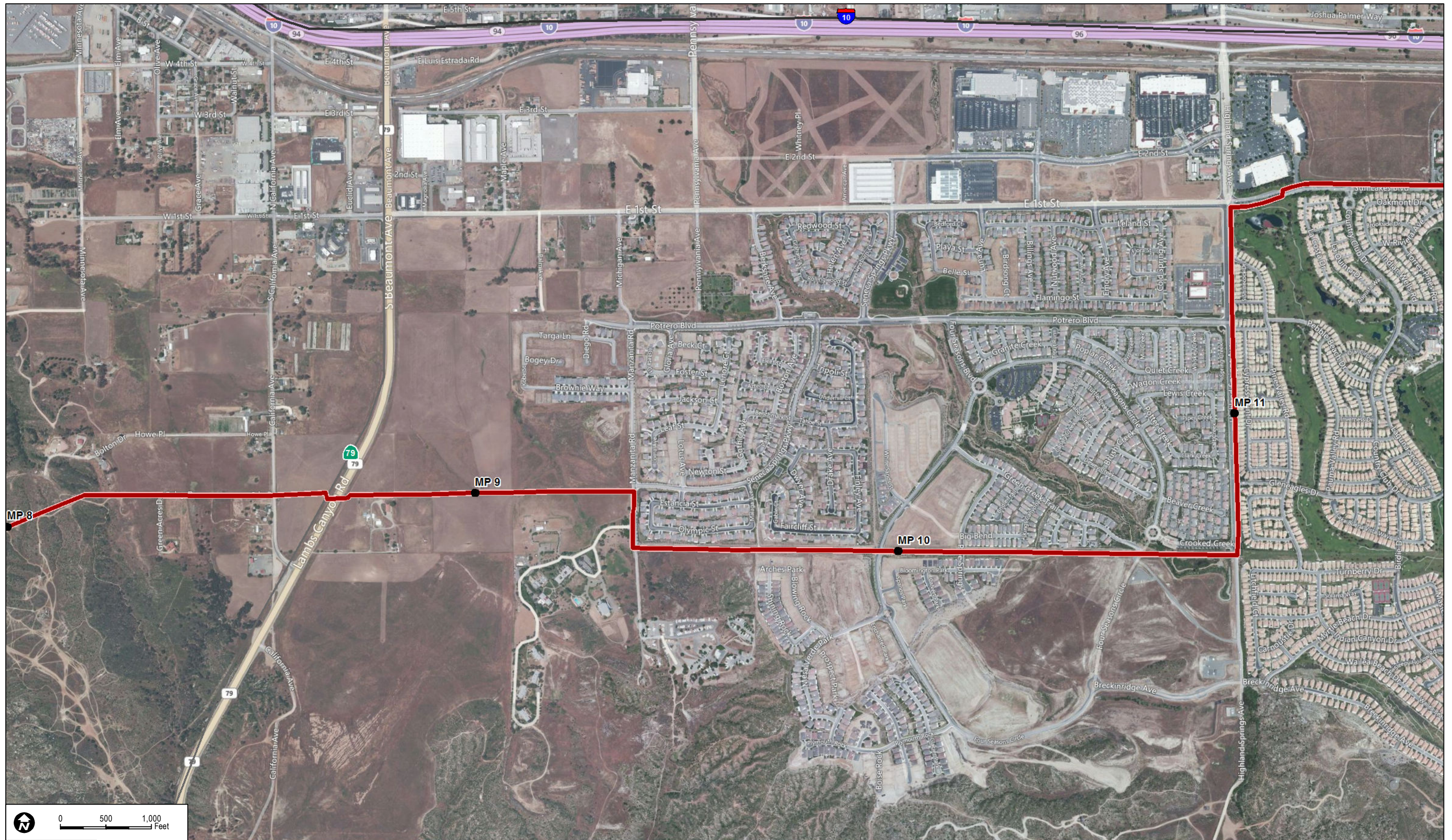


SOURCE: BING Maps 2014; Southern California Gas Company 2014

North South Project

- ▲ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- Project Points
- Mileposts

FIGURE 3-3w
Detailed Map Sheets



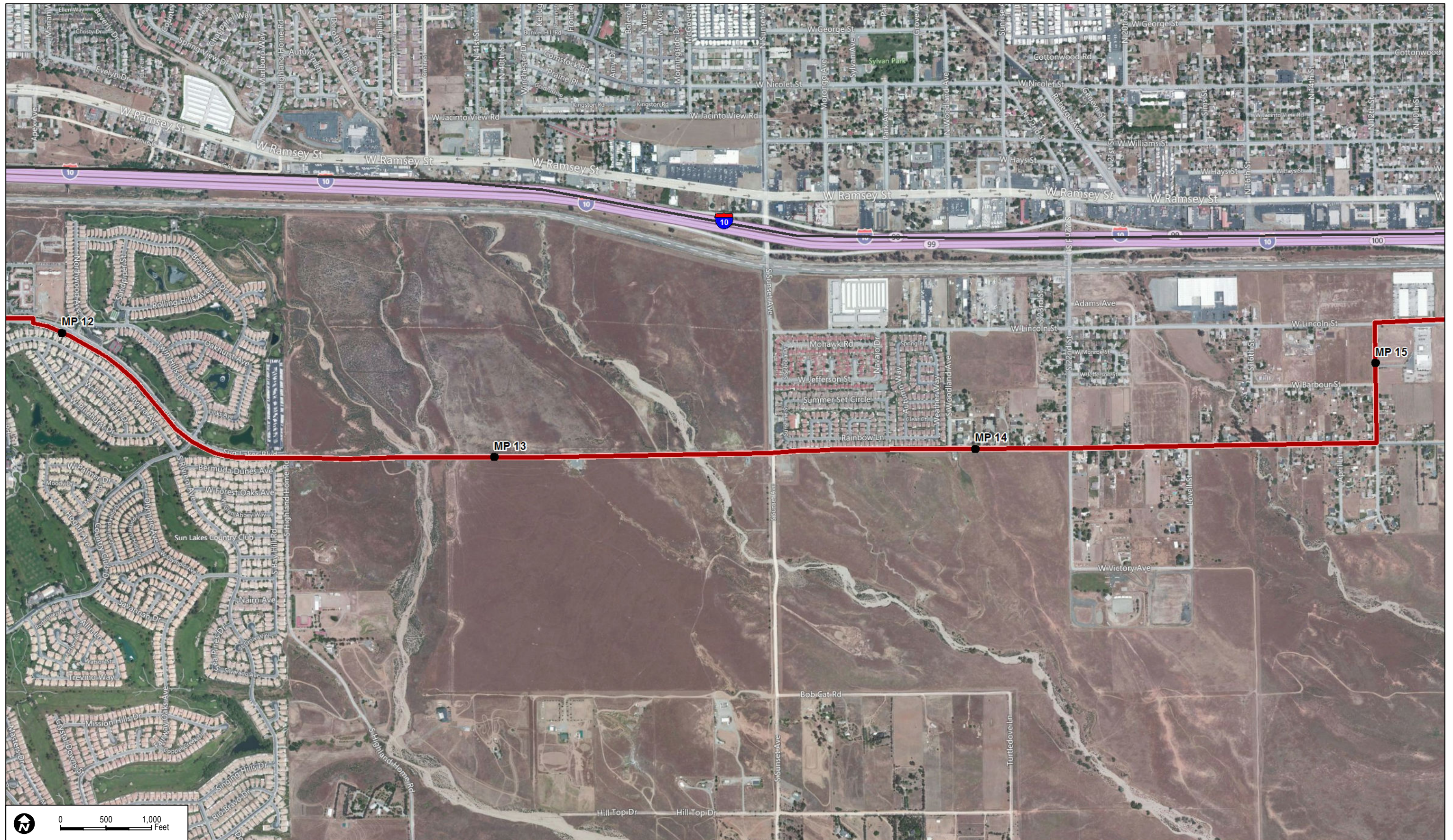
SOURCE: BING Maps 2014; Southern California Gas Company 2014

- ▲ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- Project Points
- Mileposts



North South Project

FIGURE 3-3x
Detailed Map Sheets

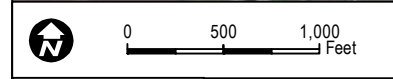
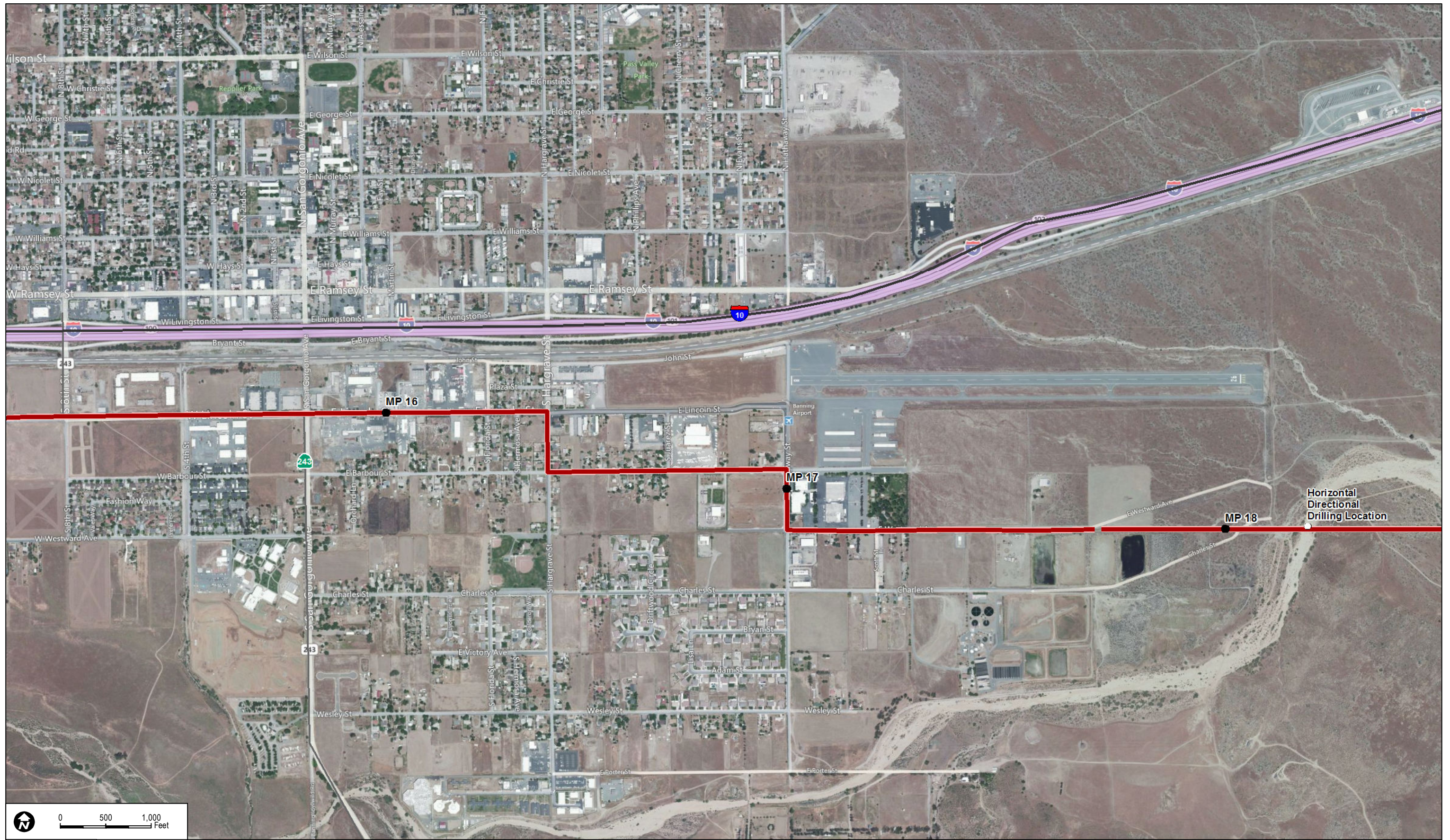


SOURCE: BING Maps 2014; Southern California Gas Company 2014



North South Project

FIGURE 3-3y
Detailed Map Sheets



SOURCE: BING Maps 2014; Southern California Gas Company 2014

- ▲ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- Project Points
- Mileposts



North South Project

FIGURE 3-3z
Detailed Map Sheets



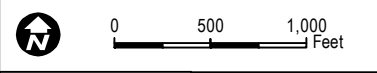
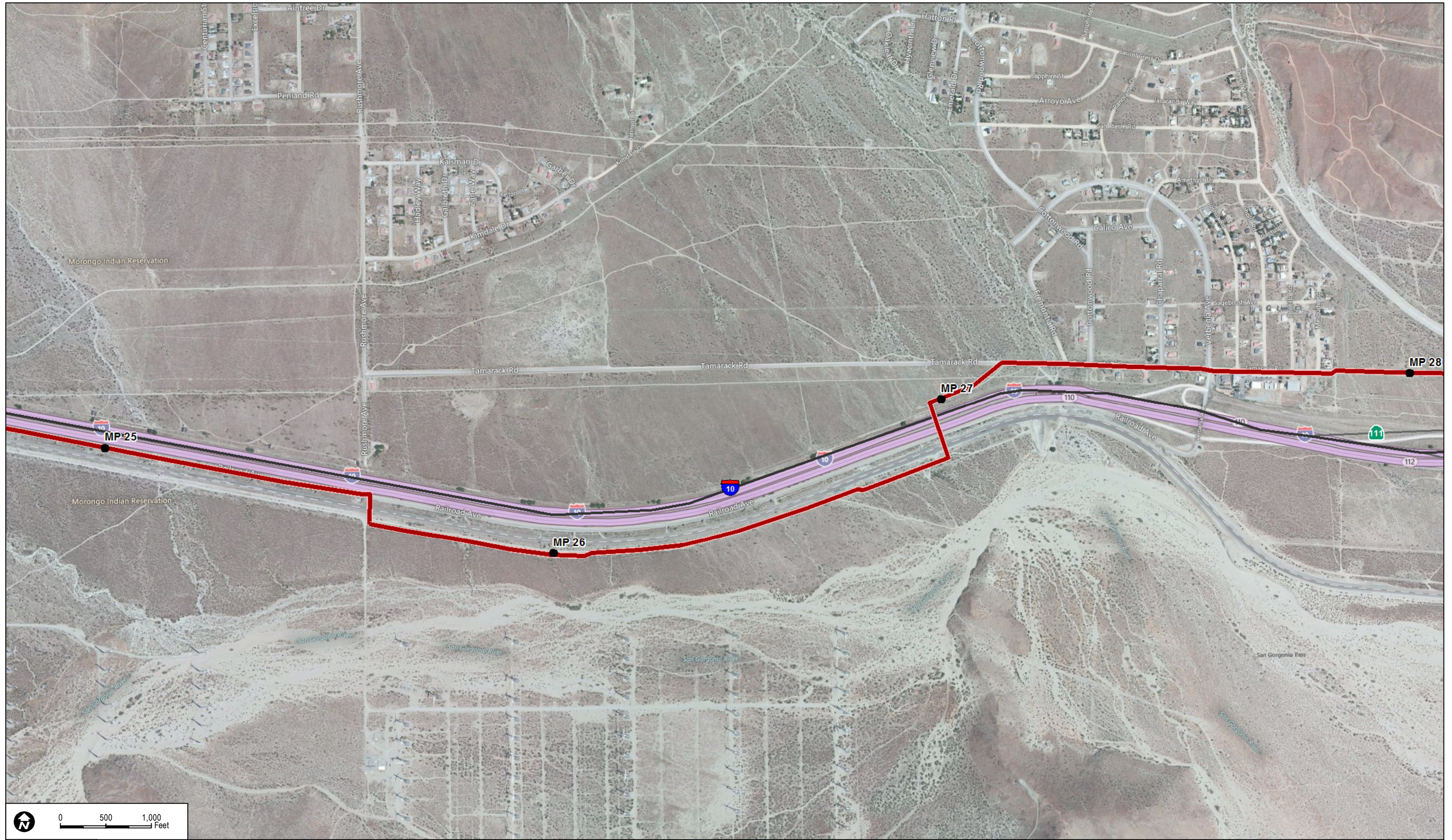
SOURCE: BING Maps 2014; Southern California Gas Company 2014

North South Project

- ▲ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- Project Points
- Mileposts

FIGURE 3-3aa
Detailed Map Sheets



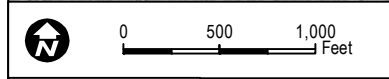


SOURCE: BING Maps 2014; Southern California Gas Company 2014

North South Project

- ▲ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- Project Points
- Mileposts

FIGURE 3-3cc
Detailed Map Sheets



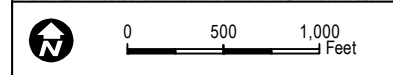
SOURCE: BING Maps 2014; Southern California Gas Company 2014

North South Project

- ▲ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- Project Points
- Mileposts

FIGURE 3-3dd
Detailed Map Sheets

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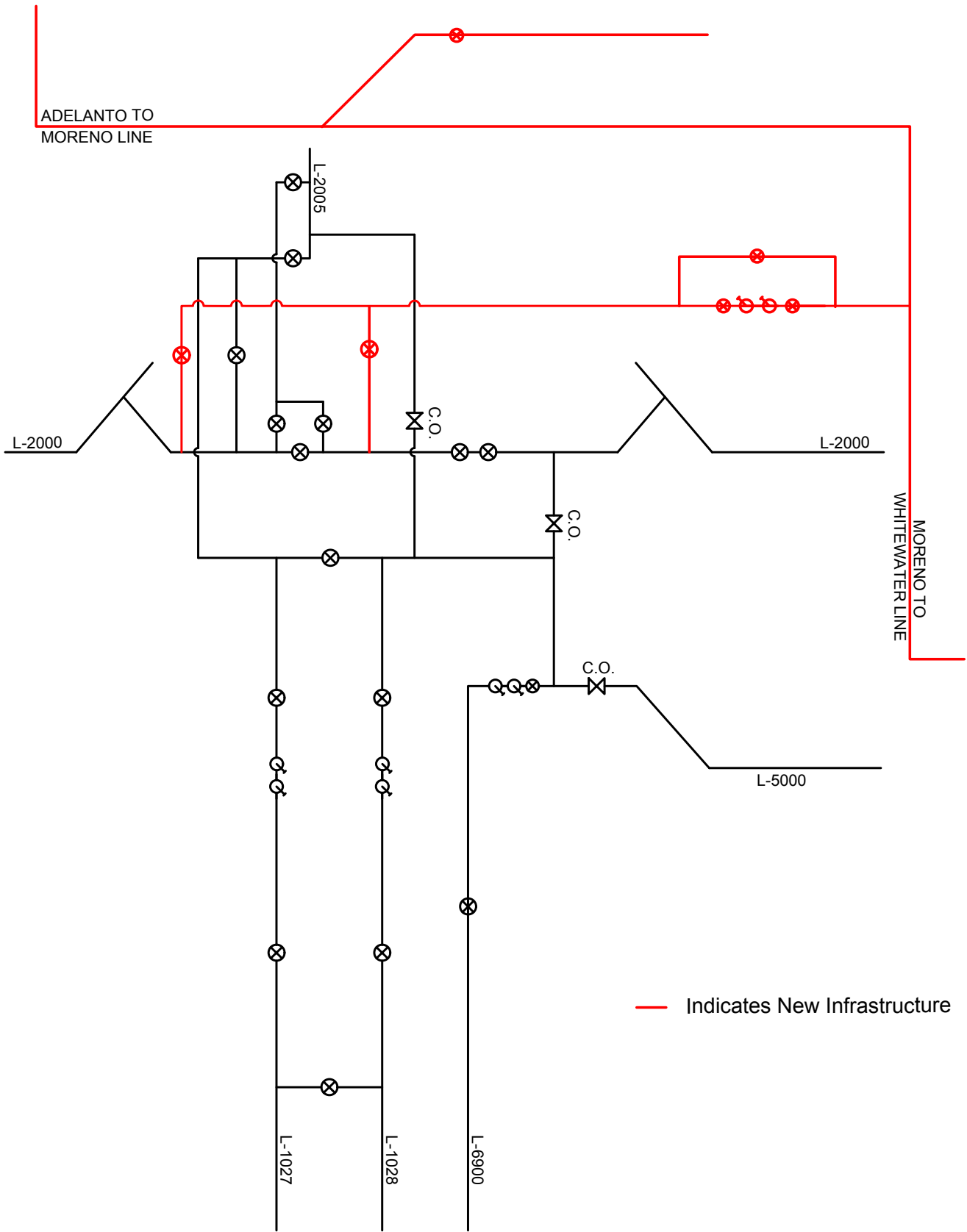
SOURCE: BING Maps 2014; Southern California Gas Company 2014

North South Project

- ▲ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- Project Points
- Mileposts

FIGURE 3-3ee
Detailed Map Sheets

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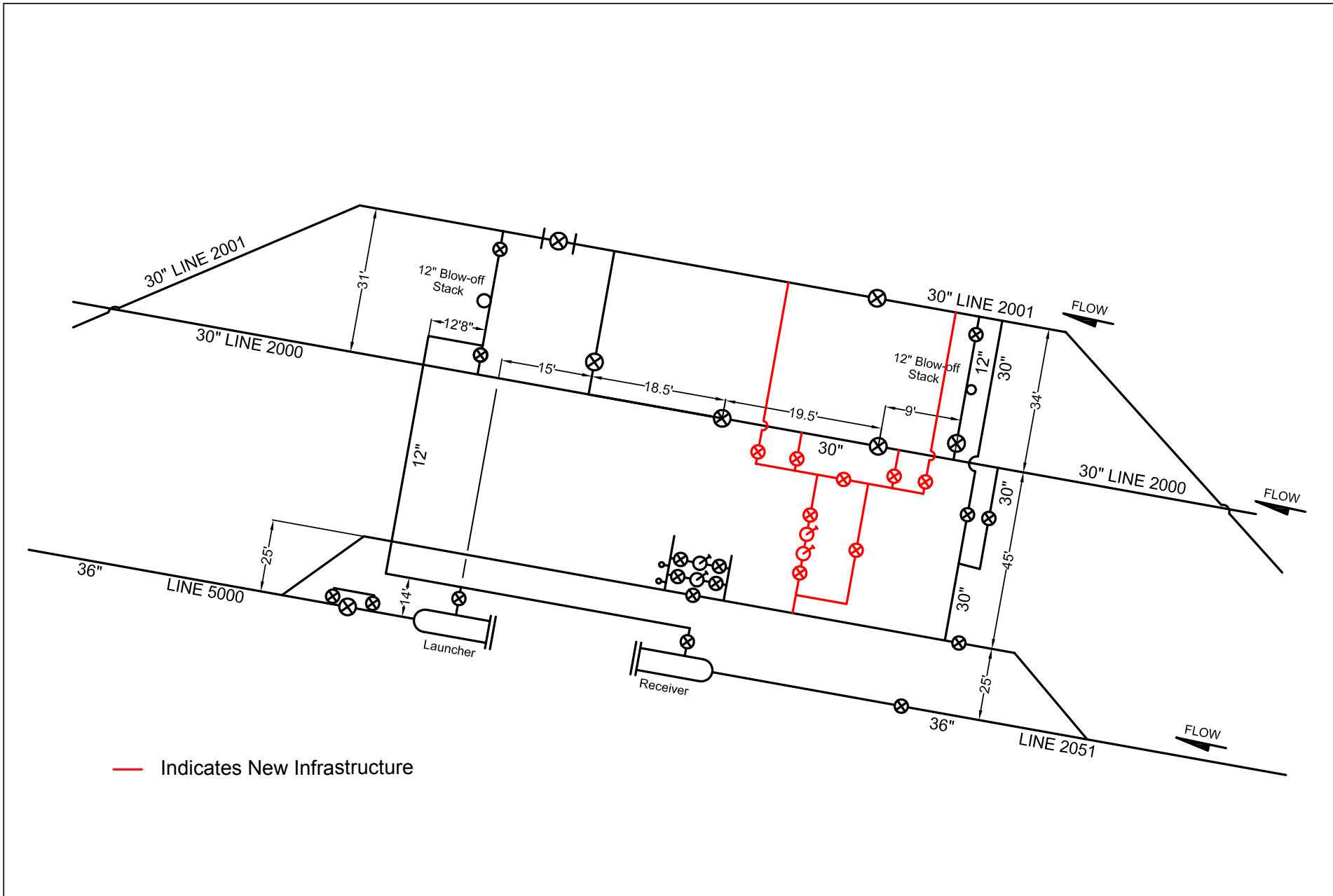
SOURCE: SoCalGas 2014

North-South Project

FIGURE 3-4
Moreno Pressure Limiting Station Modifications

3 Project Description

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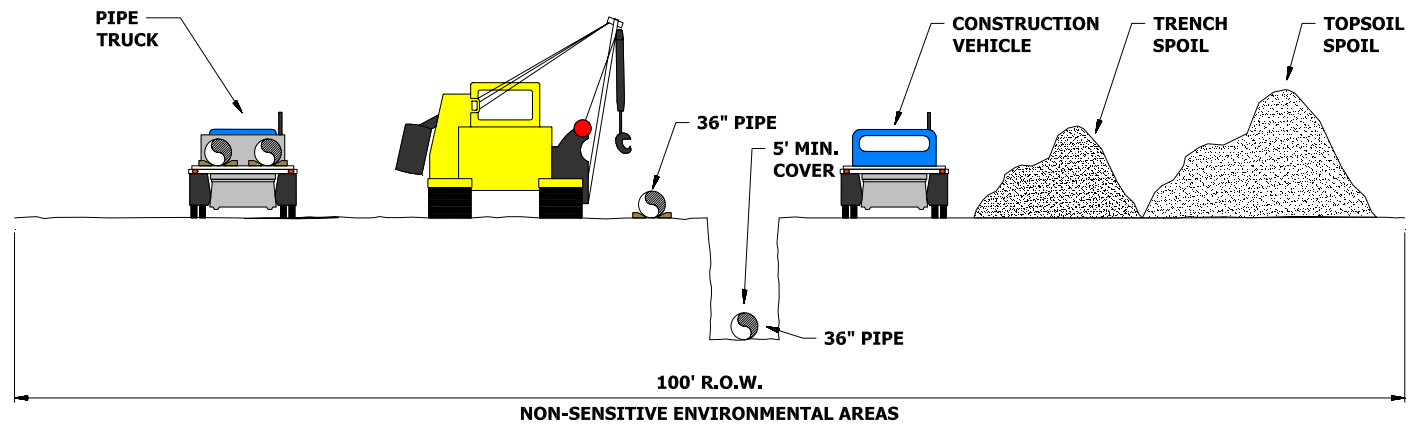
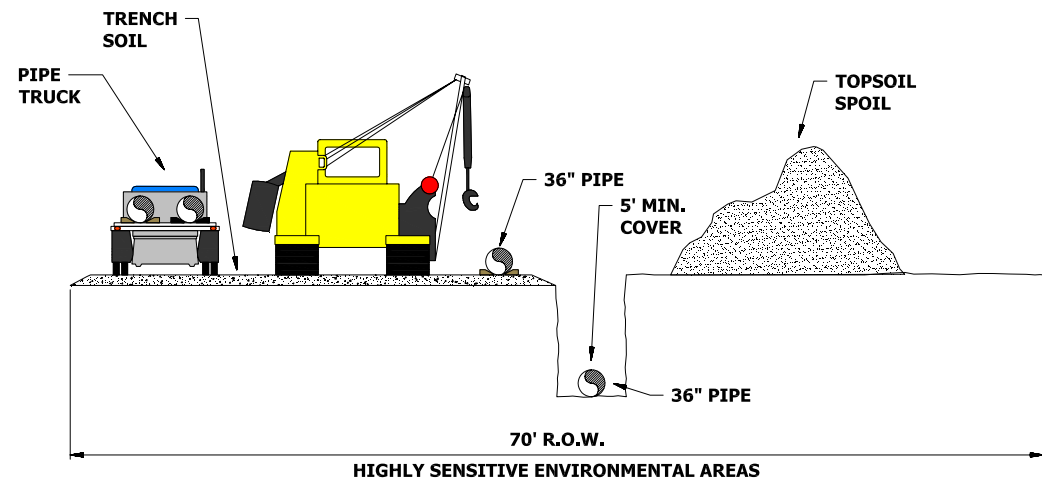
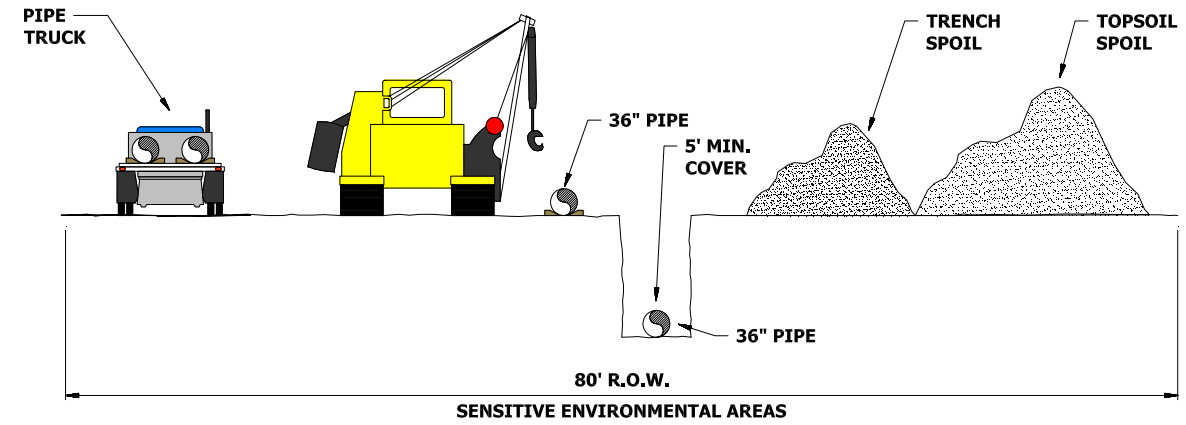
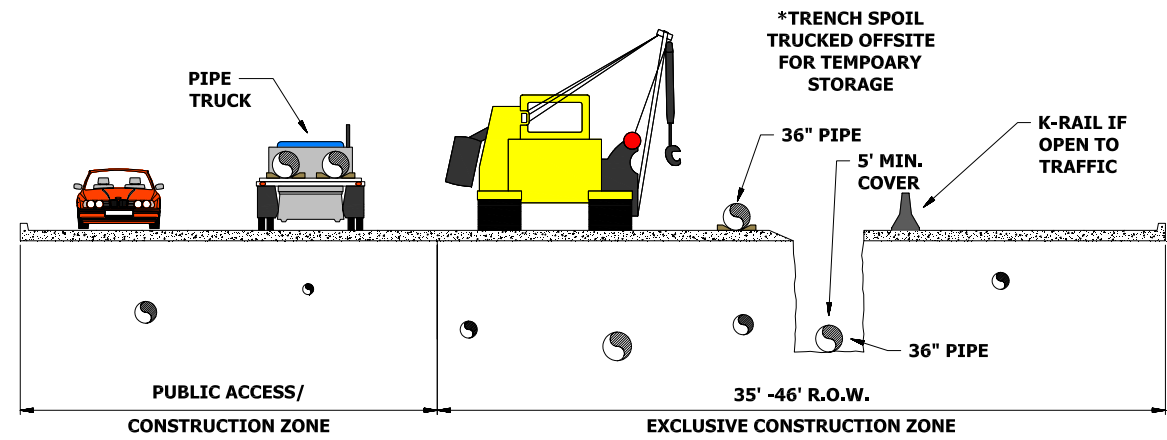
SOURCE: SoCalGas 2014

North-South Project

FIGURE 3-5
Whitewater Pressure Limiting Station Modifications

3 Project Description

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1 Surveying & Marking
Prior to construction, surveyors mark on the ground with paint or flags the location where the pipeline will be installed.

2 Potholing
This task involves digging a small hole or trench to positively locate any existing substructures so they can be protected during construction.

3 Pavement Breaking
In paved roadways, a saw is used to cut the outline of the trench to be excavated. Once outlined, the pavement is broken and removed.

4 Trenching
A 1 foot wider than the pipe and deep enough to provide a min. of 3' cover trench is dug using a backhoe tractor. The tractor may have rubber tires or a steel track.

5 Plating
In order to maintain access to businesses and residences, steel plates are installed over the ditch.

6 Pipe Stringing
Pipe joints approx. 40 to 50 foot long are placed along the trench so they can be welded together and inspected.

7 Pipe Bending
Where required, the pipe is bent using a special machine to curve around underground structures.

8 Welding
Pipe is welded together at the joints to form a long pipe string before lowering it into the trench.

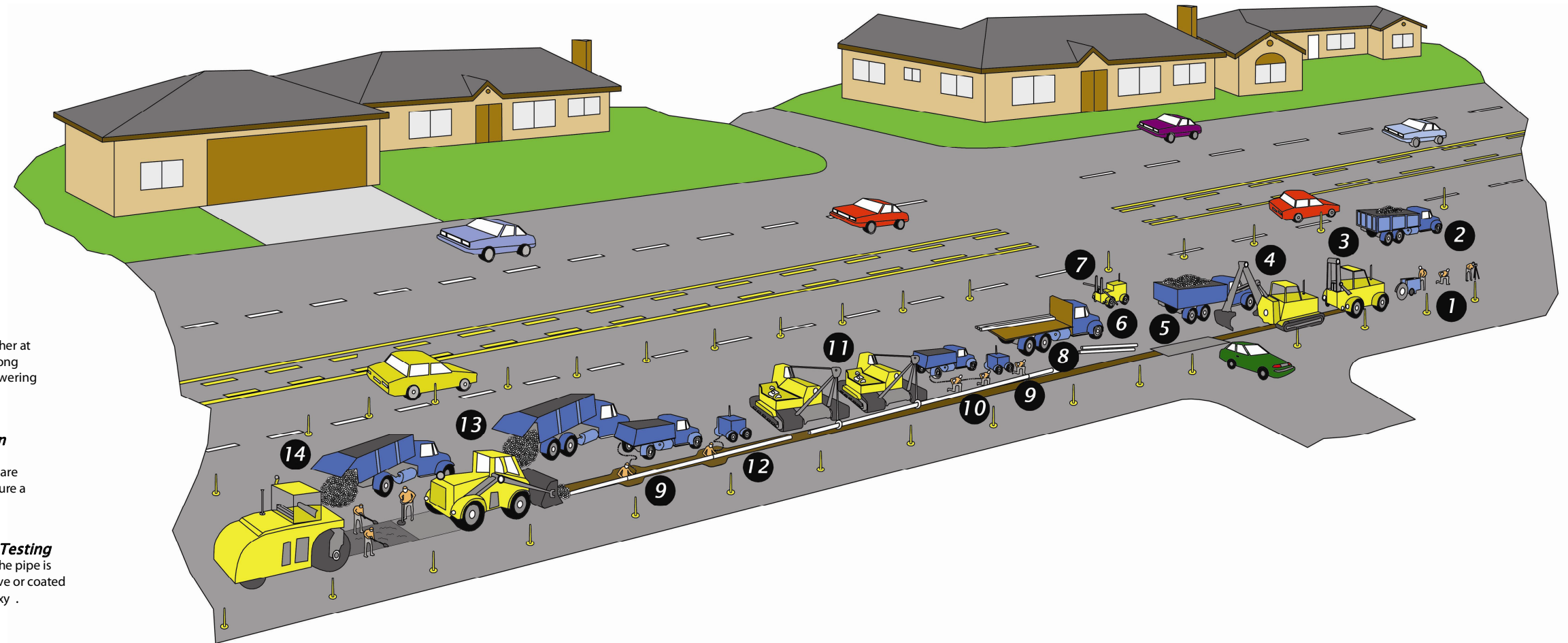
9 X-Ray Inspection
In addition to visual inspection, all welds are radiographed to ensure a quality weld.

10 Weld Coating & Testing
At every field weld, the pipe is wrapped with a sleeve or coated with a brush-on epoxy.

11 Lowering In
The pipe is lowered into the trench using large cranes called "sidebooms" with pipe slings.

12 Backfilling
After the pipeline has been installed in the trench, native or imported soil is used to fill the trench around the pipe.

13 Permanent Paving
Where required, the roadways are restored to match the existing surface with new asphalt or concrete pavement.



The design and construction of a pipeline for the most part occurs in three stages, pre-construction, construction & post-construction. During the pre-construction phase, highly trained engineers work to design a system that meets the needs of producers and shippers in moving their product to the marketplace. At the same time, pipeline employees who specialize in planning work - minimize the impact of construction projects on the environment, in addition to consulting with communities and landowners along the route about the project. Every pipeline project planning team must meet federal and state requirements, obtain necessary permits and respond to local concerns. Land or Right-of-way agents, hired by the pipeline operator, also work with potential landowners to secure easement rights to place the pipeline along the selected route.

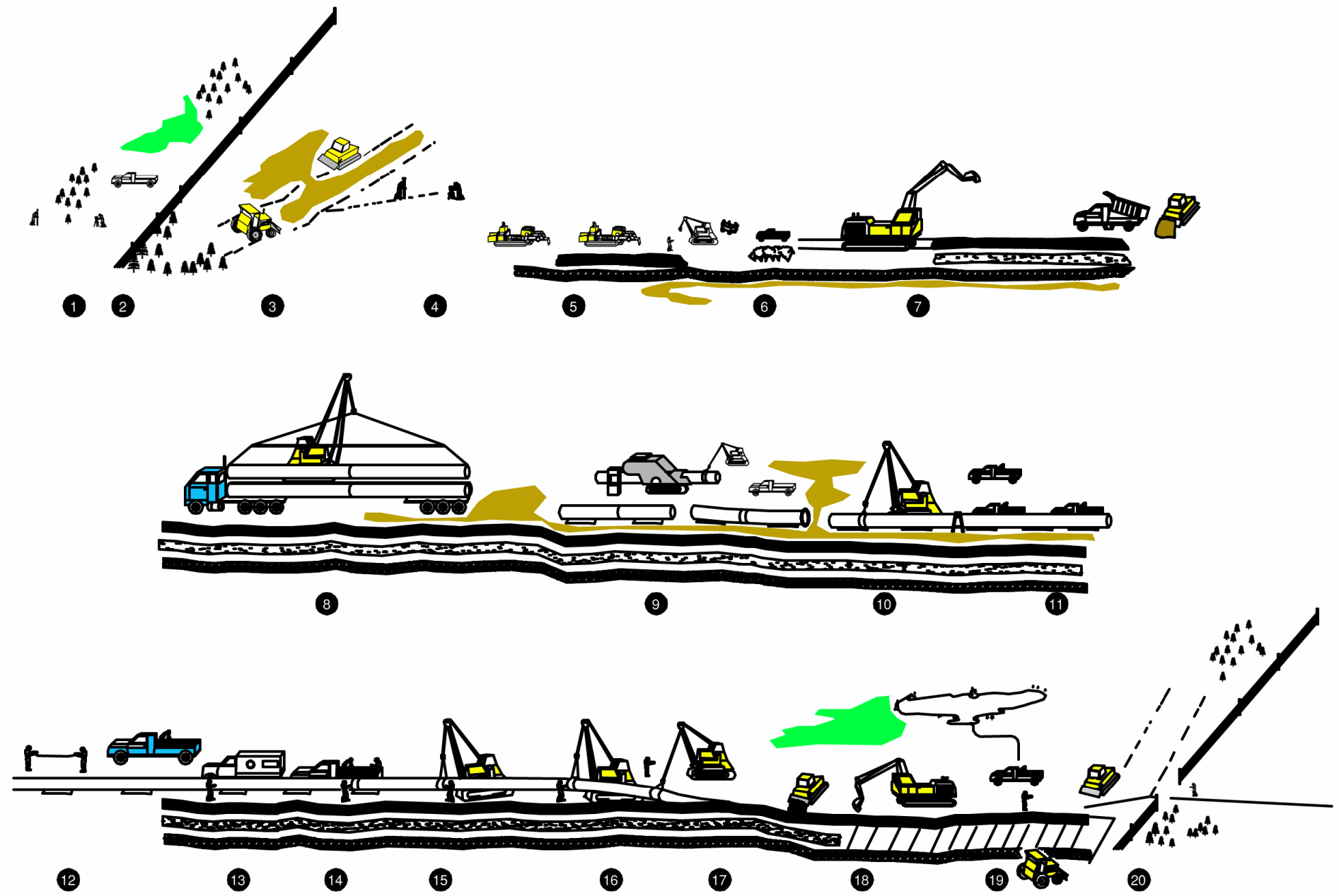
Typically, the actual construction phase of a project occurs in the shortest amount of time. But the construction phase can only begin after route selection, easement negotiations, environmental permitting, and many other pre-construction actions have been accomplished. Before the line pipe can be buried, the pipeline right-of-way must be cleared and prepared for construction. Once ready, the pipeline

is carefully placed in the pre-dug trench or bored under waterways or roads. If trenching is involved, the trench is filled and post-construction restoration begins.

The post-construction phase of any project addresses several aspects including restoring the surface of the land affected by the trenching. Work then begins to reconstruct the surface of the land. Before the pipeline is placed into service, the pipe and components are again tested in the field with a water pressure, weld x-rays and a variety of other inspection tests. Each stage of this process is overseen by qualified inspectors to ensure compliance with the engineering plan, codes, permit conditions, landowner and easement agreements, and regulatory requirements.

While this overview gives you a general idea about pipeline construction, there are many important steps along the way. To get a better understanding of the construction process, we have provided a brief description of most construction activities you might encounter.

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LEGEND:

- | | | | |
|---------------------------------------|--|--|-------------------------|
| ① RIGHT-OF-WAY ACQUISITION AND SURVEY | ⑥ DITCHING (ROCK) | ⑪ AS-BUILT FOOTAGE | ⑯ AS-BUILT SURVEY |
| ② FENCING | ⑦ STRINGING | ⑫ X-RAY AND WELD REPAIR | ⑰ PAD AND BACKFILL |
| ③ CLEARING AND GRADING | ⑧ BENDING | ⑬ COATING FIELD AND FACTORY WELDS | ⑱ TEST AND FINAL TIE-IN |
| ④ CENTERLINE SURVEY OF DITCH | ⑨ LINE-UP, STRINGER BEAD, AND HOT PASS | ⑭ INSPECTION (JEEPING) AND REPAIR OF COATING | ⑲ CLEANING |
| ⑤ DITCHING (ROCK FREE) | ⑩ FILL AND CAP WELD | ⑮ LOWERING-IN AND TIE-INS | ⑳ LINE-UP AND |

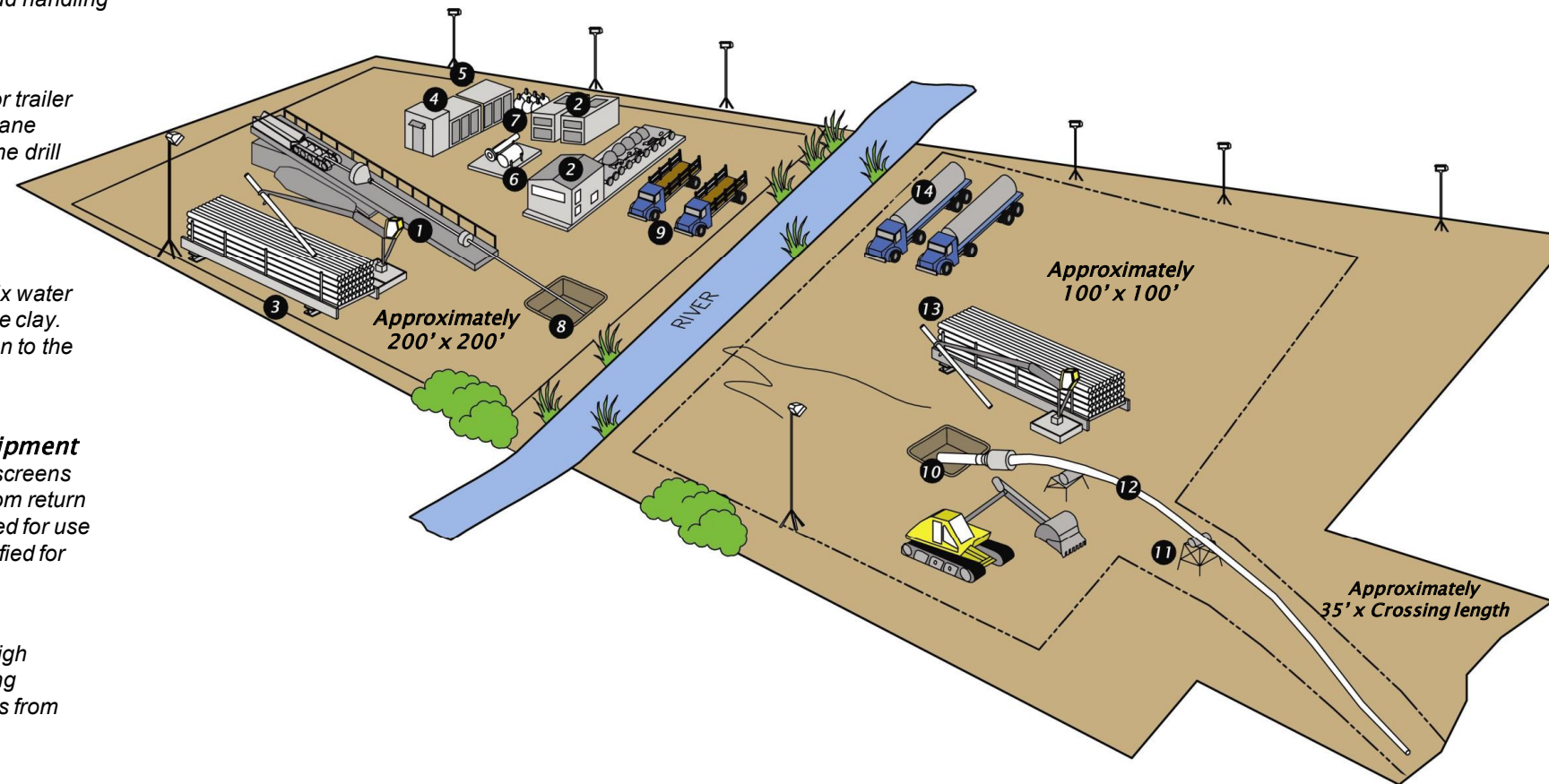


SOURCE: **SPEC SERVICES**
 North-South Project

FIGURE 3-8
 Typical Pipeline Construction (Cross Country)

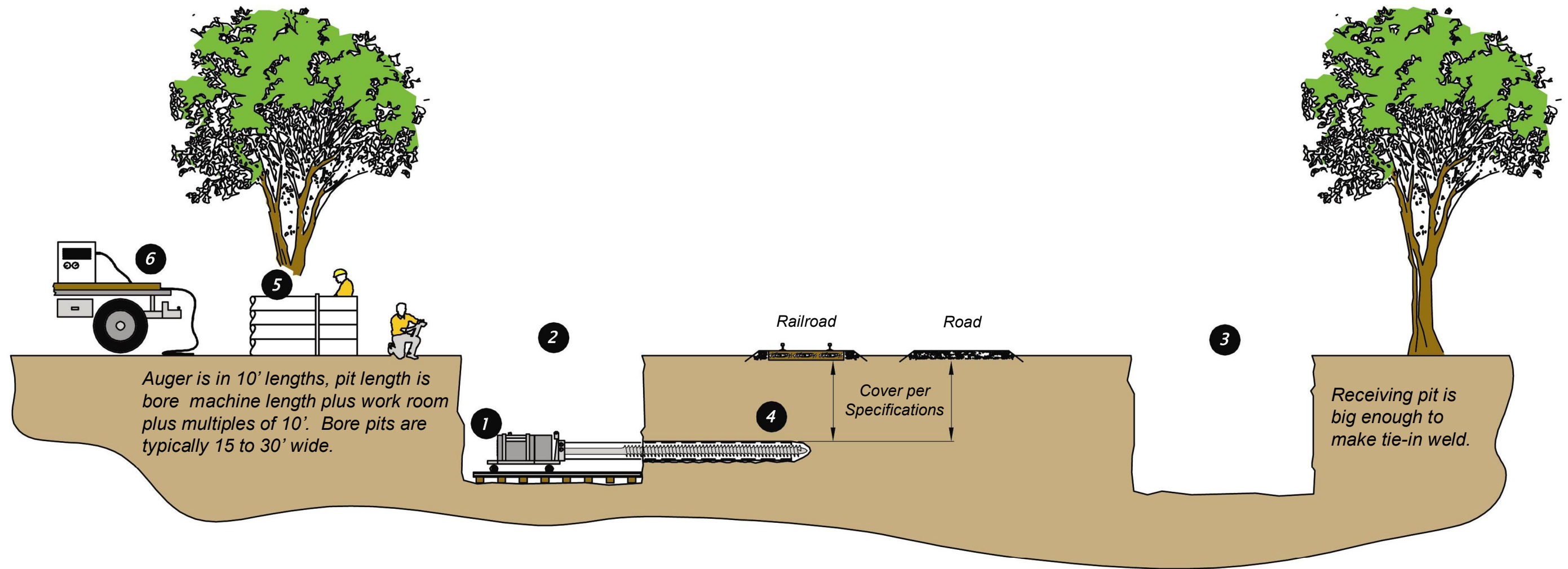
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- 1 Rig Unit**
Prior to construction, surveyors mark on the ground with paint or flags the location where the pipeline will be installed and provide a back stake to align the rig.
- 2 Control Cab/ Power Unit**
The control cab houses the rig controls and HDD tracking instruments. The power unit provides electric and hydraulic power for the HDD rig and mud handling equipment.
- 3 Drill Pipe**
Drill pipe is stored on a rack or trailer adjacent to the HDD rig. A crane moves drill pipe to and from the drill pipe storage and the drill rig.
- 4 Mud Mixing Tank**
Mud mix tanks are used to mix water and or additives with bentonite clay. The mud tanks provide suction to the mud pumps.
- 5 Cuttings Separation Equipment**
Tanks equipped with shaker screens separate the HDD cultures from return mud. Screened mud is remixed for use in drilling. Cuttings are classified for disposal.
- 6 Mud Pump**
Mud pumps provide mud at high pressure to assist in the drilling process and to sweep cuttings from the HDD hole.
- 7 Bentonite Storage**
Dry storage of sacks of bentonite clay.
- 8 Pilot Hole**
A small pit dug around the drill string entry point to collect mud and cuttings returns.



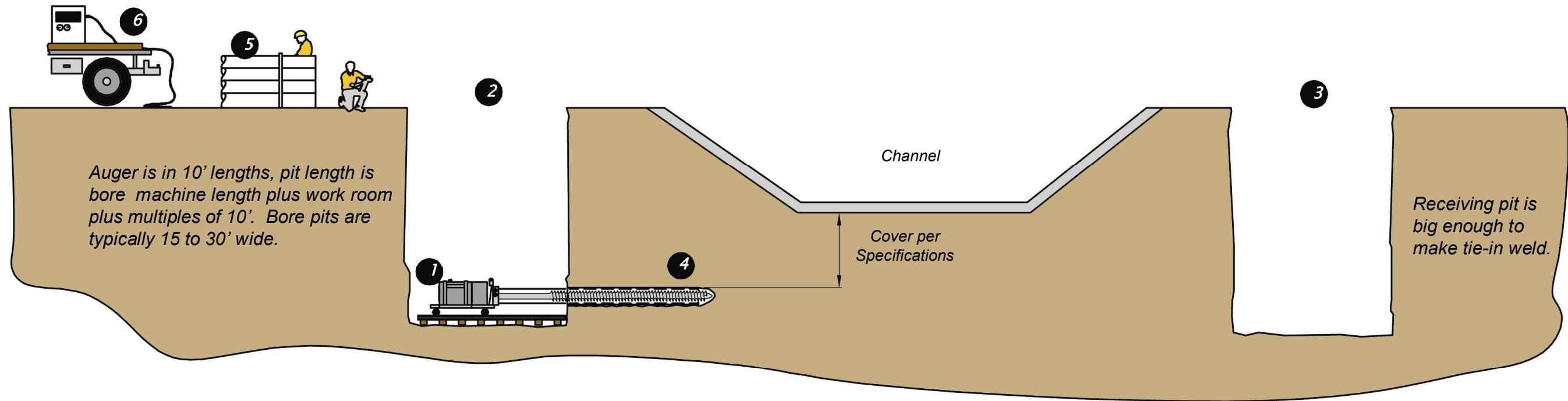
- 9 Construction Parking & Misc. Storage**
Parking for crew vehicles and materials deliveries.
- 10 Exit Hole**
A small pit dug around the drill string exit point to collect mud and cuttings returns. Returns are collected in Vacuum Truck and hauled to the rig side for recycling
- 11 Pipe Rollers**
Temporary pipe supports that allow the pipe to roll as it is pulled into the HDD drill hole.
- 12 Pipe String**
The welded, inspected and tested carrier pipe, prior to installation into the HDD hole.
- 13 Drill Pipe**
Exit side storage of drill string pipe.
- 14 Vacuum Trucks**
Vacuum truck used to collect and transport mud and cuttings from the exit side to the entry side.

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|-----------------|----------------------|
| 1 Bore Machine | 4 Carrier Pipe |
| 2 Entry Pit | 5 Carrier Stock Pipe |
| 3 Receiving Pit | 6 Welding Machine |

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- 1 Bore Machine
- 2 Entry Pit
- 3 Receiving Pit
- 4 Carrier Pipe
- 5 Carrier Stock Pipe
- 6 Welding Machine

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4 ENVIRONMENTAL SETTING

The Proposed Project traverses approximately 95 miles of varying terrain in Southern California ranging from rural desert communities and rugged mountain passes in the north and east to highly urbanized communities along the central portion of the alignment. In addition to crossing federal lands (USFS and BLM), the pipeline passes through unincorporated San Bernardino and Riverside County lands, as well as the cities of Adelanto, Banning, Beaumont, Colton, Highland, Loma Linda, Moreno Valley, Palm Springs, San Bernardino, and Victorville.

The existing environmental setting encountered along the alignment is described in Chapter 5 for each of the following resource areas:

- Aesthetics/Visual Resources (Section 5.1.1)
- Agricultural Resources (Section 5.2.1)
- Air Quality/Greenhouse Gas Emissions (Section 5.3.1)
- Biological Resources (Section 5.4.1)
- Cultural Resources (Section 5.5.1)
- Geology, Soils, and Seismicity (Section 5.6.1)
- Hazards and Hazardous Materials (Section 5.7.1)
- Hydrology and Water Quality (Section 5.8.1)
- Land Use and Planning (Section 5.9.1)
- Mineral Resources (Section 5.10.1)
- Noise (Section 5.11.1)
- Population and Housing (Section 5.12.1)
- Public Services (Section 5.13.1)
- Recreation (Section 5.14.1)
- Transportation and Traffic (Section 5.15.1)
- Utilities and Services Systems (Section 5.16.1).

4 Environmental Setting

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5 ENVIRONMENTAL IMPACT ASSESSMENT

This PEA evaluates the environmental impacts of the Proposed Project in accordance with the State of California Public Utilities Commission Information and Criteria List, including Appendix B, Section V. The CPUC requires applicants to provide this information for review in compliance with the mandates of CEQA.

The following chapter includes a discussion of the existing conditions, regulatory framework, significance criteria, and environmental impacts for each of CEQA environmental topics included in Appendix G of the State CEQA Guidelines. Pursuant to CEQA, mitigation measures are required where appropriate to offset potentially significant impacts.

The Applicant recognizes that compliance with laws, regulations, best practices and standards designed to reduce impacts are not considered mitigation measures under CEQA. Where such rules and practices are applicable to specific resource areas affected to the Proposed Project, the Applicant agrees to and proposes to incorporate APMs as project design features that would be implemented to maintain existing conditions and minimize environmental impacts. Consequently, throughout this chapter, the Applicant indicates where APMs, as project design features, would be implemented to maintain existing conditions and minimize environmental impacts. These APMs would ensure that the Proposed Project conforms to industry best practices and complies with applicable environmental laws.

Throughout this chapter, local plans and ordinances are evaluated to assist the CPUC in determining whether the Proposed Project is potentially consistent with locally adopted land use plans, goals and policies.

Article XII, Section 8 of the California Constitution states “[a] city, county, or other public body may not regulate matters over which the Legislature grants regulatory power to the [Public Utilities] Commission.” The California Public Utilities Code authorizes the CPUC to “do all things, whether specifically designated in this act or in addition thereto, which are necessary and convenient in the exercise of such power and jurisdiction” (California Public Utilities Code Section 701). Other Public Utilities Code provisions generally authorize the CPUC to modify facilities, to secure adequate service or facilities and to operate so as to promote health and safety. Thus, under the California Constitution and the Public Utilities Code, the CPUC has broad authority to preempt local regulation of public utilities, particularly when a local government attempts to unduly burden a public utility use or operations. Cities and counties cannot impose regulations that place significant burdens on utility operations. As the CPUC has general preemptory authority over the construction, maintenance, and operation of public utilities in the state of California, no discretionary permits (e.g., conditional use permits) or local plan consistency evaluations are anticipated in connection with aspects of the Proposed Project that are CPUC jurisdictional. Nonetheless, the Applicant would be required to obtain all applicable local ministerial building permits, traffic control permits, encroachment permits, and other similar permits from local jurisdictions for the Proposed Project.

5 Environmental Impact Assessment

The following environmental topics are evaluated as part of this chapter:

- Aesthetics/Visual Resources (Section 5.1)
- Agricultural Resources (Section 5.2)
- Air Quality/Greenhouse Gas Emissions (Section 5.3)
- Biological Resources (Section 5.4)
- Cultural Resources (Section 5.5)
- Geology, Soils, and Seismicity (Section 5.6)
- Hazards and Hazardous Materials (Section 5.7)
- Hydrology and Water Quality (Section 5.8)
- Land Use and Planning (Section 5.9)
- Mineral Resources (Section 5.10)
- Noise (Section 5.11)
- Population and Housing (Section 5.12)
- Public Services (Section 5.13)
- Recreation (Section 5.14)
- Transportation and Traffic (Section 5.15)
- Utilities and Services Systems (Section 5.16)
- Cumulative Analysis (Section 5.17)
- Growth-Inducing Impacts (Section 5.18).

5 Environmental Impact Assessment

5.1 Aesthetics/Visual Resources

This section describes the aesthetics/visual resources that may be affected by the Proposed Project.

5.1.1 Environmental Setting

This section discusses the visual resources in or near the proposed alignment, appurtenant structures and facilities, and the Adelanto Compressor Station. In addition to traversing unincorporated San Bernardino and Riverside County lands, the Proposed Project would pass through the San Bernardino National Forest and public lands managed by the BLM. Also, nine incorporated communities would be crossed by the proposed pipeline right-of-way, including the Cities of Adelanto, Victorville, San Bernardino, Colton, Loma Linda, Moreno Valley, Beaumont, Banning, and Palm Springs. The existing landscapes and visual resources along the proposed alignment and near appurtenant structures and the Adelanto Compressor Station are described below to establish a baseline visual setting for the Proposed Project.

The proposed alignment originates in the southern portion of the Mojave Desert at the existing Adelanto Compressor Station, which is shown in Figure 5.1-1. Long, industrial warehouses and associated surface parking areas are located north, northeast and southwest of the compressor station and an expansive Southern California Edison electrical substation and adjacent photovoltaic installation are located approximately 0.50 mile to the southeast. From the compressor station, the proposed alignment would extend to the south along dirt and paved roadways that traverse an undeveloped and sparsely developed rural residential desert landscape. Between the Adelanto Compressor Station and the northern boundary of USFS lands, the surrounding terrain displays a flat lot form and the landscape is populated by low, patchy desert shrubs, isolated Joshua trees, and occasionally, by rows of pines and other landscaping planted along residential properties. From the northern to the southern boundary of the USFS lands, the proposed alignment passes through a landscape composed of a series of undeveloped and sparsely vegetated, low ridgelines and narrow canyons, the I-15 corridor through the Cajon Pass, mountainous and descending chaparral-dotted terrain, and the SR-138 corridor and adjacent hillside and creek features.

South of SR 138, the pipeline alignment crosses the Pacific Crest National Scenic Trail and traverses elevated chaparral-covered topography via an existing network of dirt roads. The alignment is located to the east and generally parallels I-15 within the foothills of adjacent mountainous landforms. The alignment continues to the southeast and then crosses I-15 and follows SR 66/Cajon Boulevard, passing rural residential and industrial land uses as it approaches the City of San Bernardino. East of the Palm Avenue crossing, the alignment right-of-way would traverse a largely suburban residential setting and would be located within established and paved roadways. The setting would be similar as the alignment turns to the south on Harrison Street however, commercial and industrial land uses including the San Bernardino International Airport contribute to the existing landscape setting along this segment of the

5 Environmental Impact Assessment

right-of-way. Between the Santa Ana River and I-10, industrial, residential and commercial uses dot the landscape and display a decidedly urban form and character.

South of I-10, the alignment passes through industrial and residential areas of the City of Loma Linda and then proceeds to the southeast through Reche Canyon and along Reche Canyon Road. Development along Reche Canyon Road initially consists of ordered suburban neighborhoods and then transitions to scattered rural residences. A segment of Reche Canyon Road is unpaved and is aligned within a rugged landscape featuring chaparral- and exposed rock-covered hillsides. Overhead utility lines are also aligned along the roadway. A series of small residential neighborhoods are located northwest of SR 60 and south of the highway, the pipeline right-of-way would cross an expanse of low ridgelines and narrow canyons. The pipeline alignment through the City of Beaumont briefly crosses flat agricultural lands but would primarily be located in existing roads providing access to adjacent suburban development and rural residential land uses. Land uses along the pipeline alignment within the City of Banning consist of undeveloped lands, residential, industrial and commercial activities.

East of the City of Banning, the pipeline alignment crosses undeveloped desert lands, an active mining operation and then follows an existing unapproved access road that parallel I-10 and a railroad corridor. The valley landscape between the City of Banning and the Whitewater Pressure Limiting Station is flanked to the north and south by mountainous terrain of the San Jacinto and San Gorgonio wilderness areas. Residential development is scarce near the eastern end of the alignment; however, thousands of tall and bold wind turbines rise from the valley floor and introduce stark white colors and movement to the visual setting. In addition to coarse desert vegetation, rugged and rising to rolling terrain, wind turbines help define the visual character of the I-10 corridor between the Cities of Banning and Palm Springs.

5.1.2 Regulatory Setting

Federal

Federal Land Policy and Management Act

The Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) directs public land managers to use and observe the principles of multiple use and sustained yield when developing and revising land use plans. The following section of the Federal Land Policy and Management Act address the management and protection of aesthetics/visual resources on federal lands:

- **Section 102 (a)(8):** “public lands [shall] be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values.”

5 Environmental Impact Assessment

- **Section 201 (a):** “the Secretary shall prepare and maintain on a continuing basis an inventory of all public lands and their resource and other values (including, but not limited to, outdoor recreation and scenic values).”
- **Section 505 (a)(ii):** “each right-of-way shall contain terms and conditions which will minimize damage to scenic and aesthetic values.”

U.S. Forest Service

Southern California National Forest Land Management Plan

The Southern California National Forest Land Management describes the strategic direction at a broad program-level for managing the Angeles, Los Padres, San Bernardino, and Cleveland national forests (collectively referred to as the Southern California National Forests). The Land Management Plan consists of three interrelated parts (Parts 1, 2, and 3) that work together to facilitate the use of adaptive management and the development of the management activities in order to move the National Forest towards their desired outcome (USFS 2005a). Part 1 is the broad vision document for management of the entire Southern California National Forest system and Part 2 consists of Forest-specific land management plans.

The San Bernardino National Forest Land Management Plan (i.e., Part 2 of the Southern California National Forest Land Management Plan) contains the strategic direction and program emphasis objectives expected to result in the sustainability of the national forest (USFS 2005b). As discussed in the land management plan, the San Bernardino National Forest is divided into a series of geographic units referred to as “places.” Each place has its own landscape character, theme, desired condition and program emphasis in regards to scenery and general land management. Portions of the proposed alignment located within the national forest would traverse the Cajon Pass Place, an approximately 27,000-acre area located east and west of the Cajon Pass. The Cajon Pass Place is described as a major modern transportation and utility corridor consisting of railroads, highways, pipelines, fiber optic lines, and electric lines. Vegetative coverage in the place is predominantly chaparral that tends to cover the characteristic hillside and steep mountain topography however, the northern portion of the area extends to the high desert. The desired condition is that the Cajon Pass Place be maintained as a naturally appearing landscape providing managed recreation opportunities, a transportation gateway, a utility corridor and a wildlife habitat linkage (USFS 2005b). Lastly, the Cajon Pass Place program emphasis is focused on maintaining utility corridor service for people, goods and services while at the same time retaining the rugged and picturesque character of the landscape.

Part 2 of the Southern California National Forest Land Management Plan contains the following San Bernardino National Forest-specific design criteria related to aesthetics/visual resources:

5 Environmental Impact Assessment

- **SBNF S7** – Pacific Crest National Scenic Trail – Protect scenic values in accordance with adopted scenic integrity objectives. Protect foreground views from the footpath, as well as designated viewpoints. Where practicable avoid establishing unconforming land uses within the viewshed of the trail.

Part 3, Design Criteria for the Southern California National Forest (USFS 2005c), contains the following policies related to aesthetics/visual resources and more specifically, scenery management:

- **S9** – Design management activities to meet the Scenic Integrity Objectives shown on the Scenic Integrity Objectives Map.
- **S10** – Scenic Integrity Objectives will be met with the following exceptions:
 - Minor adjustments not to exceed a drop of one Scenic Integrity Objective level is allowable with the Forest Supervisor’s approval.
 - Temporary drops of more than one Scenic Integrity Objective level may be made during and immediately following project implementation providing they do not exceed three years in duration.

Scenery Management System

For purposes of managing visual resources of lands within their jurisdiction, the USFS applies an inventory and assessment system known as the Scenery Management System. Adopted in 1995 and defined in the USFS’s Landscape Aesthetics: A Handbook for Scenery Management (USFS 1995), the Scenery Management System establishes management standards to describe the level of modification associated with land use activity that is acceptable in a given area. These standards or Scenic Integrity Objectives range from “Very High,” which is typically applied only to highly sensitive landscapes such as wilderness areas or special classified areas, to “Unacceptably Low,” a standard that allows land use activity that may appear extremely dominant in relationship to the natural landscape (USFS 1995). Only one Scenic Integrity Objective class applies to any given area. It is important to note that the Scenic Integrity Objective does not necessarily represent current scenery conditions, but instead is a guideline for forest management objectives over time. Scenic Integrity Objective characteristics are described in Table 5.2-1.

**Table 5.2-1
USFS Scenic Integrity Objectives (Summary)**

Scenic Integrity Objective	Characteristics
Very High	The valued landscape character “is” intact with only minute if any deviations. The existing landscape character and sense of place is expressed at the highest possible level.
High	The valued landscape character “appears” intact. Deviations may be present but must repeat the form, line, color, texture, and pattern common to the landscape character so completely and at such scale that they are not evident.

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**Table 5.2-1
USFS Scenic Integrity Objectives (Summary)**

Scenic Integrity Objective	Characteristics
Moderate	The valued landscape character “appears slightly altered.” Noticeable deviations must remain visually subordinate to the landscape character being viewed.
Low	The valued landscape character “appears moderately altered.” Deviations begin to dominate the valued landscape character being viewed but they borrow valued attributes such as size, shape, edge effect and pattern of natural openings, vegetative type changes, or architectural styles outside the landscape being viewed.
Very Low	The valued landscape character “appears heavily altered,” and deviations may strongly dominate the valued landscape character. They may not borrow from valued attributes such as size, shape, edge effect and pattern of natural openings, vegetative type changes, or architectural styles within or outside the landscape being viewed; however, deviations must be shaped and blended with the natural terrain (landforms) so that elements such as unnatural edges, roads, landings, and structures do not dominate the composition.
Unacceptably Low	The valued landscape character being viewed appears extremely altered and deviations are extremely dominant and borrow little if any form, line, color, texture, pattern, or scale from the landscape character. Landscapes at this level of integrity need rehabilitation.

Source: USFS 1995.

According to the San Bernardino National Forest Land Management Plan (USFS 2005b), USFS lands traversed by the proposed pipeline through the Cajon Pass area are managed consistent with High scenic integrity objectives.

U.S. Bureau of Land Management

California Desert Conservation Area Plan

A portion of Segment 7 of the proposed alignment would traverse public lands within the California Desert Conservation Area Plan managed by the BLM (BLM 1980). The California Desert Conservation Area Plan states that the area has a superb variety of scenic values that the public considers a significant resource. In addition, the plan briefly mentions the visual resource management program of the BLM but it does not include visual resource management classifications for public lands. The Palm Springs Field Office has however conducted interim visual resource inventories and established interim visual resource management objectives for the area (BLM 2010). Public lands along the proposed alignment are located in the Seven Palms Valley, an area featuring flat to low landforms surrounded by distinct mountains, little variety in vegetation, and large, prominent wind turbines. The area was determined to have low scenic quality and as a result, management of the area according to the Class III visual resource management objectives was recommended (BLM 2010).

Visual Resource Management

The BLM maintains its Visual Resource Management System to assess and assist in the conservation of scenic resources on public lands. Through the Visual Resource Management System, the BLM assigns

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management class designations (Class I through Class IV) to public lands determined in part by existing scenic quality of landscape elements (i.e., landform, vegetation, water, color, adjacent scenery, scarcity, and cultural modification), viewer sensitivity levels, and distance zones. Visual Resource Management classes and the applicable class objectives are listed in Table 5.2-2.

Table 5.2-2
BLM Visual Resource Management Classes and Objective

Visual Resource Management Class	Class Objective
Class I	Preserve the existing character of the landscape. The level of change to the characteristic landscape should be very low and must not attract attention.
Class II	Retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer.
Class III	Partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer.
Class IV	Provide for management activities which require major modifications of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention.

Source: BLM 1986.

National Trails Systems Act

National Trails System Act

The National Trails System Act was established by Congress in 1968 “in order to provide for the ever-increasing outdoor recreation needs of an expanding population and in order to promote the preservation of, public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas and historic resources of the Nation” (16 U.S.C. 1241 et seq.). The act defined four categories of national trails: National Scenic Trails; National Historic Trails; National Recreation Trails; and connecting or side trails that provide additional points of public access to scenic, historic, and/or recreation trails. National trails are administered by the BLM, National Parks Service and the USFS and each agency and association is vital to ensure effective management and protection National Trails. Segment 2 and Segment 7 of proposed alignment would cross the Pacific Crest National Scenic Trail (managed by the USFS) and Segment 2 could cross the Old Spanish National Historic Trail (managed jointly by the National Park Service and BLM) (NPS 2014).

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State

California Scenic Highway System

Created by the California State Legislature in 1963, the California Scenic Highway Program includes highways designated by the California Department of Transportation (Caltrans) as scenic. The purpose of the program is to protect the scenic beauty of California highways and adjacent corridors through conservation and land use regulation. For a highway to be included in the program it must first be nominated by the specific city or county in which it is located. The nomination/eligibility process also entails that the city/county identify and define the scenic corridor of the highway to better understand the extent of visual resources requiring conservation. For an eligible highway to be officially designated and included in the program, the local government with jurisdiction over lands abutting the highway must implement a scenic highway corridor protection program that safeguards the scenic appearance of the corridor. Corridor protection may be achieved through a variety of means including (but not limited to) regulation of land uses and intensity of development, detailed land and site planning, control of outdoor advertising, consideration of earthmoving and landscaping, and the design and appearance of structures and equipment. If the local Caltrans district and State Scenic Highway Coordinators determine that the corridor protection program meets the five legislatively required elements discussed above, a recommendation to designate the highway as scenic is forwarded to the Caltrans Director (Caltrans 2014a).

Designated scenic highways in San Bernardino County near the proposed alignment through the Cajon Pass include SR 138. SR 138 is eligible state scenic highways (Caltrans 2014b). As proposed, the Section 1 of the proposed alignment passes beneath SR 138 northeast of the Cajon Junction.

There are two officially designated scenic highways in Riverside County from which views of portions of Segment 7 of the proposed alignment may be visible: SR 62 and SR 243 (Caltrans 2014a). SR 62 is an officially designated state scenic highway from the San Bernardino County border south to I-10 and SR 243 is officially designated from SR 74 to the city limit of Banning. In addition to officially designated scenic highways, SR 111 between SR 74 and I-10 is an eligible state scenic highway and Segment 7 of the proposed alignment passes near the SR 111 on- and off-ramps to I-10.

Local

County of Riverside

Regulatory Ordinances

Ordinance No. 655 (Regulation of Light Pollution) restricts the permitted use of certain light fixture that emit “undesirable light rays” that have a detrimental effect on astronomical observation and research (County of Riverside 1988). The majority of preferred alternative segments and appurtenant structures

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located in Riverside County are included in Zone B, a 45-mile radius area centered on Palomar Observatory. Within Zone B, use of low pressure sodium lamps and others lighting materials of 4,050 lumens and below for illumination of streets, equipment yards and outdoor security (i.e., Class II lighting) is allowed (County of Riverside 1988) and may remain on all night in Zone B. Lamps of 4050 lumens and above for Class II uses is prohibited in Zone B.

General Plan

The Open Space Element of the General Plan (County of Riverside 2014) contains the following policies related to aesthetics and visual resources:

- **Policy OS 21.1.** Identify and conserve the skylines, view corridors, and outstanding scenic vistas within Riverside County. According to the General Plan, scenic vistas are “points, accessible to the general public, that provide a view of the countryside.”
- **Policy OS 22.1.** Design developments within designated scenic highway corridors to balance the objectives of maintaining scenic resources with accommodating compatible land uses.

County of San Bernardino

Development Code

Section 83.07.40 of the County of San Bernardino Development Code (also referred to as the Night Sky Protection Ordinance) provides standards for outdoor lighting in the Mountain and Desert Regions. The Adelanto Compressor Station, Segment 1 of the proposed alignment and portions of Segment 2 are located in the Desert Region. This section of the development code requires new permitted lighting for construction and operational lighting be fully shielded to preclude light pollution or light trespass on adjacent property, other property within line of sight (direct or reflected) of the light source, or members of the public who may be travelling adjacent on adjacent roadways or rights-of-way (County of San Bernardino 2009). Emergency lighting operated by public utility or agency during the course of repairing or replacing damaged facilities is exempt from the requirements of development code.

General Plan

The Conservation and Open Space Elements of the General Plan (County of San Bernardino 2011 and 2007) contain the following goals and policies pertaining to the protection of aesthetics and visual resources:

- **Goal D/CO 1.** Preserve the unique environmental features and natural resources of the Desert Region including native wildlife, vegetation, water and scenic vistas.

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- **Policy D/CO 1.2.** Require future land development practices to be compatible with the existing topography and scenic vistas, and protect the natural vegetation.
- **Goal D/CO 3.** Preserve the “Dark Sky” as a natural resource in the Desert Region communities.
- **Policy D/CO 3.2.** All outdoor lighting, including street lighting, shall be provided in accordance with the Night Sky Protection Ordinance and shall only be provided as necessary to meet safety standards.
- **Goal OS 5.** The County will maintain and enhance the visual character of scenic routes in the County.
- **Policy OS 5.2.** Development along scenic corridors will be required to demonstrate through visual analysis that proposed improvements are compatible with the scenic qualities present.
- **Policy OS 5.3.** The County desires to retain the scenic character of visually important roadways throughout the County. A “scenic route” is a roadway that has scenic vistas and other scenic and aesthetic qualities that over time have been found to add beauty to the County. The following scenic route is designated by the County and is located near the proposed alignment:
 - *Interstate 15 from the junction with Interstate 215 northeast to the Nevada State line (excepting all incorporated areas).*

Local Jurisdictions

As stated in Section 5.1.1, the proposed pipeline would cross the boundaries of nine incorporated cities in Counties of San Bernardino and Riverside between the Adelanto Compressor Station and the Whitewater Pressure Limiting Station. In addition to applicable local land use policies identified in Section 5.9.2, select local General Plans contain policies relevant to aesthetics/visual resources. Policies are listed below by local jurisdiction.

City of Banning General Plan (2006)

- **Open Space and Conservation Element Policy 3.** The City of Banning shall protect the peaks and ridgelines within the City, and encourage coordination with adjacent jurisdictions to protect the peaks and ridgelines within the City’s area of influence, to protect the historic visual quality of the hillside areas and natural features of the Pass area.

City of Loma Linda General Plan (2009)

- **Conservation and Open Space Element Policy 9.2.10.1.a.** Preserve outstanding natural features, such as the skyline of a prominent hill, rock outcroppings, the San Timoteo Creek Aviary Sanctuary, and native and/or historically significant trees.

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City of Moreno Valley General Plan (2006)

- **Conservation Element Objective 7.7.** Where practical, preserve significant visual features significant views and vistas.
- **Conservation Element Policy 7.7.1.** Discourage development directly upon a prominent ridgeline.
- **Conservation Element Policy 7.7.4.** Gilman Springs Road, Moreno Beach Drive, and SR 60 shall be designated as local scenic roads.
- **Conservation Element Policy 7.7.5.** Require development along scenic roadways to be visually attractive and to allow for scenic views of the surrounding mountains and Mystic Lake.

City of San Bernardino General Plan (2005)

- **Natural Resource and Conservation Element Goal 12.8.** Preserve natural features than are characteristic of San Bernardino’s image.
- **Natural Resource and Conservation Element Policy 12.8.1 (c)(d).** Carefully review new projects that provide natural vistas or views enjoyed by the community; or serve as landmark features within the City.

5.1.3 Significance Criteria

The significance criteria used to evaluate impacts to aesthetics and visual resources are based on criteria listed in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.). A significant impact would occur if the project would:

- a Have a substantial adverse effect on a scenic vista
- b Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway
- c Substantially degrade the existing visual character or quality of the site and its surroundings
- d Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

5.1.4 Impact Analysis

The boxes in the chart below have been checked accordingly to characterize the level of significance for each CEQA criterion. The rationale for the anticipated significance levels is provided below the chart in each of the corresponding sections.

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Would the project:	Potentially Significant Impact	Less Than Significant with APMs Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) *Would the project have a substantial adverse effect on a scenic vista?*

San Bernardino County

Less than Significant Impact with APMs Incorporated. According to the San Bernardino County General Plan, scenic vistas consist of locations that provide long views of undisturbed natural areas or those that provide relief from less attractive or nearby features (such as views of mountain backdrops from urban areas) (County of San Bernardino 2007). While designated scenic vistas are not listed in the General Plan, the proposed pipeline alignment was reviewed to determine where scenic vistas could occur in the Proposed Project area landscape.

With the exception of proposed pipeline segments through the Cajon Pass and north to the Adelanto Compressor Station, the Proposed Project would generally follow existing roads in urban areas of San Bernardino County. Due to existing alteration of the landscape associated with roads and adjacent commercial, industrial and residential development, segments of the Proposed Project located in urban areas would not have a substantial effect on views available from scenic vistas. Views from urban areas to the proposed pipeline alignment do not provide long views of undisturbed natural areas. In addition, where views provide relief from less attractive or nearby features (such as available views from the Glen Helen Regional Park towards the Cajon Pass), the proposed pipeline would be aligned along an existing road and would not substantially affect the quality and character of existing views. Therefore, segments of the proposed pipelines in urban areas would have a less than significant impacts on scenic vistas.

Through the Cajon Pass motorists are afforded views of adjacent chaparral-covered hillsides and more distant rugged and prominent terrain. While views through the Cajon Pass contain natural scenic elements, landscape alterations are numerous (the area is a federally designated utility corridor and occasional commercial businesses are located adjacent to the interstate) and linear disturbance associated with establishment of access roads is relatively commonplace. In

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addition, views from the interstate tend to be limited in extent due to the surrounding mountainous terrain. Further, the presence of existing linear disturbances and utilities in foreground and middleground views would tend to reduce the visual sensitivity of motorists to the subtle landscape alterations associated with pipeline installation and low alignment markers. Therefore, due to the visibility of previous disturbances and landscape alterations associated with utility, transportation and commercial development from I-15, scenic vista impacts associated with installation of the proposed pipeline would be less than significant.

North of the San Bernardino National Forest boundary, the pipeline alignment would generally follow existing roads (including Baldy Mesa Road and Koala Road) to the Adelanto Compressor Station. The landscape adjacent to the proposed alignment displays a relatively flat, horizontal form dotted with low desert shrubs and occasionally, ornamental trees near rural residences. There are no designated or known scenic vistas in the surrounding area from which the anticipated visual disturbance associated with pipeline installation would be viewed as a prominent feature. While much of the desert landscape in the area appears unaltered and natural, the proposed alignment would be located within existing areas of disturbance (i.e., roadways) that would be restored post construction (see **APM-AES-1**). With implementation of **APM-AES-1**, installation of the proposed pipeline would not result in a substantial adverse effect on a scenic vista and impacts would be less than significant.

County of Riverside

Less than Significant Impact with APMs Incorporated. According to the Riverside County General Plan, scenic vistas are “points accessible to the general public that provide a view of the countryside” (County of Riverside 2014). Within the Riverside County portion of the Proposed Project, the pipeline alignment would largely follow existing roadways and areas of disturbance and as such, effects to the landscape visible from scenic vistas would not be significant. As discussed in greater detail below, wide, panoramic views of the valley floor are available to motorists as they descend SR 243 from the San Bernardino National Forest. The proposed pipeline alignment would be located in the state route viewshed; however, Proposed Project activities would be difficult to discern due to distance. In addition, the visual effects associated with pipeline installation would be obscured and minimized by installing the pipeline within existing roadways and areas of disturbance. In addition, the horizontal nature of construction activities and the discoloration of roadway surfaces resulting from pipeline installation would not obscure or impede panoramic views available from the state highway.

Views to the valley floor and adjacent mountainous terrain are also available from elevated, publically accessible landforms in the area including Mount San Jacinto and Mount San Gorgonio. Similar views of the valley are also available from rugged segments of the Pacific Crest National Scenic Trail as the trail descends the mountainous terrain of the San Bernardino

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National Forest north of I-10 and east of Cabazon. Views from these locations tend to be long and panoramic in nature and Proposed Project activities on the valley floor would generally be obscured by distance. In addition, visual contrast associated with pipeline installation would be masked by the presence of roads and other alterations in the landscape. Further, the proposed pipeline would be installed within existing areas of disturbance largely along existing natural gas pipeline routes, and therefore, post-construction views of the valley floor would be similar to existing views. Because Proposed Project activities would not substantially obscure or interrupt panoramic views available from elevated and publicly accessible landforms and trails in the Proposed Project area, impacts would be less than significant.

Lastly, scenic views of the adjacent countryside and distant San Bernardino Mountains are available from northbound SR 79 between South California Avenue north to the City of Beaumont limits. Along this segment of the state highway, foreground views to the east and west consist of a sparsely developed and primarily agricultural landscape featuring rolling hills supporting low grasses and occasional trees and distant views to the north consist of foothills and peaks of the San Bernardino Mountains. The proposed pipeline alignment would cross the state highway approximately 0.20 miles north of South California Avenue but would not substantially affect existing views of the countryside and local area mountains. As proposed, the state highway crossing would occur at a visible road cut and noticeable disturbance associated with pipeline installation would be located in the normal field of vision of passing motorists for an extremely brief duration. In addition, the pipeline alignment would be restored post construction and subtle contrasts between existing low grasses and the restored right-of-way would not be overly noticeable to passing motorists travelling at the posted speed limit of 65 mph. As a result, views of the pastoral landscape set against the backdrop of prominent, rugged mountains would remain intact. Therefore, impacts to existing views available from the northbound lanes of SR 79 between South California Avenue and the City of Beaumont limits would be less than significant.

In addition to visual disturbance associated installation of the 50-foot by 75-foot gravel pad and perimeter fencing, block valve components including a 5- to 7-foot above grade, 12-inch blowdown stack, communication equipment, a 40-foot above grade radio antennae and equipment housing could be visible to passing motorists on northbound SR 79. Block valves would be installed in the proposed pipeline approximately 5 to 8 miles apart and the specific location of these components along the alignment has not yet been determined. Similar to the view duration to effects resulting from pipeline installation, block valves components would be experienced briefly by motorists but would contribute vertical metallic lines and components to a gently rolling pastoral landscape largely void of similar features. To avoid this potential conflict, **APM-AES-2** would be implemented to ensure proper siting of these facilities near scenic routes. Therefore, with implementation of **APM-AES-2**, installation of block valves along the

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pipeline alignment would not result in a substantial adverse effect on a scenic vista and impacts would be less than significant.

- b) ***Would the project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?***

San Bernardino County

Less than Significant Impact with APMs Incorporated. Because the Adelanto Compressor Station is not visible from eligible or officially designated state scenic highways, there is no impact to resources along a scenic highway resulting from the compressor station modifications.

SR 138 is eligible state scenic highway near the proposed alignment through the Cajon Pass. As proposed, Section 1 of the proposed alignment crosses SR 138 northeast of the Cajon Junction and construction activities would be visible from the state highway. The presence of construction equipment and vehicles and active construction activities would temporarily disrupt views from segments of east- and westbound lanes of SR 138 included in the Proposed Project viewshed. From the eastbound lanes of SR 138, the duration of views of construction activity would be brief and due to the presence of intervening topography and a large road cut that effectively creates a temporarily enclosed landscape, views would be limited to two viewing windows of less than 0.1-mile length each. From the westbound travel lanes of SR 138, views tend to be longer and wider in extent and due to a general lack of intervening vertical features; views of construction activities may be available from middleground to foreground viewing distances over an approximate 1.1-mile segment of the highway. Grading may be required for the access road development but would generally be facilitated via an existing unpaved road network in the area. Because view duration of construction equipment, vehicles and activities from segments of SR 138 would be brief and because the visibility of construction equipment and vehicles would not in and of itself damage or remove scenic resources from the existing landscape, impacts during construction would be less than significant, and there would be no impacts to scenic resources during operation. Also implementation of a revegetation plan (**APM-AES-1**) would minimize color and line contrast associated with the removal of natural vegetation associated with grading activities for construction access.

Following construction, the straight, smooth lines associated with vegetation removal for pipeline installation would be visible from east and westbound segments of SR 138. As proposed, the pipeline alignment would run perpendicular to and would cross SR 138 and disturbance would be visible atop elevated terrain located immediately north of the highway. Views of pipeline-associated disturbance located south of the highway would be obscured by intervening terrain and visual effects would be reduced by installing the pipeline within an existing area of linear disturbance associated with an existing pipeline alignment. In addition,

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restoration of the pipeline alignment (**APM-AES-1**) would minimize the visual effects associated with pipeline installation. While the density of vegetation in the right-of-way would be less than that displayed in adjacent natural areas, the visual changes during operation would be rather subtle to passing state highway motorists. Also, this segment of the proposed pipeline would be located in a federally designated utility corridor and the existing visual landscape is marked by the effects of linear utility development. For example, regional transmission lines supported by tall and geometric steel lattice towers are visible to the south of the highway as are visible bands of exposed soils associated with existing pipeline access roads. Therefore, due to the presence of existing utilities and industrial features in the SR 138 viewshed and with implementation of **APM-AES-1** and **APM-AES-2**, impacts to scenic resources during operation would be less than significant and would not substantially affect the scenic highway eligibility of SR 138.

Riverside County

Less than Significant Impact with APMs Incorporated. SR 62 is an officially designated state scenic highway from the San Bernardino County border south to I-10 and SR 243 is officially designated from SR 74 to the city limit of Banning. In addition, SR 111 between SR 74 and I-10 is an eligible state scenic highway and Segment 7 of the proposed alignment passes near the SR 111 on- and off-ramps to I-10.

From southbound lanes of SR 62 near I-10, existing intervening features screen views to the proposed pipeline alignment and Whitewater Pressure Limiting Station. In addition to sloping terrain located immediate west of the state route right-of-way, lines of tall trees along the north and southbound lanes of the highway and the slightly elevated SR 62 northbound ramp from eastbound I-10 would effectively screen construction activities and Proposed Project visual effects from the view of southbound motorists. Project features would be located outside of the normal field of vision of northbound SR 62 motorists. Therefore, due to the presence of intervening screening elements and because views of Proposed Project components would not be visible from northbound travel lanes of SR 62, impacts to scenic resources within the viewshed of SR 62 would be less than significant.

Views to the City of Banning, the I-10 corridor, and Mount San Gorgonio are available from SR 243 as it descends mountainous terrain of the San Bernardino National Forest towards the valley floor. The superior viewing angle afforded to state highway motorists suggests that views to the proposed pipeline alignment may be available; however, the visible landscape is expansive and views are panoramic and nature. The pipeline alignment would follow an existing paved roadway through an urban corridor that would not generally be an area of focus in the views of motorists. Further, due to distance, the presence of construction vehicles, equipment and activities would not be overly discernable from the state highway. Similarly, the discoloration of roadway surfaces resulting from pipeline installation and road restoration

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would be obscured by distance and screened by existing development. Locating the proposed pipeline within/near an existing roadway would not require the removal of existing scenic resources (i.e., trees, vegetation, rock outcroppings) located within the state highway viewshed; therefore, impacts to views from SR 243 would be less than significant.

Portions of Segment 7 of the proposed pipeline alignment and the Whitewater Pressure Limiting Station are located within the viewshed of SR 111. Both the pressure limiting station and the proposed alignment are located within the visible desert landscape that has been heavily modified by the installation of thousands of wind turbines. Construction equipment and activities may be visible from the state highway however, given the largely flat, horizontal form of the state highway and presence of intervening desert shrubs, visual effects associated with vegetation removal would be screened from view. Further, with implementation of **APM-AES-1** and **APM-AES-2**, areas disturbed by pipeline installation would be restored after construction and block valves would be located outside the foreground views from the state highway. In addition, Proposed Project activities at the Pressure Limiting Station and along the pipeline alignment would generally occur at and along areas of existing disturbance. The proposed pipeline alignment would largely follow existing unpaved roads and the pressure limiting station is an existing facility and as such, the removal of trees and rock outcroppings would not be required. As a result, visual impacts to scenic resources within the viewshed of SR 111 would be less than significant with implementation of **APM-AES-1** and **APM-AES-2**.

c) *Would the project substantially degrade the existing visual character or quality of the site and its surroundings?*

Less than Significant Impact with APMs Incorporated. The existing landscape setting as it relates to the proposed pipeline alignment is discussed in Section 5.1.1, Environmental Setting. As discussed in Section 5.1.1, the Proposed Project crosses National Forest lands, public lands managed by the BLM, two counties, and nine local jurisdictions. While the methodology used to determine impacts to visual character and quality will differ slightly between federal and regional/local jurisdictions (both the USFS and BLM manage lands according to established visual management systems), existing landscapes are described in terms of the four basic landscape character elements of form, line, color, and texture. Project effects to existing landscapes are described in terms of anticipated contrast in form, line, color, and texture. In addition, views to existing landscape features and Proposed Project components are described according to the foreground, middleground, and background distance zones. *Foreground* views pertain to viewing distances where the viewer has close range visibility to a given object (generally within 0.25–0.5 mile). *Middleground* views typically pertain to viewing distances of between 0.5 mile and 3 miles, where objects are still distinguishable from other adjacent visual features. *Background* views pertain to viewing distances up to 15 miles, where visibility of

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objects is less distinctive, and where ridges and skylines provide the greatest potential viewing opportunities to an object.

It should also be reiterated that USFS lands crossed by the proposed pipeline alignment are managed according to scenic integrity objectives which allows deviations/alterations provided that they repeat the form, line, color texture and pattern common to the landscape and that they are constructed at a similar scale. Public lands managed by the BLM that would be crossed by the proposed pipeline alignment are designated as visual resource inventory Class III. The Class III designation requires the partial retainment of the existing landscape character and allows for moderate levels of change provided that they do not dominate the views of casual viewers.

Visual simulations are typically prepared for development projects in order to graphically depict the anticipated “before and after” visual effects of the Proposed Project. Visual simulations are based at specific locations in the surrounding landscape identified by the Applicant and jurisdictional agencies as “key observation points” that are representative of views of the landscapes in which the Proposed Project would be located. Visual simulations have not been prepared for the Proposed Project and key observation points from which to assess the anticipated construction and operational impacts have not been established to date. As such, construction and operational impacts of the Proposed Project are discussed below in a general manner according to viewer types, existing landscape character and quality, distance zones, and availability of views.

Construction

Less than Significant Impact with APMs Incorporated. Construction activities at the Adelanto Compressor Station would primarily be visible to motorists on Rancho Road, Muskrat Avenue and Koala Road. In addition, employees of industrial businesses located to the north, northeast and southwest of the compressor are located in the viewshed of the compressor station; however, industrial land uses are not considered sensitive receptors for purposes of visual analyses. While construction activities would be visible to passing motorists, construction vehicles, equipment and workers would be located within and immediately south of the existing compressor station fence line, in areas where compressor station facilities and activities currently occur. In addition to the compressor station, motorists (primarily employees of local businesses) passing through the area on Rancho Road are afforded views of a desert landscape interrupted by long rows of industrial warehouses and an expansive SCE electrical substation. Because the immediate area displays an industrial character and construction activities would occur within the existing compressor station boundaries, impacts to the existing visual character and quality of the site and surroundings would be less than significant.

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During construction, the removal of natural vegetation and alteration of existing terrain during pipeline installation activities would create visible line and color contrast that would be evident in the immediate foreground to middleground distance zones. In addition, contrasts may also be visible in background distances where vegetation would be removed from atop ridgelines or rising terrain. Construction equipment and vehicles would also temporarily disrupt the existing quality of views and would be primarily visible from foreground and middleground zones. Given the location of the proposed pipeline alignment, sensitive receptors within the foreground to middleground zones would primarily consist of interstate, highway and local road motorists but would also include recreationists and residents. Motorists are afforded relatively brief and passing views of the landscape and due to a shorter view duration, are not considered as sensitive as recreationists and residents to changes in the landscape. Some construction activities and construction disturbance would be screened by terrain and vegetation located between the proposed alignment and travel lanes however, visible effects associated with pipeline installation would tend to be noticeable where the pipeline alignment is located adjacent to travel routes, residences and trails.

With the exception of the chaparral-covered hillside and low shrub landscape through the Cajon Pass, the proposed alignment would generally traverse arid desert or developed urban landscapes. Project effects in the Cajon Pass landscape would be visible from a foreground to middleground viewing distances and following construction, line and color contrasts would be most apparent where the installation of the proposed pipeline would create new linear disturbances in the landscape. Installation of the pipeline within existing access roads may slightly expand the width of existing linear disturbance in the landscape however, visual contrast associated with new vegetation removal and grading would mimic existing conditions and contrasts and as a result, would not substantially degrade visual character or quality. Evidence of particularly rocky and rugged terrain occurs near segments of the proposed pipeline alignment near existing access roads in the San Bernardino National Forest. While this terrain may be encountered during construction and pipeline installation could result in the stockpile of excavated rocky materials adjacent to the alignment, occurrences are anticipated to be limited and stockpiling would typically be located outside of the viewshed of area travel routes. Therefore, due to the anticipated limited occurrence of stockpiling and the presence of similar features near the pipeline alignment, stockpiling during construction would not substantially degrade existing visual character and impacts would be less than significant.

North of SR 138 to Baldy Mesa Road, the proposed alignment would temporarily deviate from existing access roads and other existing linear ground disturbances and would create a new horizontal band of lightly colored exposed soils that would be flanked by relatively dense chaparral vegetation. This anticipated visual contrast would be noticeable to passing motorists however, with implementation of **APM-AES-1** and the establishment of planting materials, visual contrasts

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would be minimized over time and visual effects would be relatively subtle when viewed by motorist travelling at prevailing interstate speeds (the posted speed limit is 45 mph near the proposed alignment). Also, while the proposed alignment would not be located in an existing access road along this segment, it would be located near and would generally parallel existing access roads in the area. Due to the presence of existing linear disturbances in the landscape, construction activities creating similar line, color and texture contrasts would not dominant existing views and would not create substantial contrast that would with the existing visual character of the area. Further, USFS scenic management objectives for the Cajon Pass Place allows alterations that repeat the form, line, color and texture common to the landscape. Pipeline installation within existing access roads would reduce the potential for new line, color and texture contrast in the landscape, where the pipeline would deviate from existing access roads and areas of disturbance, new horizontal bands of exposed soils would be viewed alongside similar disturbances present in the landscape. Therefore, because the proposed alignment would generally follow existing roads and with implementation of **APM-AES-1**, vegetation removal and landscape alterations associated with construction activities would not substantially degrade the existing visual character or quality of the area. Impacts would be less than significant.

Within arid desert and developed urban landscapes, the proposed pipeline alignment would generally be located within existing unpaved or paved roadways. Open cutting along existing roadways would create visible line and color contrasts between the altered and unaltered portions of road surfaces and the existing continuity of roadway surfaces would be disrupted. Following construction, roadways would be returned to pre-construction conditions and as a result, the existing visual character of the area would not be substantially affected. Roads themselves create line and color contrast that is particularly noticeable when viewed against natural and primarily undeveloped areas and by installing the proposed pipeline within existing areas of disturbance, the creation of new and substantial visual contrast would be minimized. Where the pipeline alignment would deviate from existing roadway alignments, implementation of **APM-AES-1** and reestablishment of vegetation and pre-construction surface conditions would minimize visual contrast such that visible changes would be relatively subtle to passing motorists and other sensitive receptors. Therefore, with implementation of **APM AES-1**, impacts would be less than significant.

Operations

Less than Significant Impact with APMs Incorporated. Following construction, the new compressor equipment and auxiliary and generator buildings would operate within the enclosed compressor station boundaries. Although the site would be surrounded by a masonry block wall, some new aboveground tanks, vessels and appurtenant facilities would be partially visible within the station boundaries. The introduction of new buildings and aboveground equipment to the site

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would create new rectangular and horizontal forms in the landscape however, given the industrial character of the existing compressor station and the industrial character of developed lands in the immediate vicinity, proposed infrastructure replacement would not substantially degrade established visual character. The compressor station would appear less sparsely developed with new buildings and equipment on site and with the installation of multiple buildings, the compressor station could begin to display an appearance similar to that of industrial warehouses located north of Rancho Road. It is anticipated that proposed tanks, vessel and other features would display a similar bulk, scale and character as existing on-site features. Therefore, modification of infrastructure at the compressor station would not substantially degrade existing visual character and quality and impacts would be less than significant.

Operational impacts associated with the Proposed Project would be similar to those discussed above for construction. Visible line and color contrast resulting from pipeline installation would be less noticeable over time as plantings associated with the revegetation plan (**APM AES-1**) become established and the pre-construction conditions are restored. The visual prominence of block valves in the landscape would be reduced through implementation of **APM-AES-2** and as a result, potential line and color contrasts experienced by sensitive receptors would be muted. Pipeline markers in the immediate foreground distance would generally be noticeable to motorists and other sensitive receptors however, because these features would be display a low, vertical form, they would be backscreened by surrounding terrain and vegetation and would not be overly discernable from middleground distances. Post- installation markers would dot the alignment landscape but would not substantially affect existing visual character or quality. The installation of markers would not require the removal of vegetation beyond that required for the pipeline and due to a low, narrow form, these features would not be visually prominent. Markers would also tend to be backscreened by surrounding terrain and vegetation and over time may be screened from view by shrubs and other components of the revegetation plan. Therefore, with implementation of **APM-AES-1** and **APM-AES-2**, impacts resulting from operation of the proposed pipeline and installation of pipeline markers would be less than significant.

- d) ***Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?***

Construction

Less than Significant Impact. While construction would normally take place Monday through Saturday between the hours of 6:00 AM and 7:00 PM, night construction may occasionally be necessary in urban areas to minimize impacts to local traffic and industrial or commercial business activities. In these instances, new sources of lighting would be required and would be concentrated around active construction areas. Nighttime lighting is commonplace in urban settings and typically includes street, traffic signal, and sign lighting, ornamental and

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decorative lighting associated with commercial and residential land uses, and parking lot lighting. Because sources of nighttime lighting are relatively common in urban areas, the temporary addition of lighting associated with occasional nighttime construction activities would not substantially affect nighttime views in urban areas. Therefore, impacts would be less than significant during construction.

Operations

Less than Significant Impact. Operation of the pipeline would not create new sources of light or glare.

Proposed modifications at the existing Adelanto Compressor Station would entail the installation of a new natural gas-driven turbine compressors to meet the Proposed Project's horsepower and throughput needs. In addition to new compressors that would be housed in a new compressor building, new auxiliary and generator buildings are proposed as well as new tanks, vessel and other appurtenant structures. New light fixtures may be required to facilitate occasional (and/or emergency) nighttime operation and maintenance needs within the existing property boundary. New buildings may also require outdoor lighting fixtures to ensure safe access and for security purposes. Existing outdoor lighting is installed at the Adelanto Compressor Station and at industrial business located to the north and northeast. In addition, overhead street lighting is installed on Rancho Road (located immediately north of the Adelanto Compressor Station) and operates during nighttime hours. Any new lighting would be installed in compliance with Section 83.07.40 of the County of San Bernardino Development Code (also referred to as the Night Sky Protection Ordinance). Because existing sources of nighttime lighting operate in the immediate area surrounding the Adelanto Compressor Station, and given the lack of sensitive visual receptors near the Adelanto Compressor Station (land uses are primarily industrial), new lighting associated with proposed infrastructure modification at the Adelanto Compressor Station would not adversely affect nighttime views in the area. Therefore, impacts would be less than significant.

Construction of new equipment at several pressure limiting stations would also occur as part of the Project. Both the Moreno and Whitewater Pressure Limiting Stations are existing fenced facilities along the proposed alignment and feature outdoor, overhead lighting. The construction of new pressure limiting stations at these existing facilities is not anticipated to require the installation of new sources of lighting. Similarly, existing nighttime lighting is assumed to be installed at the Shaver Summit Pressure Limiting Station and Desert Center Compressor Station and would be adequate to accommodate operation of new piping, valves, and equipment. The installation of new aboveground components at pressure limiting stations could create glare; however, these facilities are remotely located and screened from view of sensitive receptors. The Moreno Pressure Limiting Station is located approximately 1.8 miles from the nearest residences and is visually obscured by distance and screened by intervening vegetation. The

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Whitewater Pressure Limiting Station is located approximately 0.35 mile south of I-10 at the SR 62 junction; however, due to the relatively low profile of components at the facility, the station is not clearly visible from the interstate or the state route. Therefore, impacts associated with substantial new sources of lighting associated with construction of new pressure limiting station facilities would be less than significant.

5.1.5 Applicant Proposed Measures

APM-AES-1 Implementation of Revegetation and Restoration Plan. Following construction, temporary areas of disturbance shall be returned to their pre-construction conditions to the extent feasible. Where pipeline installation would require the removal of natural vegetation and alteration of the existing landforms that could result in new line and color contrasts, areas would be restored according to a revegetation plan. Following construction activities in primarily natural appearing settings, the permanent pipeline right-of-way would be reseeded with a seed mix appropriate to the region and local area and would be approved by the applicable jurisdictional agency, depending on the location. Revegetation plans would require approval of the applicable jurisdictional agency and installation would be consistent with accepted techniques for the area and particular implementation task. Effectiveness criteria and monitoring protocols consistent with that required by jurisdictional agencies would be implemented to support establishment and success of the revegetation plan.

On developed lands and in urban areas, the ground surface would be restored in accordance with property owner and/or applicable agency requirements. Unpaved roads would be backfilled and regraded to level roadway surface consistent with that of undisturbed portions of the road. Following construction, paved roadways would be compacted, repaved and restored to pre-construction conditions.

APM-AES-2 Block Valve Locations. To reduce the apparent scale and visual prominence of above ground components, block valves will be located outside of the viewshed of State and county-designated scenic routes. If such placement is determined to be infeasible during the design process, then block valves will be located within the middleground (i.e., 0.5 to 3.0 miles) or background (i.e., greater than 3.0 miles) distance zones as measured from the scenic route in question. If engineering design limits the ability to locate block valves outside of the foreground, the facility will be screened appropriately.

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5.1.6 References

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SOURCE: Google Earth 2014

North-South Project

FIGURE 5.1-1
Photo of Adelanto Compressor Station

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5.2 Agricultural Resources

This section describes the agricultural and forestry resources that may be affected by the Proposed Project.

5.2.1 Environmental Setting

The Proposed Project traverses multiple jurisdictions, including cities, counties, and federal lands that include lands currently in agricultural use or designated for agricultural uses. A description of the pipeline segments and the jurisdictions that apply to each is provided below:

- Segment 1 – Adelanto Compressor Station to the San Bernardino National Forest Boundary (City of Adelanto, City of Victorville)
- Segment 2 – San Bernardino National Forest (USFS)
- Segment 3 – Swarthout Canyon Road along U.S. Route 66 to Reche Canyon Road (Unincorporated San Bernardino County, City of San Bernardino, City of Colton, City of Loma Linda)
- Segment 4 – Reche Canyon Road to Moreno Pressure Limiting Station (City of Loma Linda, City of Moreno Valley, Unincorporated Riverside County)
- Segment 5 – Moreno Pressure Limiting Station to State Highway 79 (City of Moreno Valley, Unincorporated Riverside County)
- Segment 6 – State Highway 79 to Sunset Avenue (City of Beaumont, City of Banning)
- Segment 7 – Sunset Avenue to Whitewater Pressure Limiting Station (BLM, City of Palm Springs).

The pipeline alignment would largely be located within existing SoCalGas right-of-way or public right-of-way; however, Proposed Project construction would require temporary access roads, staging areas, and work areas that may extend beyond the existing right-of-way. Additionally, right-of-way acquisition would be required in limited areas, as discussed in Section 3.7.

In addition to the pipeline alignment, the Proposed Project includes infrastructure modification at the existing Adelanto Compressor Station facility in the City of Adelanto, and improvements to the Moreno Valley Pressure Limiting Station, Whitewater Pressure Limiting Station, Shaver Summit Pressure Limiting Station, and Desert Center Compressor Station.

A description of the existing agricultural designations that apply to the Proposed Project is provided in Section 5.2.2. Important farmland areas within 500 feet of the Proposed Project are also described in Section 5.2.2.

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5.2.2 Regulatory Setting

Federal

Farmland Protection Policy Act (7 U.S.C. Section 4201)

The purpose of the Farmland Protection Policy Act (FPPA) is to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses. It additionally directs federal programs to be compatible with state and local policies for the protection of farmlands. For the purpose of the FPPA, farmland includes Prime Farmland, Unique Farmland, and Farmland of Statewide or Local Importance, as defined in 7 U.S.C. 4201. Federal agencies are required to develop and review their policies and procedures to implement the FPPA every 2 years. The FPPA does not authorize the federal government to regulate the use of private or nonfederal land or in any way to affect the property rights of owners of such land. Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a federal agency or with assistance from a federal agency (USDA 2014).

San Bernardino National Forest Land Management Plan

The San Bernardino National Forest Land Management Plan describes the vision for the future of the national forest, describes land use zones and suitable uses for areas of the national forest, addresses monitoring of implementation of the plan, and includes design criteria for future projects and activities. The Land Use Zones include Developed Areas Interface, Back Country, Back Country Motorized Use Restricted, Back County Non-Motorized, Critical Biological, and Wilderness. Major Utility Corridors are considered suitable uses in designated areas within the Developed Areas Interface zone, Back Country zone, and Back Country Motorized Use Restricted zone. I-15 (Cajon Pass) is a Designated Utility Corridor in the San Bernardino National Forest (USFS 2005). A total of 1,224 acres within the 500-foot buffer of the proposed alignment are within the San Bernardino National Forest.

State

Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP) was created by the California Legislature in 1982 to continue the Important Farmland Inventory efforts started by the Natural Resources Conservation Service (NRCS) in 1975. It requires the California Department of Conservation to prepare, update, and maintain Important Farmland series maps and other soils and land capability information. Under the FMMP, the California Department of Conservation categorizes land as described below (California Department of Conservation 2004). Table 5.2-3 includes the amount of land within the proposed alignment (including a 500-foot buffer around the alignment) within each FMMP category. The FMMP designations are also shown on Figure 5.2-1.

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Prime Farmland

This farmland has the best combination of physical and chemical characteristics for crop production. It has the soil quality, growing seasons, and moisture supply needed to produce sustained high-yield crops when treated and managed, including water management, according to current farming methods.

In order to be shown on FMMP's Important Farmland maps as Prime Farmland, land must meet the following two criteria: First, it must have been used for irrigated agricultural production at some time during the 4 years prior to the Important Farmland map date; FMMP staff determines irrigated land use by analyzing current aerial photos, local comment letters, and related geographic information system (GIS) data, supplemented with field verification. Second, the soil must meet the physical and chemical criteria for Prime Farmland or Farmland of Statewide Importance as determined by the USDA NRCS. The NRCS compiles lists of which soils in each survey area meet the quality criteria. Factors considered in qualification of a soil by the NRCS include the following:

- Water moisture regimes, available water capacity, and developed irrigation water supply
- Soil temperature range
- Acid–alkali balance
- Water table
- Soil sodium content
- Flooding (uncontrolled runoff from natural precipitation)
- Erodibility
- Permeability rate
- Rock fragment content
- Soil rooting depth.

Prime Farmland soils commonly get an adequate and dependable supply of moisture from precipitation or irrigation. Temperature and growing season are favorable, and the level of acidity or alkalinity is acceptable. The soils have few rocks and are permeable to water and air, are not excessively erodible or saturated with water for long periods, and are not flooded during the growing season.

Farmland of Statewide Importance

This is land other than Prime Farmland that has a good combination of physical and chemical characteristics for the production of crops and has been used for the production of irrigated crops within the 4 years prior to the mapping date.

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Unique Farmland

This is land that does not meet the criteria for Prime Farmland or Farmland of Statewide Importance and that is currently used for the production of specific crops with high economic value. It has the special combination of soil quality, location, growing season, and moisture supply needed to produce sustained high quality or high yields of specific crops (e.g., oranges, olives, avocados, cut flowers) when treated and managed according to current farming methods. This category excludes abandoned orchards or vineyards. Land must have been cropped at some time during the four years prior to the mapping date.

Farmland of Local Importance

This land produces crops or has the capability of production, or is used for the production, of confined livestock. It may be important to the local economy due to its productivity. A local advisory committee set up by the Soil Conservation Service in each county initially identified Farmland of Local Importance.

Grazing Land

This is land on which the existing vegetation, whether grown naturally or through management, is suitable for grazing or browsing of livestock. It is identified in minimum mapping units of 40 acres and does not include land previously identified above.

Urban and Built-Up Land

This land is used for residential, industrial, commercial, construction, institutional, and public administrative purposes, among others.

Other Land

This is land not included in any of the other mapping categories and generally includes rural development with a density of less than one structure per 1.5 acres, marginal agricultural lands, brush, timber, roads, and other rural land uses. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

**Table 5.2-3
Existing FMMP Acreages (within 500-foot buffer of alignment)**

Jurisdiction	Prime Farmland (acres)	Farmland of Statewide Importance (acres)	Unique Farmland (acres)	Farmland of Local Importance (acres)	Grazing Land (acres)	Other Land (acres)	Urban and Built-Up Land (acres)
City of Adelanto	—	—	—	—	265	—	6
City of Banning	—	—	—	189	75	55	460
City of Beaumont	—	—	—	57	--	40	118
City of Colton	—	—	—	—	56	8	163

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**Table 5.2-3
Existing FMMP Acreages (within 500-foot buffer of alignment)**

Jurisdiction	Prime Farmland (acres)	Farmland of Statewide Importance (acres)	Unique Farmland (acres)	Farmland of Local Importance (acres)	Grazing Land (acres)	Other Land (acres)	Urban and Built-Up Land (acres)
City of Loma Linda	1	—	—	—	9	—	75
City of Moreno Valley	—	—	—	683	4	96	190
City of Palm Springs	—	—	—	—	—	218	—
City of San Bernardino	0.2	—	—	—	97	79	1,538
City of Victorville	—	—	—	—	151	—	1
Unincorporated Riverside County	—	—	—	487	643	1,780	127
Unincorporated San Bernardino County	11	2	4	—	913	571	471
U.S. Bureau of Land Management	—	—	—	—	—	25	—
Total	12.2	2	4	17	1804	2,376	2,137

Source: California Department of Conservation 2010.

California Land Conservation Act (Williamson Act)

The California Land Conservation Act of 1965, also known as the Williamson Act, was established with the basic intent of encouraging preservation of the state’s agricultural lands in view of the increasing trends toward their “premature and unnecessary” urbanization. The Williamson Act enables local governments to enter into contracts with private landowners for the purpose of restricting land to agricultural or related open space use. In return, landowners receive property tax assessments that are much lower than normal because assessments are based on farming and open space uses as opposed to full market value. Local governments have traditionally received annual subvention of forgone property tax revenues from the state via the Open Space Subvention Act of 1971, but payments have been reduced or eliminated since 2009 due to economic conditions. Williamson Act contracts must have an initial term of at least 10 years. Williamson Act contracts are available only when the land is located within an established agricultural preserve. Every year, absent a notice of nonrenewal, the contract is automatically extended, or “renewed,” for an additional year (California Department of Conservation 2014a).

A total of 55 acres of land within the 500-foot buffer on either side of the proposed alignment is under Williamson Act contracts within unincorporated Riverside County (California Department of Conservation 2008). Williamson Act contract lands are shown on Figure 5.2-2.

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Farmland Security Zone Act

The Farmland Security Zone Act is similar to the Williamson Act and was passed by the California State Legislature in 1999 to ensure that long-term farmland preservation is part of public policy (California Government Code, Sections 51296–51297.4). Farmland Security Zone Act contracts are sometimes referred to as “Super Williamson Act Contracts.” Under the provisions of this act, a landowner already under a Williamson Act contract can apply for Farmland Security Zone status by entering into a contract with the county. Farmland Security Zone contracts must be for an initial term of at least 20 years. As with Williamson Act contracts, each year an additional year is automatically added to the contract term unless a notice of nonrenewal is given. In return for a further 35% reduction in the property tax value of land and growing improvements (in addition to Williamson Act tax benefits), the owner of the property promises not to develop the property into nonagricultural uses during the term of the contract. Farmland Security Zone contracts may also be canceled, but only upon a finding that cancellation would both serve the purposes of the Williamson Act and be in the public interest (California Department of Conservation 2014b).

Local

County of San Bernardino Development Code

The County of San Bernardino Development Code includes the following use regulations related to public utility facilities within agricultural zoning districts:

Chapter 82.03 Agricultural and Resource Management Land Use Zoning Districts. Pipelines, transmission lines, and control station uses are regulated and approved by the California Public Utilities Commission. See alternate review procedures in Section 85.02.050 (Alternate Review Procedures).

Section 85.02.050 Alternate Review Procedures. Unless preempted by State or Federal Law, the specific land uses listed in the land use tables in Chapters 82.03 through 82.22 shall be allowed without a Conditional Use Permit when the following alternate review procedures have been completed to the satisfaction of the Director.

The alternate review procedures include projects that are approved by the California Public Utilities Commission, as would be the case with the Proposed Project (County of San Bernardino 2007).

County of Riverside Zoning Ordinance

The County of Riverside Zoning Ordinance states that public utility facilities are permitted in areas zoned A-1 Light Agriculture, A-2 Heavy Agriculture, and C/V Citrus/Vineyard, subject to the approval of a plot plan (County of Riverside 2014).

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5.2.3 Significance Criteria

The significance criteria used to evaluate impacts to agricultural resources are based on criteria listed in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.). A significant impact to agricultural resources would occur if the project would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use
- Conflict with existing zoning for agricultural use, or a Williamson Act contract
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))
- Result in the loss of forest land or conversion of forest land to non-forest use
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

5.2.4 Impact Analysis

The boxes in the chart below have been checked accordingly to characterize the level of significance for each CEQA criterion. The rationale for the anticipated significance levels is provided below the chart in each of the corresponding sections.

Would the project:	Potentially Significant Impact	Less Than Significant with APMs Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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Would the project:	Potentially Significant Impact	Less Than Significant with APMs Incorporated	Less Than Significant Impact	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

No Impact. Although the Adelanto Compressor Station site and the pressure limiting station locations are not located within designated farmland, the proposed alignment runs through lands currently identified by the FMMP as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland (see Table 5.2-3). A total of 12.2 acres of Prime Farmland, 2 acres of Farmland of Statewide Importance, and 4 acres of Unique Farmland is located within the 500-foot buffer on either side of the proposed alignment. Because the Proposed Project consists of installing new natural gas pipelines, it would not result in the conversion of prime farmland, unique farmland, or farmland of statewide importance or any other lands used for farming to another use. After the pipeline is installed, the construction area would be returned to its original condition to an extent that is reasonably possible. Long-term operation of the Proposed Project would therefore have no impact on the conversion of farmland to non-agricultural use.

b) *Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

No Impact. The Proposed Project would run through areas that are currently zoned for agricultural use and/or are under a Williamson Act contract. The County of Riverside Zoning Ordinance permits public utility facilities, including natural gas pipelines in A-1 (Light Agriculture) zones subject to approval of a plot plan. The County of San Bernardino Development Code permits pipelines in agricultural zoning districts pursuant to the review and approval by the CPUC. A total of 55 acres of Williamson Act contract lands in unincorporated Riverside County fall within the 500-foot buffer on either side of the proposed alignment.

Although the Proposed Project would run through areas zoned for agricultural use and under Williamson Act contracts, it would not conflict with the existing zoning or Williamson Act contracts. Farming activities that currently occur within and in the vicinity of the alignment would not be restricted in any way they are not currently restricted. Therefore, the Proposed Project would result in no impact to existing zoning or Williamson Act contracts.

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- c) *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*

No Impact. The Proposed Project would run through the San Bernardino National Forest (USFS jurisdiction); however the alignment in this area would generally fall within the I-15 corridor and would also fall within Federal Energy Corridor 368, an area designated for utility alignments. The areas through which the Proposed Project would run within USFS lands are predominantly existing developed, disturbed areas traversed by motorized roadways and multiple utility alignments. Although forest land may occur in the lands adjacent to the I-15 corridor, the Proposed Project would not conflict with any existing zoning or cause rezoning of these lands. In addition, no timberland or areas zoned for timberland occur within the proposed alignment. The area through which the Proposed Project would cross BLM lands is minor (approximately 0.2 mile) and use of this land for an underground pipeline would be consistent with the multiple use designation of BLM lands. After the pipeline is installed, the construction area would be returned to its original condition to an extent that is reasonably possible. For these reasons, no impact to forestland or timberland would occur as a result of the Proposed Project.

- d) *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

No Impact. As described above, no loss or conversion of forest land to non-forest use would result from the Proposed Project. Therefore, no impact would result from the Proposed Project.

- e) *Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?*

No Impact. Project construction and operation would take place within existing SoCalGas right-of-way or public right-of-way. The Proposed Project would not, therefore, result in changes to the infrastructure of the area affecting the agricultural economy, and would not result in indirect conversion of farmlands to non-agricultural uses or forest land to non-forest use. No impact would occur as a result of the Proposed Project.

5.2.5 Applicant Proposed Measures

No APMs would be required.

5.2.6 References

7 U.S.C. 4201. Farmland Protection Policy Act.

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14 CCR 15000–15387 and Appendices A–L. California Environmental Quality Act Guidelines.

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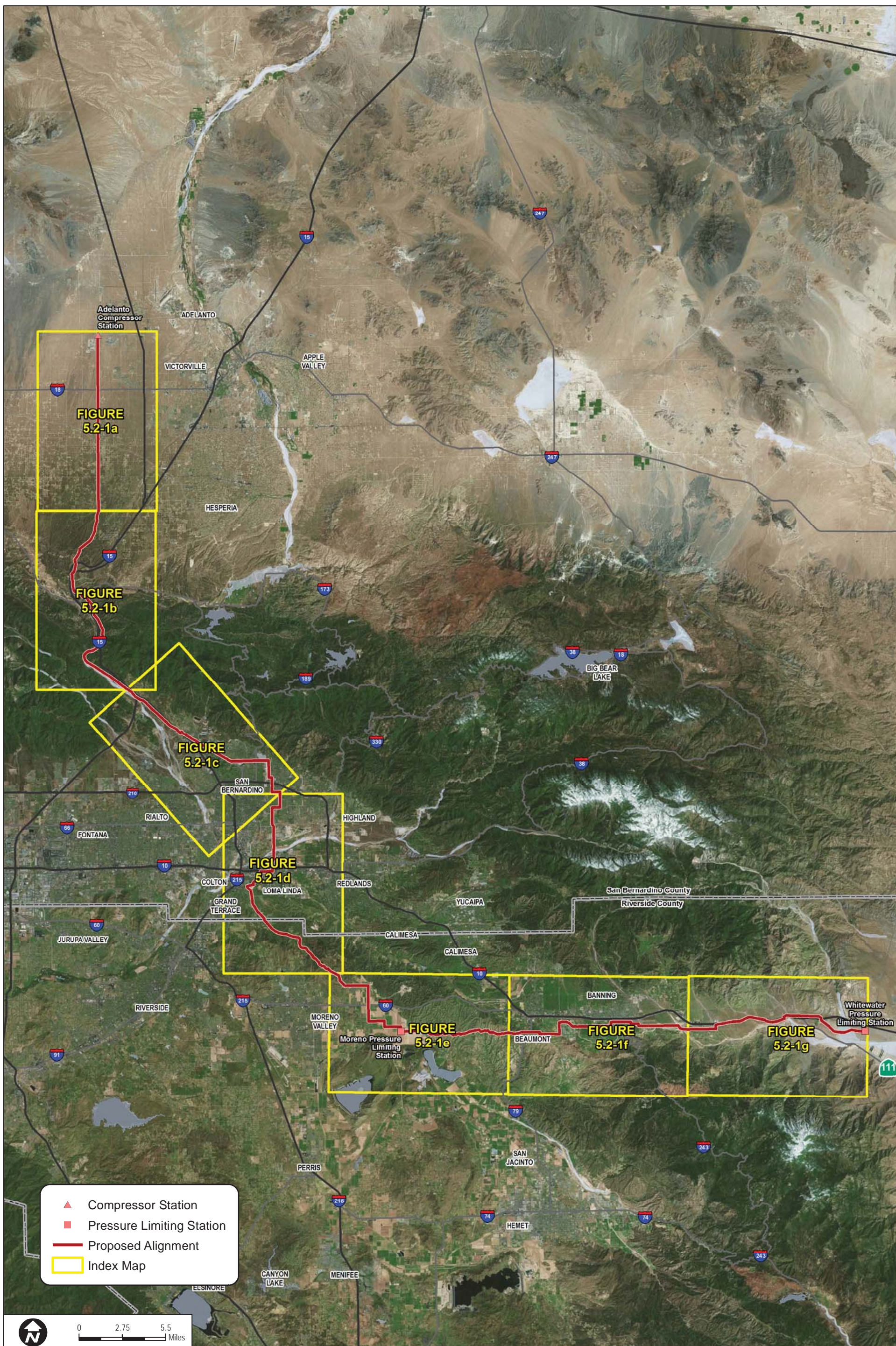


FIGURE 5.2-1

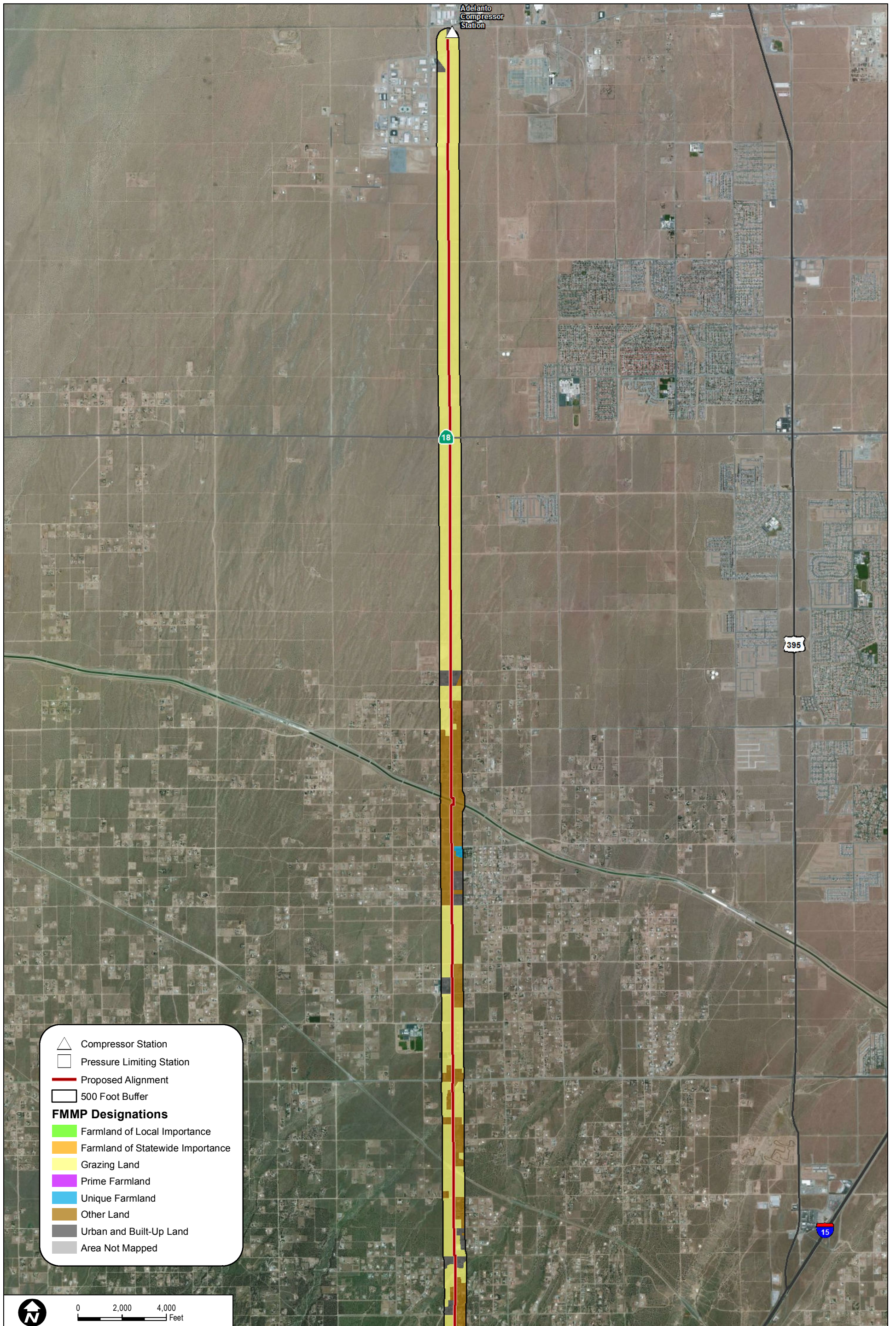
Farmland Mapping and Monitoring Program Designations - Index Map

SOURCE: BING Maps 2014; Southern California Gas Company 2014

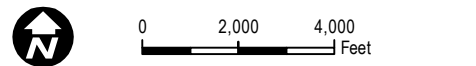


North South Project

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▲ Compressor Station
 □ Pressure Limiting Station
 — Proposed Alignment
 □ 500 Foot Buffer
FMMP Designations
 ■ Farmland of Local Importance
 ■ Farmland of Statewide Importance
 ■ Grazing Land
 ■ Prime Farmland
 ■ Unique Farmland
 ■ Other Land
 ■ Urban and Built-Up Land
 ■ Area Not Mapped



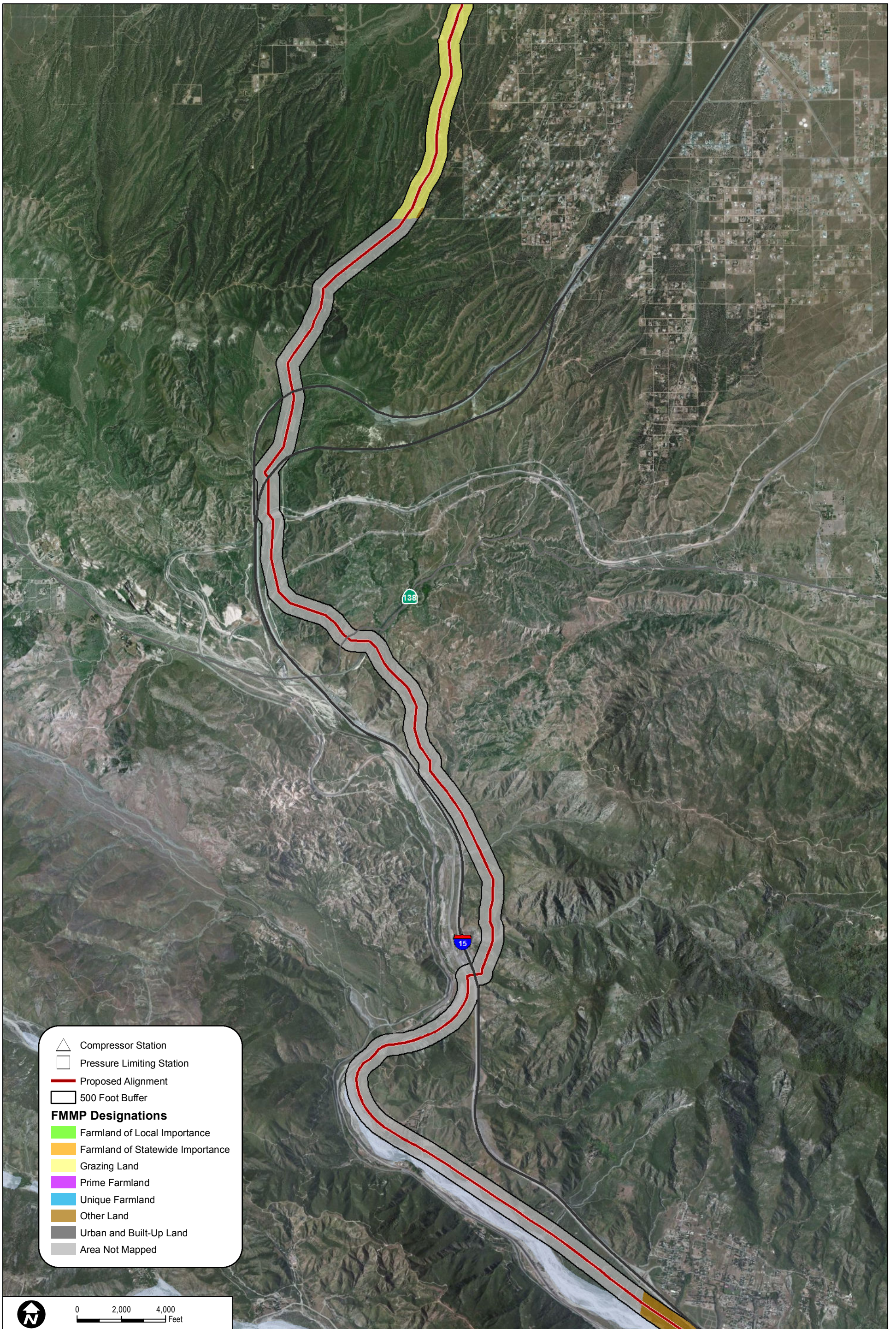
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CA Department of Conservation 2010



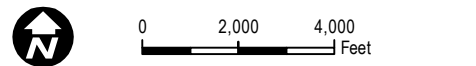
North South Project

FIGURE 5.2-1a
Farmland Mapping and Monitoring Program Designations

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▲ Compressor Station
 □ Pressure Limiting Station
 — Proposed Alignment
 □ 500 Foot Buffer
FMMP Designations
 ■ Farmland of Local Importance
 ■ Farmland of Statewide Importance
 ■ Grazing Land
 ■ Prime Farmland
 ■ Unique Farmland
 ■ Other Land
 ■ Urban and Built-Up Land
 ■ Area Not Mapped



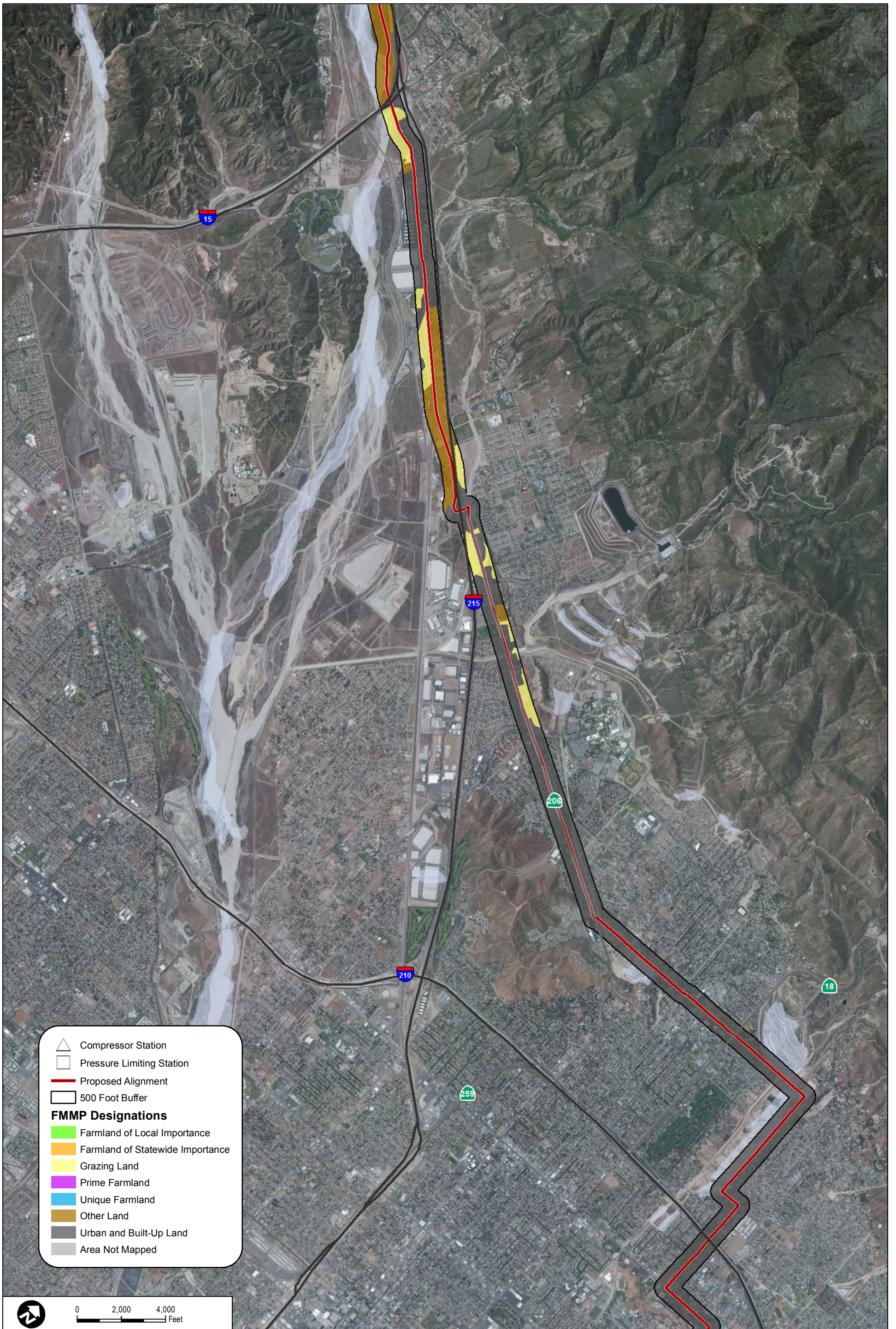
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CA Department of Conservation 2010



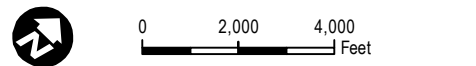
North South Project

FIGURE 5.2-1b
Farmland Mapping and Monitoring Program Designations

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	Compressor Station
	Pressure Limiting Station
	Proposed Alignment
	500 Foot Buffer
FMMP Designations	
	Farmland of Local Importance
	Farmland of Statewide Importance
	Grazing Land
	Prime Farmland
	Unique Farmland
	Other Land
	Urban and Built-Up Land
	Area Not Mapped



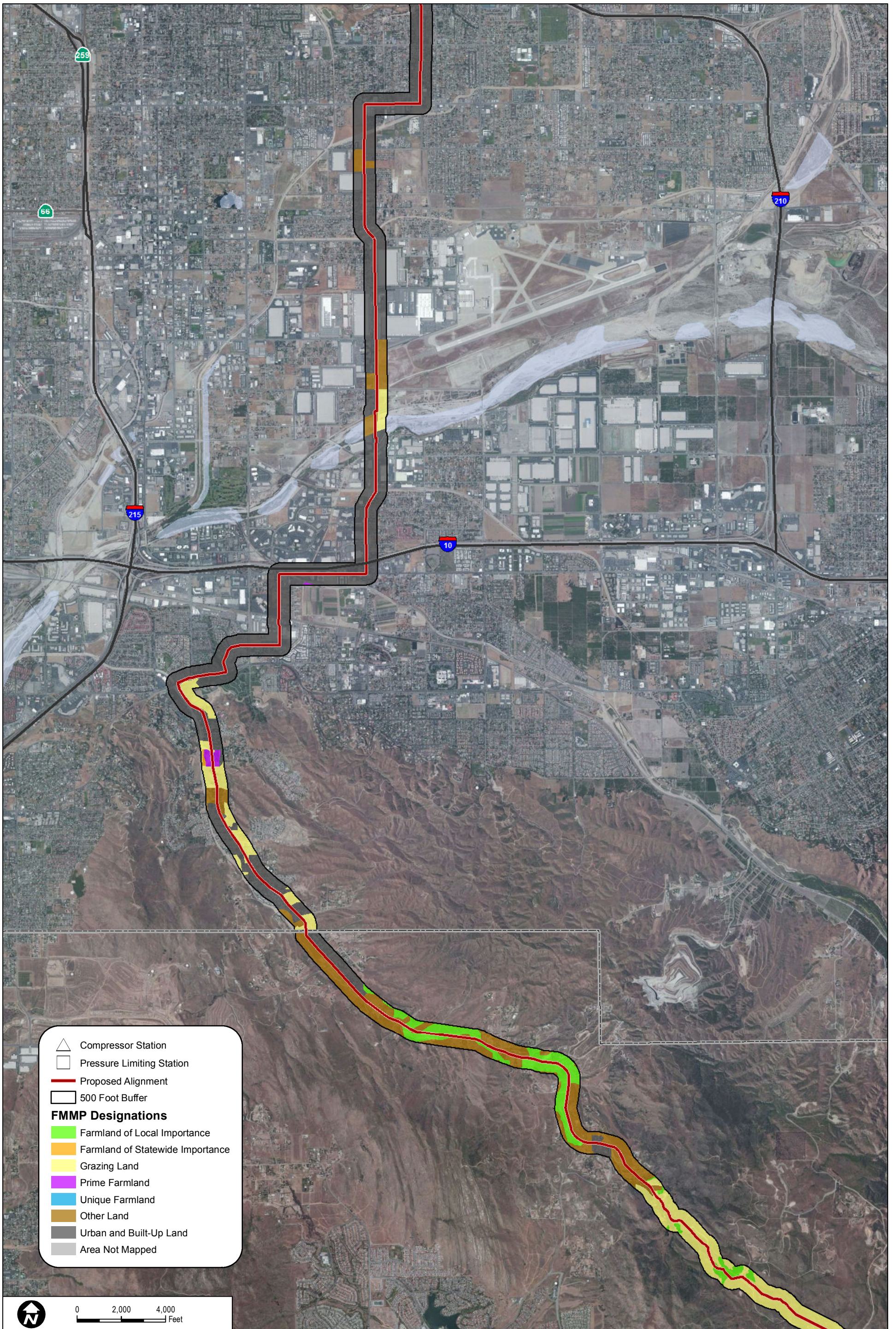
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CA Department of Conservation 2010



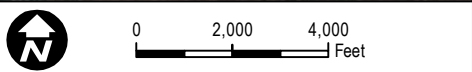
North South Project

FIGURE 5.2-1c
Farmland Mapping and Monitoring Program Designations

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▲ Compressor Station
 □ Pressure Limiting Station
 — Proposed Alignment
 □ 500 Foot Buffer
FMMP Designations
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 ■ Farmland of Statewide Importance
 ■ Grazing Land
 ■ Prime Farmland
 ■ Unique Farmland
 ■ Other Land
 ■ Urban and Built-Up Land
 ■ Area Not Mapped



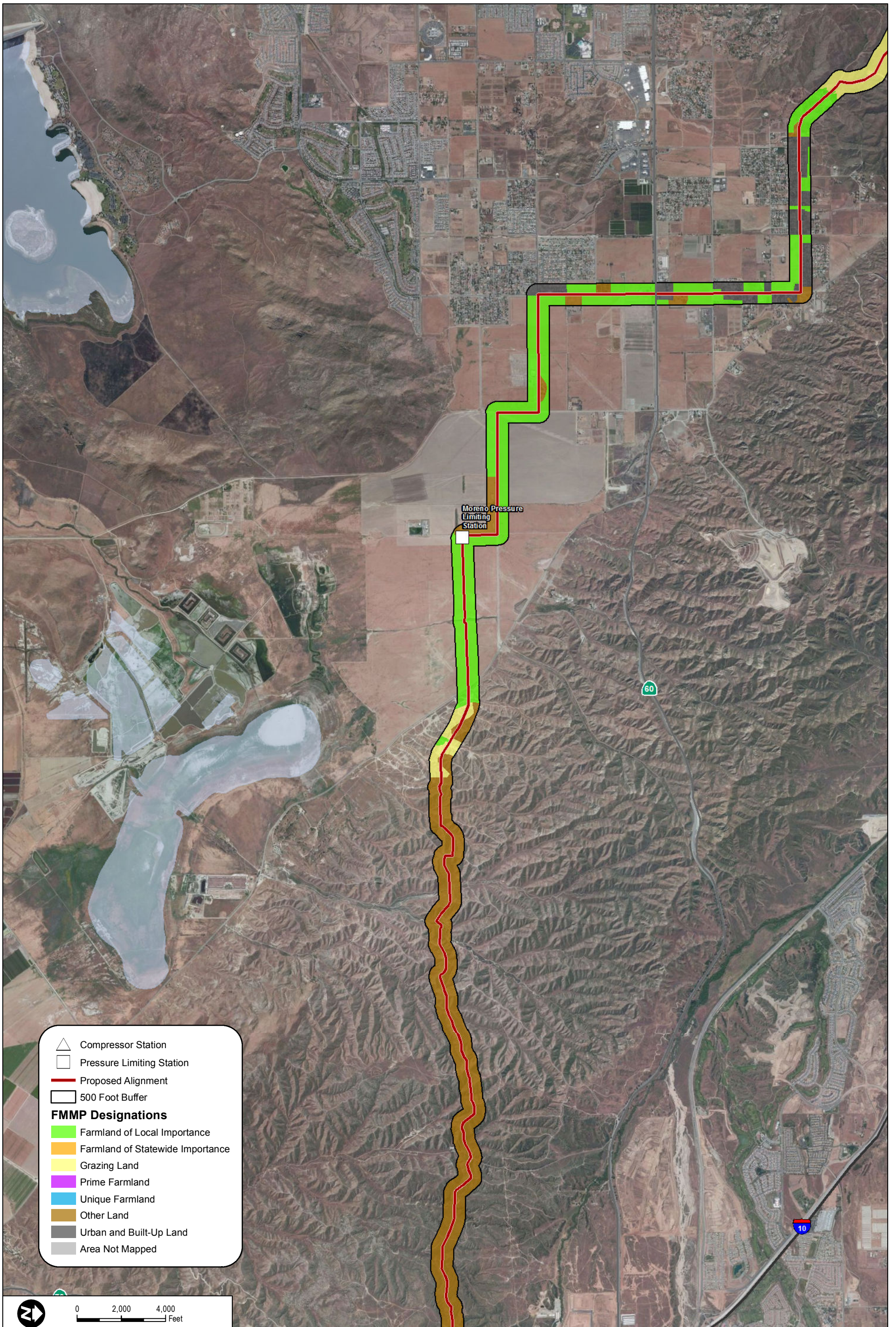
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CA Department of Conservation 2010



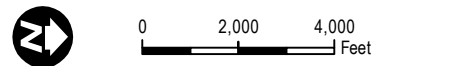
North South Project

FIGURE 5.2-1d
Farmland Mapping and Monitoring Program Designations

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	Compressor Station
	Pressure Limiting Station
	Proposed Alignment
	500 Foot Buffer
FMMP Designations	
	Farmland of Local Importance
	Farmland of Statewide Importance
	Grazing Land
	Prime Farmland
	Unique Farmland
	Other Land
	Urban and Built-Up Land
	Area Not Mapped



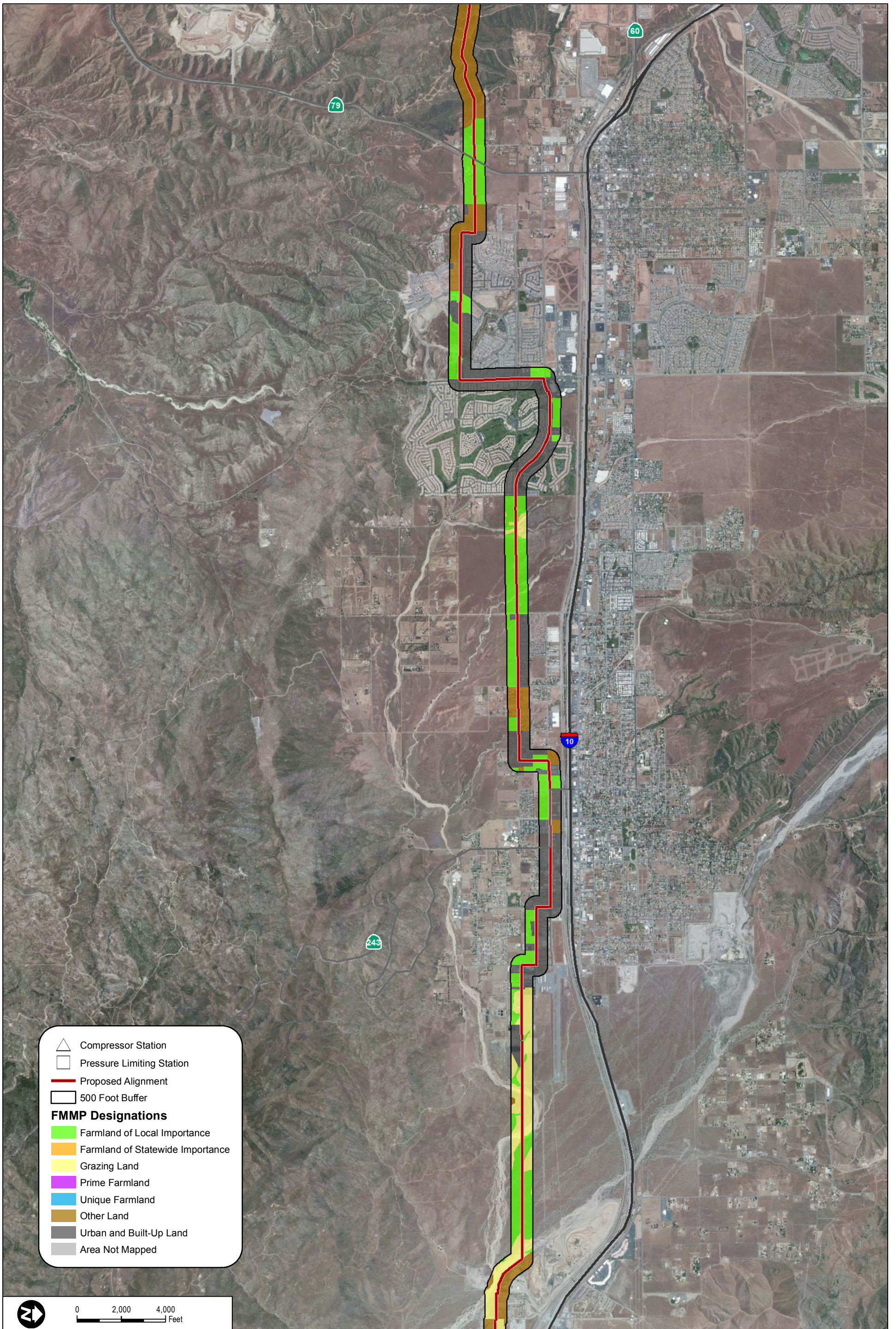
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CA Department of Conservation 2010



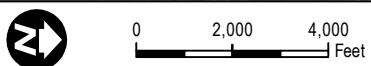
North South Project

FIGURE 5.2-1e
Farmland Mapping and Monitoring Program Designations

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▲ Compressor Station
 □ Pressure Limiting Station
 — Proposed Alignment
 □ 500 Foot Buffer
FMMP Designations
 ■ Farmland of Local Importance
 ■ Farmland of Statewide Importance
 ■ Grazing Land
 ■ Prime Farmland
 ■ Unique Farmland
 ■ Other Land
 ■ Urban and Built-Up Land
 ■ Area Not Mapped



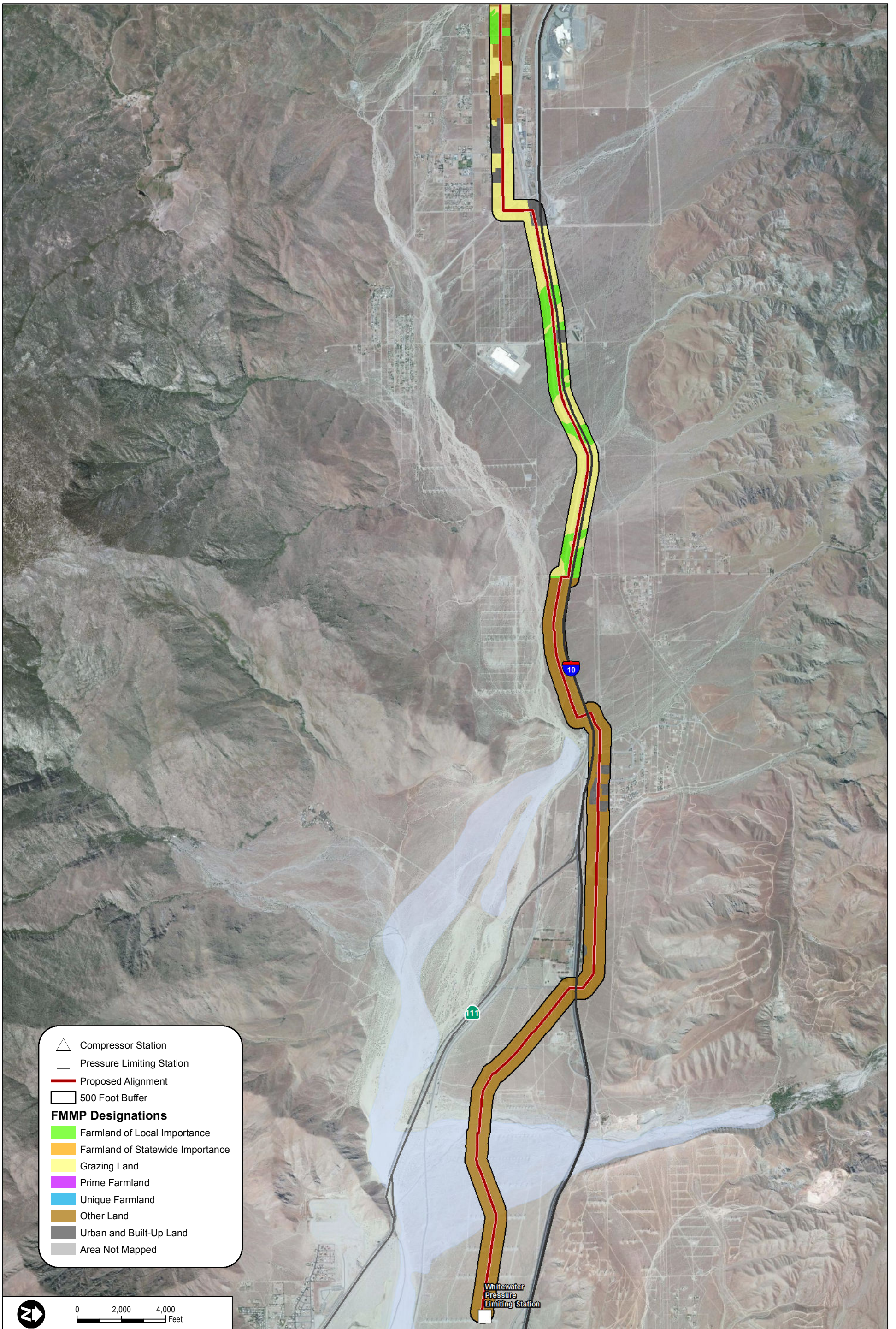
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CA Department of Conservation 2010



North South Project

FIGURE 5.2-1f
Farmland Mapping and Monitoring Program Designations

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▲ Compressor Station
 □ Pressure Limiting Station
 — Proposed Alignment
 □ 500 Foot Buffer
FMMP Designations
 ■ Farmland of Local Importance
 ■ Farmland of Statewide Importance
 ■ Grazing Land
 ■ Prime Farmland
 ■ Unique Farmland
 ■ Other Land
 ■ Urban and Built-Up Land
 ■ Area Not Mapped

Whitewater Pressure Limiting Station

0 2,000 4,000 Feet
 [North Arrow]

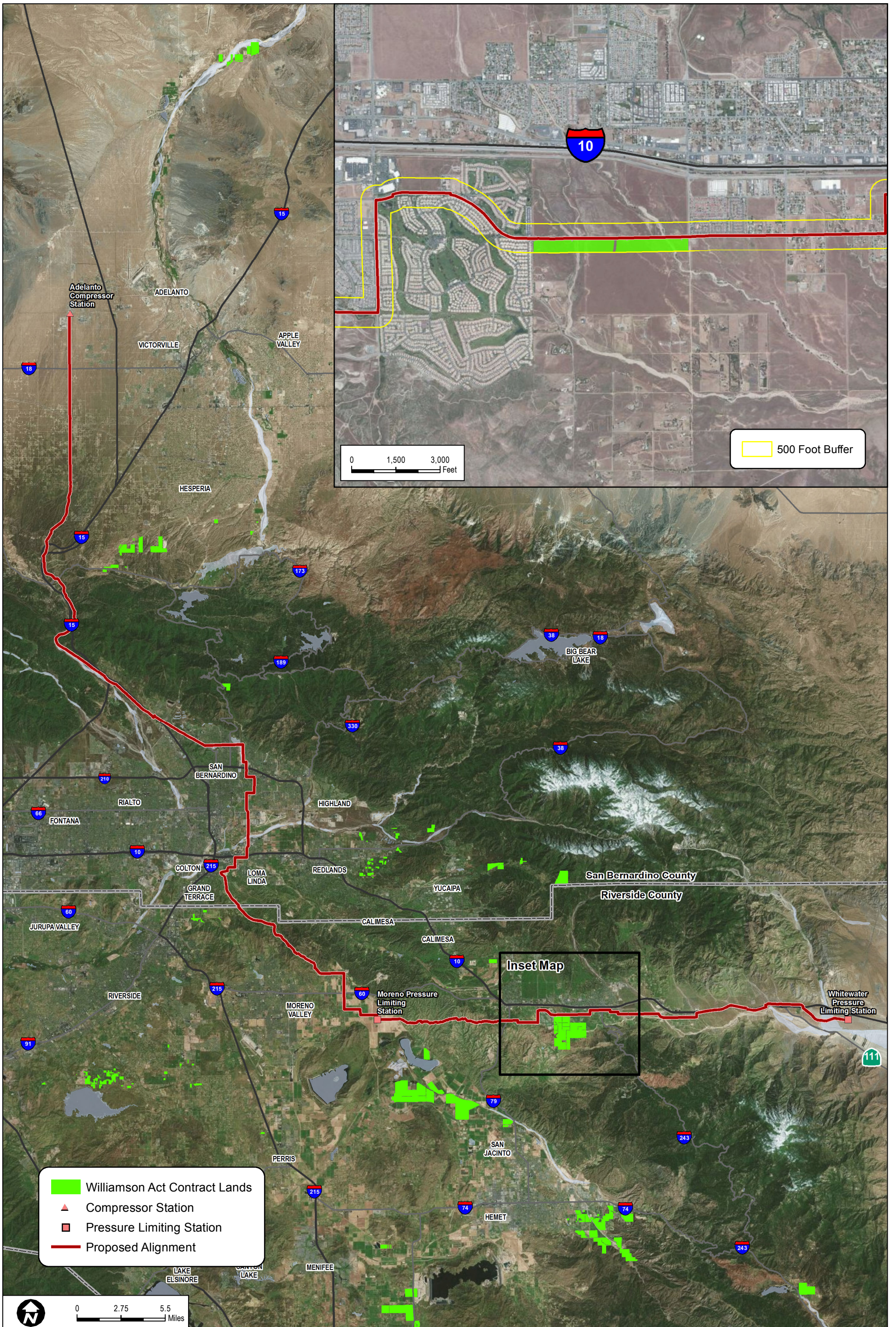
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CA Department of Conservation 2010



North South Project

FIGURE 5.2-1g
Farmland Mapping and Monitoring Program Designations

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SOURCE: BING Maps 2014; Southern California Gas Company 2014; CA Department of Conservation 2004 and 2008

FIGURE 5.2-2
Williamson Act Contract Lands



North South Project

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5 Environmental Impact Assessment

5.3 Air Quality/Greenhouse Gas Emissions

This section describes the air quality impacts and greenhouse gas (GHG) emissions associated with the Proposed Project.

5.3.1 Environmental Setting

Regional Setting

The Proposed Project traverses the Mojave Desert Air Basin (MDAB), the South Coast Air Basin (SCAB), and the Coachella Valley portion (Riverside County) of the Salton Sea Air Basin (SSAB). The portion of the proposed alignment located within the MDAB, including the compressor station located in the City of Adelanto, is within the jurisdiction of the MDAQMD. The proposed alignment that is within the SCAB and SSAB is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

The northernmost part of the alignment is located within the San Bernardino portion of the MDAB, starting in the City of Adelanto and running southward towards the Cajon Pass, passing through the City of Victorville and USFS land. The alignment then crosses into the SCAB approximately 1 mile south of the Cajon Junction. The majority of the Proposed Project is located within the San Bernardino County portion and the Riverside County portion of the SCAB. From south of the Cajon Pass in the unincorporated area of San Bernardino County, the alignment continues south in the SCAB through the cities of San Bernardino, Colton, and Loma Linda until it reaches the Riverside County border. The alignment continues in the SCAB running east through the unincorporated area of Riverside County and the cities of Moreno Valley, Beaumont, and Banning, to Cabazon in unincorporated Riverside County. Approximately 2 miles east of Cabazon, the alignment crosses from the SCAB into the SSAB. The Proposed Project then continues east for approximately 7 miles within the Coachella Valley portion of the SSAB, running through unincorporated Riverside County and a portion of the City of Palm Springs until it terminates within the unincorporated community of Whitewater.

Table 5.3-1 presents the air basin and air district jurisdiction the Proposed Project components are located within per each affected city, county, or other land jurisdiction.

**Table 5.3-1
Project Component Air Basin and Air District Jurisdiction**

Affected Jurisdiction	Length (approx. miles)	Project Component			Air Basin	Air District
		Adelanto Compressor Station	Adelanto to Moreno Pipeline	Moreno to Whitewater Pipeline		
City of Adelanto	2.2	X	X		MDAB	MDAQMD
City of Victorville	1.4		X		MDAB	MDAQMD
U.S. Forest Service	9.9		X		MDAB, SCAB	MDAQMD, SCAQMD

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Unincorporated San Bernardino County	19.0		X		MDAB, SCAB	MDAQMD, SCAQMD
City of San Bernardino	14.6		X		SCAB	SCAQMD
City of Colton	2.0		X		SCAB	SCAQMD
City of Loma Linda	0.8		X		SCAB	SCAQMD
City of Moreno Valley	8.0		X	X	SCAB	SCAQMD
Unincorporated Riverside County	28.2		X	X	SCAB, SSAB	SCAQMD
City of Beaumont	1.5			X	SCAB	SCAQMD
City of Banning	6.4			X	SCAB	SCAQMD
U.S. Bureau of Land Management	0.2			X	SCAB	SCAQMD
City of Palm Springs	1.8			X	SSAB	SCAQMD

The compressor station is located within the MDAB, while the pipeline alignment is located primarily within the SCAB. The southeastern tip of the alignment is located within the SSAB. The MDAB, SCAB, and SSAB are discussed below.

Mojave Desert Air Basin

The MDAB is an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes. Many of the lower mountains that dot the vast terrain rise from 1,000 to 4,000 feet above the valley floor. Prevailing winds in the MDAB are out of the west and southwest. These prevailing winds are due to the proximity of the MDAB to coastal and central regions and the blocking nature of the Sierra Nevada to the north; air masses pushed onshore in Southern California by differential heating are channeled through the MDAB. The MDAB is separated from the Southern California coastal and central valley regions by mountains (highest elevation approximately 10,000 feet), whose passes form the main channels for these air masses. The Mojave Desert is bordered in the southwest by the San Bernardino Mountains, separated from the San Gabriel Mountains by the Cajon Pass (4,200 feet). A lesser channel lies between the San Bernardino Mountains and the Little San Bernardino Mountains (the Morongo Valley).

During the summer the MDAB is generally influenced by a Pacific Subtropical High cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The MDAB is rarely influenced by cold air masses moving south from Canada and Alaska, as these frontal systems are weak and diffuse by the time they reach the desert. Most desert moisture arrives from infrequent warm, moist and unstable air masses from the south. The MDAB averages between three and seven inches of precipitation per year (from 16 to 30 days with at least 0.01 inches of precipitation). The Victorville CIMIS station estimates an average annual precipitation of 7.3 inches over an average of 29 days of precipitation per year. The MDAB is classified as a dry-hot desert climate, with portions classified as dry-very hot desert, indicating that at least three months have maximum average temperatures over 100.4°F (MDAQMD 2011).

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South Coast Air Basin

The SCAB's combination of topography, low mean mixing height, abundant sunshine, and emissions from one of the largest urban areas in the United States has historically resulted in some of the worst air pollution in the nation.

Although the SCAB has a semiarid climate, air near the surface is generally moist because of the presence of a shallow marine layer. With very low average wind speeds, there is a limited capacity to disperse air contaminants horizontally. The dominant daily wind pattern is an onshore daytime breeze of 8–12 mph and an offshore nighttime breeze of 3–5 mph. The typical wind flow pattern fluctuates only with occasional winter storms or strong northeasterly Santa Ana winds from the mountains and deserts northeast of the SCAB. Summer wind flow patterns represent worst-case conditions because this is the period of higher temperatures and more sunlight, which results in more ozone (O₃) formation.

During spring and early summer, pollution produced during any one day is typically blown out of the SCAB through mountain passes or lifted by warm, vertical currents adjacent to mountain slopes. The vertical dispersion of air pollutants in the SCAB is limited by temperature inversions in the atmosphere close to the Earth's surface. The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly onshore into Riverside and San Bernardino Counties. In the winter, the greatest pollution problems are carbon monoxide (CO), particulate matter (PM_{2.5} and PM₁₀), and nitrogen dioxide (NO₂) because of extremely low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and the brighter sunshine combine to cause a reaction between hydrocarbons and oxides of nitrogen (NO_x) to form photochemical smog (SCAQMD 2011).

Salton Sea Air Basin (Coachella Valley)

The SSAB includes the central portion of Riverside County (Coachella Valley) and all of Imperial County. The Riverside County portion of the SSAB is under the jurisdiction of the SCAQMD. The SSAB is generally very flat and bordered to the west by the Peninsular Mountain range and to the east by the Chocolate, Orocopia, and Cargo Muchacho Mountains. The Riverside county portion of the SSAB is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley. The federal nonattainment area (known as the Coachella Valley Planning Area) is a subregion of Riverside County and the SSAB that is bounded by the San Jacinto Mountains to the west and the eastern boundary of the Coachella Valley to the east (SCAQMD 2007).

The SSAB is a continental, desert region with a climate characterized by low annual rainfall, low humidity, hot days, and cool nights. Temperatures exceed 100°F during the summer with daily highs

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near 110°F during July and August. The mean temperature in the summer is 89°F, while the mean temperature in the winter is 57°F. Rainfall in the area varies considerably; precipitation normally occurs November through April. A semi-permanent high-pressure climate blocks mid-latitude storms and causes sunny skies most of the time in the SSAB. The high-pressure zone tends to be weaker in the winter, and it is during this time that the SSAB usually receives its average 2.8 inches of annual precipitation. The Peninsular Mountains to the west block coastal influence, such as cool and damp marine air that traverses inland from the Pacific Ocean. The geographic barriers and atmospheric conditions often limit the amount of precipitation for the area.

During the winter, the SSAB experiences radiation inversions in which the air near the ground surface cools by radiation, whereas the air higher in the atmosphere remains warmer. A shallow inversion layer is created between the two layers and precludes the vertical dispersion of air, thus trapping pollutants. This inversion, which refers to an increase in temperature with height or to the layer within which such an increase occurs, can lead to pollution such as smog being trapped close to the ground. The SSAB experiences surface inversions frequently throughout the year and inversions in the SSAB often last for long periods, allowing for air stagnation and the build-up of pollutants.

The Coachella Valley Planning Area is impacted by pollutant transport from the SCAB. Ozone in the atmosphere of the Riverside County portion of SSAB is both directly transported from the SCAB and formed principally from ozone precursors (hydrocarbons and NO_x) emitted upwind. In addition, pollutant transport occurs to the Antelope Valley, Mojave Desert, Ventura County, and San Diego County. The mountains to the east act as physical barriers to the dispersion of airborne contaminants. The Coachella Valley is exposed to frequent gusty winds; with stronger tending to occur in the open mid-portion of the valley, while lighter winds tend to occur closer to the foothills. The pollutant transport pathway from the SCAB to the SSAB is through the San Geronio Pass (sometimes referred to as the Banning Pass) to the Coachella Valley.

Criteria Air Pollutants and Effects

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include O₃, NO₂, CO, sulfur dioxide (SO₂), particulate matter with an aerodynamic diameter less than or equal to 10 microns in size (PM₁₀), particulate matter with an aerodynamic diameter less than or equal to 2.5

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microns in size (PM_{2.5}), and lead (Pb). These pollutants, as well as toxic air contaminants (TACs), are discussed below.⁹ In California, sulfates (SO₄), vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants.

Ozone. O₃ is a strong-smelling, pale blue, reactive, toxic chemical gas consisting of three oxygen atoms. It is a secondary pollutant formed in the atmosphere by a photochemical process involving the sun's energy and O₃ precursors, such as hydrocarbons and NO_x. These precursors are mainly NO_x and volatile organic compounds (VOCs; also referred to as reactive organic compounds or gases). The maximum effects of precursor emissions on O₃ concentrations usually occur several hours after they are emitted and many miles from the source. Meteorology and terrain play major roles in O₃ formation, and ideal conditions occur during summer and early autumn, on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. O₃ exists in the upper atmosphere ozone layer (stratospheric ozone) as well as at the Earth's surface in the troposphere (ozone). O₃ in the troposphere causes numerous adverse health effects; short-term exposures (lasting for a few hours) to O₃ at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. These health problems are particularly acute in sensitive receptors such as the sick, the elderly, and young children.

Nitrogen Dioxide. NO₂ is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO₂ in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO), which is a colorless, odorless gas. NO_x plays a major role, together with VOCs, in the atmospheric reactions that produce O₃. NO_x is formed from fuel combustion under high temperature or pressure. In addition, NO_x is an important precursor to acid rain and may affect both terrestrial and aquatic ecosystems. The two major emissions sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers. NO₂ can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections.

Carbon Monoxide. CO is a colorless, odorless gas formed by the incomplete combustion of hydrocarbon, or fossil, fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas such as the Proposed Project location, automobile exhaust accounts for the majority of CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal

⁹ The descriptions of health effects for each of the criteria air pollutants associated with project construction and operations are based on the U.S. Environmental Protection Agency's *Six Common Air Pollutants* (EPA 2013a) and CARB's *Glossary of Air Pollutant Terms* (CARB 2012).

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distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions; primarily, wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, a typical situation at dusk in urban areas from November to February. The highest levels of CO typically occur during the colder months of the year, when inversion conditions are more frequent. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions.

Sulfur Dioxide. SO₂ is a colorless, pungent gas formed primarily from incomplete combustion of sulfur-containing fossil fuels. The main sources of SO₂ are coal and oil used in power plants and industries; as such, the highest levels of SO₂ are generally found near large industrial complexes. In recent years, SO₂ concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO₂ and limits on the sulfur content of fuels. SO₂ is an irritant gas that attacks the throat and lungs and can cause acute respiratory symptoms and diminished ventilator function in children. When combined with particulate matter, SO₂ can injure lung tissue and reduce visibility and the level of sunlight. SO₂ can also yellow plant leaves and erode iron and steel.

Particulate Matter. Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. PM_{2.5} and PM₁₀ represent fractions of particulate matter. Fine particulate matter (PM_{2.5}) is roughly 1/28 the diameter of a human hair. PM_{2.5} results from fuel combustion (e.g., from motor vehicles and power generation and industrial facilities), residential fireplaces, and woodstoves. In addition, PM_{2.5} can be formed in the atmosphere from gases such as sulfur oxides (SO_x), NO_x, and VOCs. Respirable particulate matter, or coarse particulate matter (PM₁₀), is about 1/7 the thickness of a human hair. Major sources of PM₁₀ include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions.

PM_{2.5} and PM₁₀ pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. PM_{2.5} and PM₁₀ can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause lung damage directly or be absorbed into the blood stream, causing damage elsewhere in the body. Additionally, these substances can transport absorbed gases such as chlorides or ammonium into the lungs, also causing injury. Whereas PM₁₀ tends to collect in the upper portion of the respiratory system, PM_{2.5} is so tiny that it can penetrate deeper into the lungs

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and damage lung tissue. Suspended particulates also damage and discolor surfaces on which they settle, as well as producing haze and reducing regional visibility.

People with influenza, people with chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death as a result of breathing particulate matter. People with bronchitis can expect aggravated symptoms from breathing in particulate matter. Children may experience a decline in lung function due to breathing in PM₁₀ and PM_{2.5}. Other groups considered sensitive are smokers, people who cannot breathe well through their noses, and exercising athletes (because many breathe through their mouths).

Lead. Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturing of batteries, paints, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phaseout of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phaseout of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emission sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth. Children are highly susceptible to the effects of lead.

Volatile Organic Compounds. Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to formation of O₃ are referred to and regulated as VOCs. Combustion engine exhaust, oil refineries, and fossil-fueled power plants are the sources of hydrocarbons. Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

The primary health effects of VOCs result from the formation of O₃ and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered TACs. There are no separate health standards for VOCs as a group.

Toxic Air Contaminants. A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic non-cancer health effects. A toxic substance released into the air is considered a TAC. TACs are identified by federal and state agencies based on a review of available scientific evidence. In California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant

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Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air.

Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

Sensitive Receptors

Air quality varies as a direct function of the amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions. Air quality problems arise when the rate of pollutant emissions exceeds the rate of dispersion. Reduced visibility, eye irritation, and adverse health impacts upon those persons termed “sensitive receptors” are the most serious hazards of existing air quality conditions in the area. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution may include children, the elderly, and people with cardiovascular and chronic respiratory diseases. Land uses (sensitive sites) where sensitive receptors are typically located may include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, hospitals, and retirement homes (SCAQMD 2005).

The Greenhouse Effect and Greenhouse Gases

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind, lasting for an extended period (decades or longer). Gases that trap heat in the atmosphere are often called GHGs. The greenhouse effect traps heat in the troposphere through a threefold process: short-wave radiation emitted by the Sun is absorbed by the Earth; the Earth emits a portion of this energy in the form of long-wave radiation; and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and back toward the Earth. This “trapping” of the long-wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect.

Principal GHGs include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), ozone (O₃), and water vapor (H₂O). Some GHGs, such as CO₂, CH₄, and N₂O, can occur naturally and are emitted into to the atmosphere through natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Emissions of CO₂ are largely byproducts of fossil-fuel combustion, whereas CH₄ results mostly from off-gassing associated with agricultural practices and landfills. Human-induced GHGs, which have a much greater heat-absorption potential

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than CO₂, include fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃), which are associated with certain industrial products and processes (CAT 2006).

The greenhouse effect is a natural process that contributes to regulating the Earth's temperature. Without it, the temperature of the Earth would be about 0°F (-18°C) instead of its current 57°F (14°C). Global climate change concerns are focused on whether human activities are leading to an enhancement of the greenhouse effect.

The effect each GHG has on climate change is measured as a combination of the mass of its emissions and the potential of a gas or aerosol to trap heat in the atmosphere, known as its global warming potential (GWP). The GWP varies between GHGs; for example, the GWP of CH₄ is 21, and the GWP of N₂O is 310. Total GHG emissions are expressed as a function of how much warming would be caused by the same mass of CO₂. Thus, GHG gas emissions are typically measured in terms of pounds or tons of CO₂ equivalent (CO₂E).¹⁰

Contributions to Greenhouse Gas Emissions

In 2012, the United States produced 6,501.5 million metric tons (MMT) of CO₂E (EPA 2014). The primary GHG emitted by human activities in the United States was CO₂, representing approximately 82.7% of total GHG emissions. The largest source of CO₂, and of overall GHG emissions, was fossil-fuel combustion, which accounted for approximately 78% of the CO₂ emissions.

According to the 2011 GHG inventory data compiled by California Air Resources Board (CARB) for the California GHG Inventory for 2000–2011, California emitted 448 MMT CO₂E of GHGs, including emissions resulting from out-of-state electrical generation (CARB 2013a). The primary contributors to GHG emissions in California are transportation, industry, electric power production from both in-state and out-of-state sources, agriculture, and other sources, which include commercial and residential activities. These primary contributors to California's GHG emissions and their relative contributions in 2011 are presented in Table 5.3-2, GHG Sources in California.

¹⁰ The CO₂ equivalent for a gas is derived by multiplying the mass of the gas by the associated GWP, such that metric tons of CO₂E = (metric tons of a GHG) × (GWP of the GHG). For example, the GWP for CH₄ is 21. This means that emissions of 1 metric ton of CH₄ are equivalent to emissions of 21 metric tons of CO₂.

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**Table 5.3-2
GHG Sources in California**

Source Category	Annual GHG Emissions (MMT CO ₂ E)	% of Total ^a
Agriculture	32.24	7.2%
Commercial uses	14.87	3.3%
Electricity generation	86.57 ^b	19.3%
Industrial uses	93.24	20.8%
Recycling and waste	7.00	1.6%
Residential uses	29.85	6.7%
Transportation	168.42	37.6%
High GWP substances	15.17	3.4%
Total^c	448.11	100%

Source: CARB 2013a.

^a Percentage of total has been rounded.

^b Includes emissions associated with imported electricity, which account for 46.86 MMT CO₂E annually.

^c Totals may not sum due to rounding.

Potential Effects of Human Activity on Climate Change

Globally, climate change has the potential to impact numerous environmental resources though uncertain impacts related to future air temperatures and precipitation patterns. In California, climate change impacts have the potential to affect sea level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, and electricity demand and supply (CCCC 2006). The primary effect of global climate change has been a rise in average global tropospheric temperature of 0.2°C per decade, determined from meteorological measurements worldwide between 1990 and 2005. Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the twenty-first century than were observed during the twentieth century. A warming of about 0.2°C (0.36°F) per decade is projected, and there are identifiable signs that global warming could be taking place, including substantial ice loss in the Arctic (IPCC 2007).

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. Climate change is already affecting California: Average temperatures have increased, leading to more extreme hot days and fewer cold nights; shifts in the water cycle have been observed, with less winter precipitation falling as snow, and both snowmelt and rainwater running off earlier in the year; sea levels have risen; and wildland fires are becoming more frequent and intense due to dry seasons that start earlier and end later (CAT 2010). Climate change modeling using emission rates from the year 2000 shows that further warming would occur, which would induce further changes in the global climate system during the current century. Changes to the global climate system and ecosystems and to California would include, but would not be limited to, the following:

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- The loss of sea ice and mountain snowpack resulting in higher sea levels and higher sea surface evaporation rates with a corresponding increase in tropospheric water vapor due to the atmosphere's ability to hold more water vapor at higher temperatures (IPCC 2007)
- A rise in global average sea level primarily due to thermal expansion and melting of glaciers and ice caps and the Greenland and Antarctic ice sheets (IPCC 2007)
- Changes in weather that include widespread changes in precipitation, ocean salinity, and wind patterns; and more energetic aspects of extreme weather, including droughts, heavy precipitation, heat waves, extreme cold, and intensity of tropical cyclones (IPCC 2007)
- A decline of Sierra snowpack, which accounts for approximately half of the surface water storage in California, by 30% to as much as 90% over the next 100 years (CAT 2006)
- An increase in the number of days conducive to O₃ formation by 25% to 85% (depending on the future temperature scenario) in high-O₃ areas of Los Angeles and the San Joaquin Valley by the end of the twenty-first century (CAT 2006)
- A high potential for erosion of California's coastlines and seawater intrusion into the Delta and levee systems due to the rise in sea level (CAT 2006).

5.3.2 Regulatory Setting

Air Quality Regulatory Setting

Federal

The federal Clean Air Act, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The U.S. Environmental Protection Agency (EPA) is responsible for implementing most aspects of the Clean Air Act, including setting National Ambient Air Quality Standards (NAAQS) for major air pollutants, setting hazardous air pollutant standards, approving state attainment plans, setting motor vehicle emission standards, issuing stationary source emission standards and permits, and establishing acid rain control measures, stratospheric O₃ protection measures, and enforcement provisions. NAAQS are established for criteria pollutants under the Clean Air Act, which are O₃, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for O₃, NO₂, SO₂, PM₁₀, PM_{2.5}, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for O₃, NO₂, SO₂, PM₁₀, and PM_{2.5} are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The Clean Air Act requires the EPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific

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evidence. States with areas that exceed the NAAQS must prepare a State Implementation Plan that demonstrates how those areas will attain the standards within mandated time frames.

State

The federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the federal Clean Air Act, and regulating emissions from motor vehicles and consumer products.

CARB has established California Ambient Air Quality Standards (CAAQS), which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered “in attainment” if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O₃, CO, SO₂ (1-hour and 24-hour), NO₂, PM₁₀, PM_{2.5}, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. The NAAQS and CAAQS are presented in Table 5.3-3, Ambient Air Quality Standards.

**Table 5.3-3
Ambient Air Quality Standards**

Pollutant	Average Time	California Standards ^a	National Standards ^b	
		Concentration ^c	Primary ^{c,d}	Secondary ^{c,e}
O ₃	1 hour	0.09 ppm (180 µg/m ³)	—	Same as primary standard
	8 hours	0.070 ppm (137 µg/m ³)	0.075 ppm (147 µg/m ³)	
CO	8 hours	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	None
	1 hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	
NO ₂	Annual arithmetic mean	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	Same as primary standard
	1 hour	0.18 ppm (339 µg/m ³)	0.100 ppm (188 µg/m ³)	
SO ₂	1 hour	0.25 ppm (655 µg/m ³)	0.075 ppm (196 µg/m ³)	—
	3 hours	—	—	0.5 ppm (1300 µg/m ³)
	24 hours	0.04 ppm (105 µg/m ³)	0.14 ppm (for certain areas) ⁷	—
	Annual	—	0.030 ppm (for certain areas) ⁷	—
PM ₁₀	24 hours	50 µg/m ³	150 µg/m ³	Same as primary standard
	Annual arithmetic mean	20 µg/m ³	—	
PM _{2.5}	24 hours	No separate state standard	35 µg/m ³	Same as primary standard
	Annual arithmetic mean	12 µg/m ³	12.0 µg/m ³	15.0 µg/m ³
Lead ^f	30-day average	1.5 µg/m ³	—	—
	Calendar quarter	—	1.5 µg/m ³ (for certain areas) ⁹	Same as primary

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**Table 5.3-3
Ambient Air Quality Standards**

Pollutant	Average Time	California Standards ^a	National Standards ^b	
		Concentration ^c	Primary ^{c,d}	Secondary ^{c,e}
	Rolling 3-month average	—	0.15 µg/m ³	standard
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m ³)	—	—
Vinyl chloride ^f	24 hours	0.01 ppm (26 µg/m ³)	—	—
Sulfates (SO ₄)	24 hours	25 µg/m ³	—	—
Visibility reducing particles	8 hours (10:00 AM to 6:00 PM PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to particles when the relative humidity is less than 70%	—	—

Source: CARB 2013b.

ppm= parts per million by volume; µg/m³ = micrograms per cubic meter; mg/m³= milligrams per cubic meter

- ^a California standards for O₃, CO, SO₂ (1-hour and 24-hour), NO₂, suspended particulate matter—PM₁₀, PM_{2.5}, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in 17 CCR 70200.
- ^b National standards (other than O₃, NO₂, SO₂, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O₃ standard is attained when the fourth-highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.
- ^c Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25 degrees Celsius (°C) and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- ^d National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- ^e National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- ^f CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- ^g In 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Stationary Compression Ignition Engines (17 CCR 93115 et seq.)

As part of its diesel risk reduction program, CARB adopted an Airborne Toxic Control Measure (ATCM) that applies to new and in-use stationary compression-ignition (i.e., diesel) engines. The ATCM was adopted in 2004 and revised in November 2010 with an effective date of May 19, 2011. After December

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31, 2008, the ATCM requires that new emergency standby engines must comply with EPA emission standards applicable to a 2007-model-year off-road engine of the same horsepower rating. The ATCM further limits the particulate matter emissions from an emergency standby engine operated less than 50 hours per year for maintenance and testing to 0.15 gram per brake-horsepower-hour.

Idling of Commercial Heavy Duty Trucks (13 CCR 2485)

In July 2004, CARB adopted an ATCM to control emissions from idling trucks. The ATCM prohibits idling for more than 5 minutes for all commercial trucks with a gross vehicle weight rating over 10,000 pounds. The ATCM contains an exception that allows trucks to idle while queuing or involved in operational activities.

In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449 et seq.)

In July 2007, CARB adopted an ATCM for in-use off-road diesel vehicles. This regulation required that specific fleet average requirements are met for NOx emissions and for particulate matter emissions. Where average requirements cannot be met, Best Available Control Technology requirements apply. The regulation also included several recordkeeping and reporting requirements. In response to Assembly Bill (AB) 8 2X, the regulations were revised in July 2009 (effective December 3, 2009) to allow a partial postponement of the compliance schedule in 2011 and 2012 for existing fleets. On December 17, 2010, CARB adopted additional revisions to further delay the deadlines reflecting reductions in diesel emissions due to the poor economy and overestimates of diesel emissions in California. Correspondingly, the fleet average targets were made more stringent in future compliance years. The revisions would also accelerate the phase-out of equipment with older equipment added to existing large and medium fleets over time, requiring the addition of Tier 2 or higher engines starting on March 1, 2011, with some exceptions: Tier 2 or higher engines on January 1, 2013, without exception; and Tier 3 or higher engines on January 1, 2018 (January 1, 2023, for small fleets).

On October 28, 2011 (effective December 14, 2011), the executive officer approved amendments to the regulation. The initial date for requiring the addition of Tier 2 or higher engines for large and medium fleets, with some exceptions, was revised to January 1, 2012. New provisions would allow removal of emission control devices for safety or visibility purposes. The regulation was amended to combine the particulate matter and NOx fleet average targets under one, instead of two, sections. The amended fleet average targets are based on the fleet's NOx fleet average, and the previous section regarding particulate matter performance requirements was deleted completely. The Best Available Control Technology requirements, if a fleet cannot comply with the fleet average requirements, were restructured and clarified.

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In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025)

On December 12, 2008, CARB adopted an ATCM to reduce NOx and particulate matter emissions from most in-use on-road diesel trucks and buses with a gross vehicle weight rating greater than 14,000 pounds. The original ATCM regulation required fleets of on-road trucks to limit their NOx and particulate matter emissions through a combination of exhaust retrofit equipment and new vehicles. The regulation limited particulate matter emissions for most fleets by 2011, and limited NOx emissions for most fleets by 2013. The regulation did not require any vehicle to be replaced before 2012, and never required all vehicles in a fleet be replaced. In December 2009, the CARB Governing Board directed staff to evaluate amendments that would provide additional flexibility for fleets adversely affected by the poor California economy. On December 17, 2010, CARB revised this ATCM to delay its implementation along with limited relaxation of its requirements.¹ The ATCM provides a phase-in option under which a fleet operator would equip a percentage of trucks in the fleet with diesel particulate filters, starting at 30% as of January 1, 2012, with 100% by January 1, 2016. Under each option, delayed compliance is granted to fleet operators who have or will comply with requirements before the required deadlines.

On September 19, 2011 (effective December 14, 2011), the executive officer approved amendments to the regulations, including revisions to the compliance schedule for vehicles with a gross vehicle weight rating of 26,000 pounds or less to clarify that all vehicles must be equipped with 2010 model year emissions equivalent engines by 2023. The amendments included revised and additional credits for fleets that have downsized; implement early particulate matter retrofits; incorporate hybrid vehicles, alternative-fueled vehicles, and vehicles with heavy-duty pilot ignition engines; and implement early addition of newer vehicles. The amendments included provisions for additional flexibility, such as for low-usage construction trucks, and revisions to previous exemptions, delays, and extensions.

Local

While CARB is responsible for the regulation of mobile emission sources within the state, local air quality management districts and air pollution control districts are responsible for enforcing standards and regulating stationary sources. The MDAQMD and the SCAQMD are the regional agencies responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in the MDAB (MDAQMD), the SCAB (SCAQMD), and the Riverside County portion of the SSAB (SCAQMD), where the Proposed Project components would be located. The MDAQMD and the SCAQMD operate monitoring stations in the basins, develop rules and regulations for stationary sources and equipment, prepare emissions inventory and air quality management planning documents, and conduct source testing and inspections. The air district's Air Quality Management Plans (AQMPs) include control measures and strategies to be implemented to attain the CAAQS and NAAQS in the respective basins. The air districts then implement these control measures as regulations to control or reduce criteria pollutant emissions from stationary sources or equipment.

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Mojave Desert Air Quality Management District

The MDAQMD covers the majority of the MDAB and includes the desert portion of San Bernardino County and a portion of eastern Riverside County commonly known as the Palo Verde Valley. The MDAQMD covers more than 20,000 square miles and is geographically the second largest of the state's 35 air districts. The MDAQMD implements air quality programs required by State and Federal mandates and enforces rules and regulations based on air pollution law, and has primary responsibility for controlling emissions from stationary sources of air pollution.

The Proposed Project is located within the Western Mojave Desert Ozone Non-Attainment Area, which consists of part of the San Bernardino County portion of the MDAQMD (the Mojave and Victor Valley portions of San Bernardino County) and the Antelope Valley in Los Angeles County. The EPA has designated the Western Mojave Desert Non-Attainment Area as nonattainment for the 8-hour ozone NAAQS. The most recent plan approved by EPA is the MDAQMD 2004 Ozone Attainment Plan adopted in 2004 (MDAQMD 2004), which was subsequently updated in 2008 as the Federal 8-Hour Ozone Attainment Plan (Western Mojave Desert Non-Attainment Area) (MDAQMD 2008). The 2008 Plan has been approved by the CARB, but it is being reviewed by the EPA.

In addition to the federal attainment plans, the most recently adopted state plan that applies to the entire MDAQMD is the 1996 Triennial Revision to the 1991 Air Quality Attainment Plan. This standard targeted in this Plan was the state 1-hour ozone standard; accordingly, this plan focused on NO_x and VOC. The 1991 Air Quality Attainment Plan, which applied to the San Bernardino County portion of the MDAQMD, similarly focused on the state 1-hour ozone standard.

Construction of the proposed natural gas pipelines and upgraded compressor station and operation of the compressor station would be required to comply with the following MDAQMD rules and regulations:

- Regulation II – Permits
 - Rule 201 – Permit to Construct
 - Rule 203 – Permit to Operate
- Regulation IV – Prohibitions
 - Rule 401 – Visible Emissions
 - Rule 403.2 – Fugitive Dust Control for the Mojave Desert Planning Area
 - Rule 431 – Sulfur Content of Fuels
- Regulation XI – Source Specific Standards
 - Rule 1102 – Fugitive Emissions of VOCs from Components at Pipeline Transfer Stations
 - Rule 1103 – Cutback and Emulsified Asphalt

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- Rule 1113 – Architectural Coatings
- Regulation XIII – New Source Review
 - Rule 1300 – General
 - Rule 1301 – Definitions
 - Rule 1302 – Procedure
 - Rule 1303 – Requirements
 - Rule 1304 – Emissions Calculations
 - Rule 1305 – Emission Offsets
 - Rule 1320 – Rule New Source Review for Toxic Air Contaminants

South Coast Air Quality Management District

The SCAQMD has jurisdiction over an area of approximately 10,743 square miles, consisting of the four-county SCAB, the Riverside County portion of the SSAB, and part of the Riverside County portion of the MDAB.

The SCAQMD's governing board adopted the 2003 AQMP on August 1, 2003. The 2003 AQMP updates the attainment demonstration for the federal standards for O₃ and PM₁₀, replaces the 1997 attainment demonstration for the federal CO standard, provides a basis for a maintenance plan for CO for the future, and updates the maintenance plan for the federal NO₂ standard that the SCAB has met since 1992 (SCAQMD 2003). On March 10, 2009, the EPA issued a final rule partially approving and partially disapproving the 2003 AQMP. On February 2, 2011, the U.S. Court of Appeals for the Ninth Circuit ruled that EPA's partial approval was arbitrary and capricious. The court further ruled that the EPA should have ordered California to submit a revised attainment plan for the SCAB after it disapproved the 2003 AQMP and that the EPA should have required transportation control measures.

The SCAQMD's governing board adopted the 2007 AQMP on June 1, 2007. The 2007 AQMP includes the same updates as the 2003 AQMP and incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools (SCAQMD 2007). As part of the 2007 AQMP, the SCAQMD requested that the EPA "bump up" the O₃ nonattainment status from "severe" to "extreme" to allow additional time for the SCAB to achieve attainment with the federal standard. The additional time would provide for implementation of state and federal measures that apply to sources over which the SCAQMD does not have control. The 2007 AQMP has been approved by CARB; however, on November 22, 2010, the EPA issued a proposed rule to approve in part and disapprove in part the portions related to attainment of the federal PM_{2.5} standard. The EPA, however, approved the redesignation of the SCAB to an extreme O₃ nonattainment area, effective June 4, 2010.

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Because the Coachella Valley exceeds the federal O₃ standard and is classified as an O₃ nonattainment area, the federal Clean Air Act requires that the Coachella Valley identify specific emission reduction goals, demonstrate reasonable further progress in VOC emission reductions, demonstrate attainment of the federal ozone standard by June 15, 2013, and provide contingency measures or actions in the event of a failure to attain or to meet interim milestones. The Final 2007 AQMP addresses these requirements and satisfies the State Implementation Plan requirements under Title I of the CAA. (SCAQMD 2007)

On April 18, 2003, the EPA approved the Coachella Valley PM₁₀ State Implementation Plan, which addressed future year attainment of the PM₁₀ standards and incorporated the latest mobile source emissions model results and planning assumptions. From 2003 to 2007, the annual average PM₁₀ concentrations have met the levels of the revoked federal annual standard (50 µg/m³) and peak 24-hour average PM₁₀ concentrations have not exceeded the current federal standard (150 µg/m³) and is currently eligible for redesignation as attainment (SCAQMD 2007). However, further action by the EPA is still pending.

On December 7, 2012, the SCAQMD's governing board adopted the Final 2012 AQMP (SCAQMD 2013), which is designed to meet applicable federal and state requirements for O₃ and particulate matter. The Final 2012 AQMP demonstrates attainment of the federal 24-hour PM_{2.5} standard by 2014 in the SCAB through adoption of all feasible measures. The 2012 AQMP also updates the EPA-approved 8-hour O₃ control plan with new measures designed to reduce reliance on the Clean Air Act Section 182(e)(5) long-term measures for NO_x and VOC reductions. Based on General Plans for cities and counties in the SCAB, demographic growth forecasts for various socioeconomic categories (i.e., population, housing, employment by industry) developed by the Southern California Association of Governments for their 2012 Regional Transportation Plan were used in the 2012 AQMP. In addition, emission reductions resulting from SCAQMD regulations adopted by June 2012 and CARB regulations adopted by August 2011 are included in the baseline. The 2012 AQMP reduction and control measures, which are outlined to mitigate emissions, are based on existing and projected land use and development. The Final 2012 AQMP was approved by CARB on January 25, 2013, and is being reviewed by the EPA.

While the 2007 AQMP addressed and satisfied the Clean Air Act planning requirements for the Coachella Valley, the 2012 AQMP specifically addresses Clean Air Act planning requirements for the 24-hour PM_{2.5} standard in the SCAB and not in the Coachella Valley, which is designated by the EPA as unclassifiable/attainment of this standard. The Coachella Valley is not in attainment of the federal 8-hour ozone standards; however, the 2007 AQMP adequately addressed and satisfied the Clean Air Act planning requirements for ozone in the Coachella Valley. The 2012 AQMP confirmed that with the latest emissions and modeling projections, the strategy toward attainment of the federal ozone standards in the Coachella Valley remains effective.

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Emissions that would result from construction of the proposed natural gas pipelines are subject to the rules and regulations of the SCAQMD. The SCAQMD rules applicable to the proposed construction and operational activities may include the following rules:

- Regulation II - Permits¹¹
 - Rule 201 – Permit to Construct
 - Rule 203 – Permit to Operate
- Regulation IV - Prohibitions
 - Rule 401 – Visible Emissions
 - Rule 402 – Nuisance
 - Rule 403 – Fugitive Dust
 - Rule 403.1 – Supplemental Fugitive Dust Control Requirements for Coachella Valley Sources
 - Rule 431.1 – Sulfur Content of Gaseous Fuels
 - Rule 431.2 – Sulfur Content of Liquid Fuels
 - Rule 433 – Natural Gas Quality
- Regulation XI – Source Specific Standards
 - Rules 1108 and 1108.1 – Cutback Asphalt and Emulsified Asphalt
 - Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines
 - Rule 1113 – Architectural Coatings

Air Basin Attainment Designations

An area is designated “in attainment” when it is in compliance with the NAAQS and/or CAAQS. These standards are set by the EPA or CARB for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare with a margin of safety.

The criteria pollutants of primary concern considered in this air quality assessment include O₃, NO₂, CO, SO₂, PM₁₀, and PM_{2.5}. Although there are no ambient standards for VOCs or NO_x, they are important because they are precursors to O₃.

¹¹ Permitting rules would apply in the event that the pipelines within the SCAQMD include any devices not otherwise except from permits. If such cases, SCAQMD Regulation XIII would also apply.

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The attainment classifications for these criteria pollutants for the San Bernardino County portion of the MDAB, the SCAB, and the Riverside County portion of the SSAB, are outlined in Tables 5.3-3, 5.3-4, and 5.3-5, respectively.

Mojave Desert Air Basin (San Bernardino County)

The San Bernardino County portion of the MDAB is designated as a Severe-15 nonattainment area for the federal O₃ standard and as a nonattainment area for the state O₃ standards. The federal NO₂ standard was revised in 2010, and all areas of California have been designated unclassifiable/attainment. The San Bernardino County portion of the MDAB is designated as an attainment area for the state NO₂ standards, an attainment area for federal and state CO standards, and an attainment area for federal and state SO₂ standards. The San Bernardino County portion of the MDAB is designated as a nonattainment area for the federal PM₁₀ standard (Moderate nonattainment) and state PM₁₀ standards. The San Bernardino County portion of the MDAB is designated as an attainment/unclassifiable area for federal PM_{2.5} standards, but as a nonattainment area for the state PM_{2.5} standard. Table 5.3-4 presents federal and state attainment classifications for the San Bernardino County portion of the MDAB.

**Table 5.3-4
MDAB (San Bernardino County) Attainment Classification**

Pollutant	Averaging Time	Designation/Classification
<i>NAAQS and Status</i>		
Ozone (O ₃)	8 hours	Nonattainment (Severe 15)
Nitrogen dioxide (NO ₂)	1 hour, annual arithmetic mean	Unclassifiable/attainment
Carbon monoxide (CO)	1 hour, 8 hours	Attainment
Sulfur dioxide (SO ₂)	24 hours, annual arithmetic mean	Attainment
Respirable particulate matter (PM ₁₀)	24 hours	Nonattainment (Moderate)
Fine particulate matter (PM _{2.5})	24 hours, annual arithmetic mean	Unclassifiable/attainment
Lead (Pb)	Rolling 3-month average	Unclassifiable/attainment
<i>CAAQS and Status</i>		
Ozone (O ₃)	1 hour, 8 hours	Nonattainment
Nitrogen dioxide (NO ₂)	1 hour, annual arithmetic mean	Attainment
Carbon monoxide (CO)	1 hour, 8 hours	Attainment
Sulfur dioxide (SO ₂)	1 hour, 24 hours	Attainment
Respirable particulate matter (PM ₁₀)	24 hours, annual arithmetic mean	Nonattainment
Fine particulate matter (PM _{2.5})	Annual arithmetic mean	Nonattainment
Lead (Pb) ¹	30-day average	Attainment
Sulfates (SO ₄)	24 hours	Attainment
Hydrogen sulfide (H ₂ S)	1 hour	Unclassified
Vinyl chloride ²	24 hours	Unclassified
Visibility-reducing particles	8 hours (10:00 AM–6:00 PM)	Unclassified

Source: EPA 2014b (NAAQS); CARB 2014a (CAAQS).

¹ CARB has identified Pb, vinyl chloride, and toxic air contaminants with no threshold level of exposure for adverse health effects determined

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South Coast Air Basin

The entire SCAB is designated as a nonattainment area for both federal and state O₃ standards. The EPA has classified the SCAB as an “extreme nonattainment” area and has mandated that it achieve attainment no later than June 15, 2024. The SCAB is designated as unclassifiable/attainment for the federal NO₂ standard and an attainment area for the state NO₂ standards. The SCAB is designated as an attainment area for federal and state CO and SO₂ standards and as an attainment area for the federal PM₁₀ standard. The SCAB is designated as a nonattainment area for the state PM₁₀ standards and as a nonattainment area for both federal and state PM_{2.5} standards. San Bernardino County and Riverside County are designated unclassifiable/attainment for federal lead standards and as attainment area for the state lead standard. Table 5.3-5 presents federal and state attainment classifications for the SCAB.

**Table 5.3-5
SCAB Attainment Classification**

Pollutant	Averaging Time	Designation/Classification
<i>NAAQS and Status</i>		
Ozone (O ₃)	8 hours	Nonattainment (Extreme)
Nitrogen dioxide (NO ₂)	1 hour, annual arithmetic mean	Attainment (Maintenance) – 1971 NAAQS Unclassifiable/attainment – 2010 NAAQS
Carbon monoxide (CO)	1 hour, 8 hours	Attainment
Sulfur dioxide (SO ₂)	24 hours, annual arithmetic mean	Attainment
Respirable particulate matter (PM ₁₀)	24 hours	Attainment (Maintenance)
Fine particulate matter (PM _{2.5})	24 hours, annual arithmetic mean	Nonattainment
Lead (Pb)	Rolling 3-month average	Unclassifiable/attainment
<i>CAAQS and Status</i>		
Ozone (O ₃)	1 hour, 8 hours	Nonattainment
Nitrogen dioxide (NO ₂)	1 hour, Annual	Nonattainment
Carbon monoxide (CO)	1 hour, 8 hours	Attainment
Sulfur dioxide (SO ₂)	1 hour, 24 hours	Attainment
Respirable particulate matter (PM ₁₀)	24 hours, annual arithmetic mean	Nonattainment
Fine particulate matter (PM _{2.5})	Annual arithmetic mean	Nonattainment
Lead (Pb) ¹	30-day average	Attainment
Sulfates (SO ₄)	24 hours	Attainment
Hydrogen sulfide (H ₂ S)	1 hour	Unclassified
Vinyl chloride ¹	24 hours	Unclassified
Visibility-reducing particles	8 hours (10:00 AM–6:00 PM)	Unclassified

Source: EPA 2014b (NAAQS); CARB 2014a (CAAQS).

¹ Los Angeles portion of the SCAB is designated a nonattainment area for federal and state lead standards.

² CARB has identified Pb, vinyl chloride, and toxic air contaminants with no threshold level of exposure for adverse health effects determined.

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Salton Sea Air Basin

The Riverside County portion of the SSAB is designated as a Severe-15 nonattainment area for the federal O₃ standard and as a nonattainment area for the state O₃ standards. The Riverside County portion of the SSAB is designated as unclassifiable/attainment for the federal NO₂ standard, an attainment area for the state NO₂ standard, and an attainment area for the federal and state CO and SO₂ standards. For PM_{2.5} standards, the Riverside County portion of the SSAB is designated as unclassifiable/attainment for federal standards and unclassified for state standards. The Riverside County portion of the SSAB is designated as a nonattainment area for both federal and state PM₁₀ standards. The Coachella Valley exceeds the PM₁₀ federal standard on days when high wind events cause transport of windblown dust from both disturbed and natural desert areas. After application of the EPA Exceptional Event Rule (and its predecessor, the Natural Events Policy) to high wind natural events in the Coachella Valley, no days since the mid-1990s have exceeded the federal 24-hour PM₁₀ standard at Indio or Palm Springs. As a result, the SCAQMD requested that the EPA redesignate the Coachella Valley from nonattainment to attainment of the PM₁₀ NAAQS; however, further action by the EPA on this request is still pending (SCAQMD 2013). Table 5.3-6 presents federal and state attainment classifications for the Riverside County portion of the SSAB.

**Table 5.3-6
SSAB (Riverside County, Coachella Valley Planning Area) Attainment Classification**

Pollutant	Averaging Time	Designation/Classification
<i>NAAQS and Status</i>		
Ozone (O ₃)	8 hours	Nonattainment (Severe 15)
Nitrogen dioxide (NO ₂)	1 hour, annual arithmetic mean	Unclassifiable/attainment
Carbon monoxide (CO)	1 hour, 8 hours	Attainment
Sulfur dioxide (SO ₂)	24 hours, annual arithmetic mean	Attainment
Respirable particulate matter (PM ₁₀)	24 hours	Nonattainment (Serious)
Fine particulate matter (PM _{2.5})	24 hours, annual arithmetic mean	Unclassifiable/attainment
Lead (Pb)	Rolling 3-month average	Unclassifiable/attainment
<i>CAAQS and Status</i>		
Ozone (O ₃)	1 hour, 8 hours	Nonattainment
Nitrogen dioxide (NO ₂)	1 hour, Annual	Attainment
Carbon monoxide (CO)	1 hour, 8 hours	Attainment
Sulfur dioxide (SO ₂)	1 hour, 24 hours	Attainment
Respirable particulate matter (PM ₁₀)	24 hours, annual arithmetic mean	Nonattainment
Fine particulate matter (PM _{2.5})	Annual arithmetic mean	Unclassified
Lead (Pb) ²	30-day average	Attainment
Sulfates (SO ₄)	24 hours	Attainment
Hydrogen sulfide (H ₂ S)	1 hour	Unclassified
Vinyl chloride ¹	24 hours	Unclassified
Visibility-reducing particles	8 hours (10:00 AM–6:00 PM)	Unclassified

Source: EPA 2014b (NAAQS); CARB 2014a (CAAQS).

¹ CARB has identified Pb, vinyl chloride, and toxic air contaminants with no threshold level of exposure for adverse health effects determined

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Air Quality Monitoring Data

The Proposed Project area’s local ambient air quality is monitored by the MDAQMD, the SCAQMD, and CARB. The air districts and CARB monitor ambient air quality at approximately 250 air quality monitoring stations across the state. All air pollutants are not monitored at each station; thus, data from the closest representative station that monitors a specific pollutant are summarized. Air quality monitoring stations usually measure pollutant concentrations 10 feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations.

Four air quality monitoring stations located near the proposed alignment were selected to present ambient air quality throughout the Proposed Project area and the air basins in which the Proposed Project is located. The Victorville monitoring station, located at 14306 Park Avenue in the City of Victorville, is located within the San Bernardino portion of the MDAB. The two monitoring stations located within the SCAB are the 4th Street San Bernardino station, located at 24302 4th Street in the City of San Bernardino, and the Banning Airport station, located at 12160 Santiago Road in the City of Banning. The Palm Springs Fire Station monitoring station, located at 590 Racquet Club Avenue in the City of Palm Springs, is located within the SSAB.

The data collected at these stations are considered representative of the air quality experienced in the Proposed Project vicinity. Air quality data from 2011 through 2013 for the monitoring stations are provided in Table 5.3-7.

The number of days exceeding the ambient air quality standards for each monitoring station is shown in Table 5.3-8.

The number of days exceeding the ambient air quality standards for state 1-hour O₃, state and federal 8-hour O₃, state 24-hour PM₁₀, and federal 24-hour PM_{2.5} for each monitoring station is shown in Table 5.3-8.

**Table 5.3-8
Frequency of Air Quality Standard Violations**

Monitoring Site	Year	Number of Days Exceeding Standard				
		State 1-Hour O ₃	State 8-Hour O ₃	Federal 8-Hour O ₃	State 24-Hour PM ₁₀ ^a	Federal 24-Hour PM _{2.5} ^a
MDAB – Victorville – 14306 Park Avenue	2011	2	13	5	0.0 (0)	0.0 (0)
	2012	6	58	28	N/A (0)	0.0 (0)
	2013	9	60	31	N/A (2)	N/A (0)
SCAB – San Bernardino – 4th Street	2011	40	66	39	12.3 (2)	0.0 (0)
	2012	41	77	54	N/A (1)	0.0 (0)
	2013	22	53	36	11.5 (2)	1.0 (1)

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**Table 5.3-8
Frequency of Air Quality Standard Violations**

Monitoring Site	Year	Number of Days Exceeding Standard				
		State 1-Hour O ₃	State 8-Hour O ₃	Federal 8-Hour O ₃	State 24-Hour PM ₁₀ ^a	Federal 24-Hour PM _{2.5} ^a
SCAB – Banning – Airport	2011	35	59	41	0.0 (0)	0.0 (0)
	2012	40	71	53	0.0 (0)	0.0 (0)
	2013	24	65	41	6.1 (1)	0.0 (0)
SSAB – Palm Springs – Fire Station	2011	21	69	49	0.0 (0)	2.0 (2)
	2012	17	79	51	0.0 (0)	0.0 (0)
	2013	10	80	46	13.1 (2)	N/A (1)

Source: CARB 2014b.

Note: Exceedances of federal and state standards are only shown for ozone, PM₁₀, and PM_{2.5}. All other criteria pollutants did not exceed either federal or state standards during the years shown.

^a Measurements of PM₁₀ and PM_{2.5} are usually collected every 6 days and 1 day, respectively. “Number of days exceeding the standards” is the mathematical estimates of the number of days concentrations would have been greater than the level of the standard had each day been monitored. The numbers in parentheses are the measured number of samples that exceeded the standard.

N/A = insufficient data to determine the value

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**Table 5.3-7
Peak Background Concentrations in the Project Area for the Period of 2011–2013**

	Ambient Air Quality Standard	MDAB – Victorville – 14306 Park Avenue			SCAB – San Bernardino – 4th Street			SCAB – Banning – Airport			SSAB – Palm Springs – Fire Station		
		2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013
<i>Ozone</i>													
Maximum 1-hour concentration	0.09 ppm	0.098	0.111	0.120	0.135	0.124	0.139	0.127	0.117	0.115	0.124	0.126	0.113
Maximum 8-hour concentration	0.070 ppm (state)	0.085	0.095	0.097	0.121	0.109	0.113	0.112	0.098	0.104	0.099	0.101	0.104
	0.075 ppm (federal)	0.085	0.094	0.097	0.121	0.109	0.112	0.111	0.098	0.103	0.098	0.100	0.104
<i>Nitrogen Dioxide</i>													
Maximum 1-hour concentration	0.18 ppm (state) 0.100 ppm (federal)	0.075	0.056	0.064	0.061	0.067	0.051	0.060	0.072	0.047	0.044	0.045	0.052
Annual concentration	0.030 ppm (state) 0.053 ppm (federal)	0.015	0.013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.008	0.007	N/A
<i>Carbon Monoxide</i>													
Maximum 1-hour concentration	20 ppm (state) 35 ppm (federal)	1.9	2.1	1.2	1.9	3.1	4.8	–	–	–	3.0	0.9	3.2
Maximum 8-hour concentration	9.0 ppm (state) 9 ppm (federal)	1.51	1.83	N/A	1.74	1.64	N/A	–	–	–	0.64	0.45	N/A
<i>Respirable Particulate Matter (PM₁₀)</i>													
Maximum 24-hour conc. (state method)	50 µg/m ³	34.0	40.0	70.6	54.0	51.0	98.0	47.0	41.0	60.0	41	37.0	127.0
Maximum 24-hour conc. (federal method)	150 µg/m ³	110.2	45.0	77.9	128.4	68.1	177.3	51.0	45.0	64.0	396.9	143.4	185.8
Annual concentration (state method)	20 µg/m ³	20.2	N/A	N/A	30.1	N/A	30.1	17.8	17.7	18.9	18.1	16.1	22.1
<i>Fine Particulate Matter (PM_{2.5})</i>													
Maximum 24-hour conc. (federal method)	35 µg/m ³	15.0	12.0	13.1	65.0	34.8	55.3	N/A	N/A	13.3	26.3	15.5	18.5

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**Table 5.3-7
Peak Background Concentrations in the Project Area for the Period of 2011–2013**

	Ambient Air Quality Standard	MDAB – Victorville – 14306 Park Avenue			SCAB – San Bernardino – 4th Street			SCAB – Banning – Airport			SSAB – Palm Springs – Fire Station		
		2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013
Annual concentration (state method)	12 µg/m ³	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6.0	6.5	6.5
Annual concentration (federal method)	12.0 µg/m ³	6.7	6.7	6.9	12.2	11.7	11.4	N/A	N/A	7.1	6.0	6.4	6.3
<i>Sulfur Dioxide (SO₂)</i>													
Maximum 1-hour concentration	0.075 ppm (federal)	0.013	0.006	0.004	–	–	–	–	–	–	–	–	–
Maximum 24-hour concentration	0.04 ppm (state)	0.007	0.003	0.002	–	–	–	–	–	–	–	–	–
Annual concentration	0.030 ppm (federal)	0.001	N/A	N/A	–	–	–	–	–	–	–	–	–

Sources: CARB 2014b (O₃, NO₂, CO, PM₁₀ and PM_{2.5}); EPA 2014c (CO, SO₂, and PM_{2.5}).

Notes: Data taken from CARB iADAM (2014b) or EPA AirData (2014c) represent the highest concentrations experienced over a given year.

N/A = insufficient data available to determine the value; µg/m³ = micrograms per cubic meter

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Greenhouse Gas and Climate Change Regulatory Setting

Federal

Massachusetts v. EPA

On April 2, 2007, in *Massachusetts v. EPA*, the U.S. Supreme Court directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the EPA administrator is required to follow the language of Section 202(a) of the Clean Air Act. On December 7, 2009, the administrator signed a final rule with two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- The administrator found that elevated concentrations of GHGs—CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the “endangerment finding.”
- The administrator further found the combined emissions of GHGs—CO₂, CH₄, N₂O, and HFCs— from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is referred to as the “cause or contribute finding.”

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

Energy Independence and Security Act

On December 19, 2007, President George W. Bush signed the Energy Independence and Security Act of 2007. Among other key measures, the act would do the following, which would aid in the reduction of national GHG emissions:

1. Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) requiring fuel producers to use at least 36 billion gallons of biofuel in 2022
2. Set a target of 35 miles per gallon (mpg) for the combined fleet of cars and light trucks by model year 2020 and direct National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks
3. Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

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EPA and NHTSA Joint Final Rule for Vehicle Standards

On April 1, 2010, the EPA and NHTSA announced a joint final rule to establish a national program consisting of new standards for light-duty vehicles model years 2012 through 2016. The joint rule is intended to reduce GHG emissions and improve fuel economy. The EPA is finalizing the first-ever national GHG emissions standards under the Clean Air Act, and NHTSA is finalizing Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act. The final rule became effective on July 6, 2010 (EPA and NHTSA 2010).

The EPA GHG standards require new passenger cars, light-duty trucks, and medium-duty passenger vehicles to meet an estimated combined average emissions level of 250 grams of CO₂ per mile in model year 2016, equivalent to 35.5 mpg if the automotive industry were to meet this CO₂ level through fuel economy improvements alone. The CAFE standards for passenger cars and light trucks will be phased in between 2012 and 2016, with the final standards equivalent to 37.8 mpg for passenger cars and 28.8 mpg for light trucks, resulting in an estimated combined average of 34.1 mpg. Together, these standards will cut GHG emissions by an estimated 960 MMT and save 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program. The rules will simultaneously reduce GHG emissions, improve energy security, increase fuel savings, and provide clarity and predictability for manufacturers (EPA 2013).

In August 2012, the EPA and NHTSA approved a second round of GHG and CAFE standards for model years 2017 and beyond (EPA and NHTSA 2012). These standards will reduce motor vehicle GHG emissions to 163 grams of CO₂ per mile, which is equivalent to 54.5 mpg if this level were achieved solely through improvements in fuel efficiency, for cars and light-duty trucks by model year 2025. A portion of these improvements, however, will likely be made through reductions in air conditioning leakage and through use of alternative refrigerants, which would not contribute to fuel economy. The first phase of the CAFE standards (for model year 2017 to 2021) is projected to require, on an average industry fleet-wide basis, a range from 40.3 to 41.0 mpg in model year 2021. The second phase of the CAFE program (for model years 2022 to 2025) is projected to require, on an average industry fleet-wide basis, a range from 48.7 to 49.7 mpg in model year 2025. The second phase of standards has not been finalized due to the statutory requirement that the NHTSA set average fuel economy standards not more than 5 model years at a time. The regulations also include targeted incentives to encourage early adoption and introduction into the marketplace of advanced technologies to dramatically improve vehicle performance, including the following:

- Incentives for electric vehicles, plug-in hybrid electric vehicles, and fuel-cell vehicles
- Incentives for hybrid technologies for large pickup trucks and for other technologies that achieve high fuel economy levels on large pickup trucks
- Incentives for natural gas vehicles

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- Credits for technologies with potential to achieve real-world GHG reductions and fuel economy improvements that are not captured by the standard test procedures.

State

Assembly Bill 1493

In response to the transportation sector accounting for more than half of California's CO₂ emissions, AB 1493 (Pavley) was enacted on July 22, 2002. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles whose primary use is noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards will result in a reduction of about 22% in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term (2013–2016) standards will result in a reduction of about 30%.

Executive Order S-3-05

In June 2005, Governor Schwarzenegger established California's GHG emissions reduction targets in Executive Order S-3-05. The executive order established the following goals: GHG emissions should be reduced to 2000 levels by 2010, GHG emissions should be reduced to 1990 levels by 2020, and GHG emissions should be reduced to 80% below 1990 levels by 2050. The California Environmental Protection Agency secretary is required to coordinate efforts of various agencies to collectively and efficiently reduce GHGs. The Climate Action Team (CAT) is responsible for implementing global warming emissions reduction programs. Representatives from several state agencies compose the CAT. Under the executive order, the California Environmental Protection Agency secretary is directed to report biannually on progress made toward meeting the GHG targets and the impacts to California due to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. The CAT fulfilled its initial report requirements through the 2006 *Climate Action Team Report to Governor Schwarzenegger and the Legislature* (CAT 2006).

The 2009 *Climate Action Team Biennial Report* (CAT 2010b), published in April 2010, expands on the policy outlined in the 2006 assessment. The 2009 report provides new information and scientific findings regarding the development of new climate and sea level projections using new information and tools that have recently become available and evaluates climate change within the context of broader social changes, such as land use changes and demographics. The 2009 report also identifies the need for additional research in several different aspects that affect climate change in order to support effective climate change strategies. The aspects of climate change determined to require future research include vehicle and fuel technologies, land use and smart growth, electricity and natural gas, energy efficiency, renewable energy and reduced carbon energy sources, low GHG technologies for other sectors, carbon

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sequestration, terrestrial sequestration, geologic sequestration, economic impacts and considerations, social science, and environmental justice.

Subsequently, the 2010 *Climate Action Team Report to Governor Schwarzenegger and the California Legislature* (CAT 2010a) reviews past Climate Action Milestones including voluntary reporting programs, GHG standards for passenger vehicles, the Low Carbon Fuel Standard, a statewide renewable energy standard, and the cap-and-trade program. Additionally, the 2010 report includes a cataloging of recent research and ongoing projects; mitigation and adaptation strategies identified by sector (e.g., agriculture, biodiversity, electricity, and natural gas); actions that can be taken at the regional, national, and international levels to mitigate the adverse effects of climate change; and today's outlook on future conditions.

Assembly Bill 32

In furtherance of the goals established in Executive Order S-3-05, the legislature enacted AB 32 (Núñez and Pavley), the California Global Warming Solutions Act of 2006, which Governor Schwarzenegger signed on September 27, 2006. The GHG emissions limit is equivalent to the 1990 levels, which are to be achieved by 2020.

CARB has been assigned to carry out and develop the programs and requirements necessary to achieve the goals of AB 32. Under AB 32, CARB must adopt regulations requiring the reporting and verification of statewide GHG emissions. This program will be used to monitor and enforce compliance with the established standards. CARB is also required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 allows CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

The first action under AB 32 resulted in the adoption of a report listing early-action GHG emission reduction measures on June 21, 2007. The early actions include three specific GHG control rules. On October 25, 2007, CARB approved an additional six early-action GHG reduction measures under AB 32. The three original early-action regulations meeting the narrow legal definition of "discrete early action GHG reduction measures" consist of the following:

1. A low-carbon fuel standard to reduce the "carbon intensity" of California fuels
2. Reduction of refrigerant losses from motor vehicle air conditioning system maintenance to restrict the sale of "do-it-yourself" automotive refrigerants
3. Increased methane capture from landfills to require broader use of state-of-the-art methane capture technologies.

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The additional six early-action regulations, which were also considered “discrete early action GHG reduction measures,” consist of the following:

1. Reduction of aerodynamic drag, and thereby fuel consumption, from existing trucks and trailers through retrofit technology
2. Reduction of auxiliary engine emissions of docked ships by requiring port electrification
3. Reduction of PFC emissions from the semiconductor industry
4. Reduction of propellants in consumer products (e.g., aerosols, tire inflators, and dust removal products)
5. Requirements that all tune-up, smog check and oil change mechanics ensure proper tire inflation as part of overall service in order to maintain fuel efficiency
6. Restriction on the use of SF₆ from non-electricity sectors if viable alternatives are available.

As required under AB 32, on December 6, 2007, CARB approved the 1990 GHG emissions inventory, thereby establishing the emissions limit for 2020. The 2020 emissions limit was set at 427 MMT CO₂E. In addition to the 1990 emissions inventory, CARB also adopted regulations requiring mandatory reporting of GHGs for the large facilities that account for 94% of GHG emissions from industrial and commercial stationary sources in California. About 800 separate sources fall under the new reporting rules and include electricity generating facilities, electricity retail providers and power marketers, oil refineries, hydrogen plants, cement plants, cogeneration facilities, and other industrial sources that emit CO₂ in excess of specified thresholds.

On December 11, 2008, CARB approved the Climate Change Proposed Scoping Plan: A Framework for Change (Scoping Plan; CARB 2008) to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California’s GHG emissions. The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and CAT early actions and additional GHG reduction measures by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program.

The key elements of the Scoping Plan include the following:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards
- Achieving a statewide renewables energy mix of 33%
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California’s GHG emissions

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- Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets
- Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard.

Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

Senate Bill X1 2

On April 12, 2011, Governor Jerry Brown signed Senate Bill (SB) X1 2 in the First Extraordinary Session, which would expand the Renewable Portfolio Standard (RPS) by establishing a goal of 20% of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020, and in subsequent years. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current and that meets other specified requirements with respect to its location. In addition to the retail sellers covered by SB 107, SB X1 2 adds local publicly owned electric utilities to the RPS. By January 1, 2012, the CPUC is required to establish the quantity of electricity products from eligible renewable energy resources to be procured by retail sellers in order to achieve targets of 20% by December 31, 2013; 25% by December 31, 2016; and 33% by December 31, 2020. The statute also requires that the governing boards for local publicly owned electric utilities establish the same targets and that the governing boards be responsible for ensuring compliance with these targets. The CPUC will be responsible for enforcement of the RPS for retail sellers, while the CEC and CARB will enforce the requirements for local publicly owned electric utilities.

5.3.3 Significance Criteria

The significance criteria used to evaluate impacts involving air quality and GHG emissions are based on criteria listed in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.). A significant impact would occur if the project would:

- Conflict with or obstruct implementation of the applicable air quality plan
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)
- Expose sensitive receptors to substantial pollutant concentrations

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- Create objectionable odors affecting a substantial number of people
- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

In addition, Appendix G of the CEQA Guidelines indicates that where available, the significance criteria established by the applicable air quality management district or pollution control district may be relied upon to make determinations regarding the above criteria. Below, the significance criteria from the two applicable air quality management districts are listed.

MDAQMD

The MDAQMD has adopted thresholds to address the significance of air quality impacts resulting from a proposed project. As outlined in the MDAQMD's California Environmental Quality Act (CEQA) and Federal Conformity Guidelines (MDAQMD 2011), a project would result in a significant environmental impact if it:

1. Would generate total emissions (direct and indirect) in excess of the established significance thresholds (indicated in Table 5.3-9)
2. Would generate a violation of any ambient air quality standard when added to the local background
3. Does not conform with the applicable attainment or maintenance plan
4. Would expose sensitive receptors to substantial pollutant concentrations, including those resulting in a cancer risk greater than or equal to 10 in a million (10×10^{-6}) and/or a Hazard Index (noncarcinogenic) greater than or equal to 1.

A project is deemed to be in conformance with the applicable attainment or maintenance plans, and hence not be significant, if it is consistent with the existing land use plan. Zoning changes, specific plans, general plan amendments and similar land use plan changes that do not increase dwelling unit density, do not increase vehicle trips, and do not increase vehicle miles traveled are also deemed to be in conformance and would not exceed threshold number 3 (MDAQMD 2011).

Residences, schools, daycare centers, playgrounds, and medical facilities are considered sensitive receptor land uses. The following project types proposed for sites within the specified distance to an existing or planned sensitive receptor land use must be evaluated using significance threshold number 4:

- Any industrial project within 1,000 feet

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- A distribution center (40 or more trucks per day) within 1,000 feet
- A major transportation project (50,000 or more vehicles per day) within 1,000 feet
- A dry cleaner using perchloroethylene within 500 feet
- A gasoline dispensing facility within 300 feet.

The MDAQMD Guidelines sets forth quantitative emission significance thresholds below which a project would not have a significant impact on ambient air quality. Project-related air quality impacts estimated in this environmental analysis would be considered significant if any of the applicable significance thresholds presented in Table 5.3-9, MDAQMD Significance Thresholds, are exceeded.

**Table 5.3-9
MDAQMD Significance Thresholds**

Criteria Pollutants Mass Thresholds		
<i>Pollutant</i>	<i>Daily Threshold (pounds)</i>	<i>Annual Threshold (tons)</i>
VOC	137	25
NO _x	137	25
CO	548	100
SO _x	137	25
PM ₁₀	82	15
PM _{2.5}	82	15
Lead ^a	3	0.6
Greenhouse Gases Mass Thresholds		
<i>Pollutant</i>	<i>Daily Threshold (pounds)</i>	<i>Annual Threshold (tons)</i>
CO ₂ E	548,000	100,000

Source: MDAQMD 2011.

The thresholds listed in Table 5.3-9 represent screening-level thresholds that can be used to evaluate whether project-related emissions could cause a significant impact on air quality. Emissions below the screening-level thresholds would not cause a significant impact. In the event that emissions exceed these thresholds, modeling may be required to demonstrate that the project's total air quality impacts result in ground-level concentrations that are below the CAAQS and NAAQS, including appropriate background levels. For nonattainment pollutants, if emissions exceed the thresholds shown in Table 5.3-9, the project could have the potential to result in a cumulatively considerable net increase in these pollutants and thus could have a significant impact on the ambient air quality.

The MDAQMD guidance states that a significant project must incorporate mitigation sufficient to reduce its impact to a level that is not significant and that a project that cannot be mitigated to a level that is not significant must incorporate all feasible mitigation. Emission thresholds are given as a daily value and an annual value, so that a multi-phased project (e.g., a project with a construction phase and a separate operational phase) with phases shorter than 1 year can be compared to the daily value.

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SCAQMD

The most recent version of the SCAQMD CEQA Air Quality Handbook (SCAQMD 1993) sets forth quantitative emissions significance thresholds. Projects with anticipated emissions that fall below these thresholds would not have a significant impact on ambient air quality under the SCAQMD criteria. Project-related air quality impacts estimated in this environmental analysis would be considered significant if any of the applicable significance thresholds presented in Table 5.3-10, SCAQMD Significance Thresholds, are exceeded. A project would result in a substantial contribution to an existing air quality violation of the NAAQS or CAAQS for O₃, which is a nonattainment pollutant, if the project's construction or operational emissions would exceed the SCAQMD's VOC or NO_x thresholds shown in Table 5.3-10. These emissions-based thresholds for O₃ precursors are intended to serve as a surrogate for an "ozone significance threshold" (i.e., the potential for adverse O₃ impacts to occur), because O₃ itself is not emitted directly (see discussion of O₃ and its sources in 5.3.1), and the effects of an individual project's emissions of O₃ precursors (VOC and NO_x) on O₃ levels in ambient air cannot be determined through air quality models or other quantitative methods.

**Table 5.3-10
SCAQMD Significance Thresholds**

Criteria Pollutants Mass Daily Thresholds		
<i>Pollutant</i>	<i>Construction (pounds)</i>	<i>Operation (pounds)</i>
VOC	75	55
NO _x	100	55
CO	550	550
SO _x	150	150
PM ₁₀	150	150
PM _{2.5}	55	55
Lead ^a	3	3
Toxic Air Contaminants and Odor Thresholds		
TACs (including carcinogens and noncarcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality for Criteria Pollutants^b		
NO ₂ 1-hour average NO ₂ annual average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.030 ppm (state) and 0.0534 ppm (federal)	
PM ₁₀ 24-hour average PM ₁₀ annual arithmetic mean	10.4 µg/m ³ (construction) ^c and 2.5 µg/m ³ (operation) 1.0 µg/m ³	
PM _{2.5} 24-hour average	10.4 µg/m ³ (construction) ^c and 2.5 µg/m ³ (operation)	
SO ₂ 1-hour average SO ₂ 24-hour average	0.25 ppm (state) and 0.075 ppm (federal – 99th percentile) 0.04 ppm (state)	
Sulfates (SO ₄) 24-hour average	25 µg/m ³ (state)	

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**Table 5.3-10
SCAQMD Significance Thresholds**

Criteria Pollutants Mass Daily Thresholds		
<i>Pollutant</i>	<i>Construction (pounds)</i>	<i>Operation (pounds)</i>
CO 1-hour average CO 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
Lead 30-day average ^a Lead rolling 3-month average ^a Lead quarterly average ^a	1.5 µg/m ³ (state) 0.15 µg/m ³ (federal) 1.5 µg/m ³ (federal)	

Source: SCAQMD 1993.

lb/day = pounds per day; ppm = parts per million; µg/m³ = microgram per cubic meter; ≥ = greater than or equal to

^a The phasing out of leaded gasoline started in 1976; gasoline no longer contains lead.

^b Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2, unless otherwise stated.

^c Ambient air quality threshold based on SCAQMD Rule 403.

The phasing out of leaded gasoline started in 1976. As gasoline no longer contains lead, the Proposed Project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.

In addition to the above-listed emission-based thresholds, the SCAQMD recommends the evaluation of localized air quality impacts to sensitive receptors in the immediate vicinity of the Proposed Project as a result of construction activities. Such an evaluation is referred to as a localized significance threshold analysis. For project sites greater than 5 acres, potential impacts on local sensitive receptors are determined using an air quality dispersion model. Those impacts are then compared to the localized significance thresholds.

The SCAQMD has not adopted recommended numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts of residential and commercial development projects. In October 2008, SCAQMD presented to the Governing Board the *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold* (SCAQMD 2008). The guidance document was not adopted or approved by the Governing Board. This document, which builds on the previous guidance prepared by the California Air Pollution Control Officers Association, explored various approaches for establishing a significance threshold for GHG emissions. Among the concepts discussed, the document considered a “de minimis,” or screening, threshold to “identify small projects that would not likely contribute to significant cumulative GHG impacts” (SCAQMD 2008). As further explained in this document, “Projects with GHG emissions less than the screening level are considered to be small projects, that is, they would not likely be considered cumulatively considerable” (SCAQMD 2008). The SCAQMD formed a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds until statewide significance thresholds or guidelines are established. The SCAQMD proposed three tiers of compliance that may lead to a determination that impacts are less than significant, including the following:

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1. Projects with GHGs within budgets set out in approved regional plans to be developed under the SB 375 process
2. Projects with GHG emissions that are below designated quantitative thresholds:
 - a. Industrial projects with an incremental GHG emissions increase that falls below (or is mitigated to be less than) 10,000 metric tons (MT) CO₂E per year
 - b. Commercial and residential projects with an incremental GHG emissions increase that falls below (or is mitigated to be less than) 3,000 MT CO₂E per year, provided that such projects also meet energy efficiency and water conservation performance targets that have yet to be developed
3. Projects that purchase GHG offsets that, either alone or in combination with one of the three tiers mentioned above, achieve the target significance screening level.

In December 2008, the SCAQMD Governing Board adopted an interim threshold of 10,000 MT CO₂E per year (operational emissions plus construction emissions amortized over 30 years) for “industrial” projects for which the SCAQMD is the lead agency

From December 2008 to September 2010, the SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. The most recent working group meeting on September 28, 2010 (SCAQMD 2010), proposed two options lead agencies can select from to screen thresholds of significance for GHG emissions in residential and commercial projects, and proposed to expand the industrial threshold to other lead agency industrial projects. Option 1 proposes a threshold of 3,000 MT CO₂E per year for all residential and commercial projects and Option 2 proposes a threshold value by land use type where the numeric threshold is 3,500 MT CO₂E per year for residential projects, 1,400 MT CO₂E per year for commercial projects, and 3,000 MT CO₂E per year for mixed-use projects (SCAQMD 2010). Further, the SCAQMD has not formally adopted these thresholds mentioned above.

Because the Proposed Project most closely would be considered an industrial project, the SCAQMD-adopted threshold of 10,000 MT CO₂ per year is applied to those portions of the Proposed Project within the SCAB and SSAB.

5.3.4 Impact Analysis

The boxes in the chart below have been checked accordingly to characterize the level of significance for each CEQA criterion. The rationale for the anticipated significance levels is provided below the chart in each of the corresponding sections.

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Would the project:	Potentially Significant Impact	Less Than Significant with APMs Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Greenhouse Gas Emissions				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Air Quality

a) *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

Less than Significant Impact. Per the MDAQMD guidance, a project is non-conforming if it conflicts with or delays implementation of any applicable attainment or maintenance plan. A project is conforming if it complies with all applicable MDAQMD rules and regulations, complies with all proposed control measures that are not yet adopted from the applicable plan(s), and is consistent with the growth forecasts in the applicable plan(s) (or is directly included in the applicable plan) (MDAQMD 2011). The current applicable MDAQMD AQMPs are the *2008 Federal 8-Hour Ozone Attainment Plan (Western Mojave Desert Non-Attainment Area)* and the *State 1996 Triennial Revision to the 1991 Air Quality Attainment Plan*.

Within the SCAQMD, projects are considered consistent with, and would not conflict with or obstruct implementation of, the applicable AQMP if the growth in socioeconomic factors is consistent with the objectives of the AQMP and with the underlying regional plans used to develop the AQMP. Based on general plans for cities and counties in the SCAB and the portion of the SSAB within the jurisdiction of the SCAQMD, demographic growth forecasts for various

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socioeconomic categories (e.g., population, housing, employment by industry) developed by the Southern California Association of Governments for their 2012 Regional Transportation Plan were used in the 2012 AQMP. The 2012 AQMP reduction and control measures, which are outlined to mitigate emissions, are based on existing and projected land use and development. The 2012 AQMP relies on the land use and population projections provided in Southern California Association of Governments' 2012 Regional Growth Forecast, which is generally consistent with the local plans; therefore, the 2012 AQMP is generally consistent with local general plans

The modified compressor station would comply with current regulations (i.e., New Source Review and applicable prohibitory rules) and would therefore have much lower emissions of NO_x, VOC, and CO compared to the existing older uncontrolled and high-emitting equipment currently running at the facility. Furthermore, construction of the Proposed Project would comply with applicable MDAQMD and SCAQMD regulations associated with construction (e.g., compliant architectural coatings, fugitive dust controls) and would be consistent with the plans and policies of the applicable AQMPs.

Conformity with growth forecasts can be established by demonstrating that the project is consistent with the land use plan that was used to generate the growth forecast. The Proposed Project involves construction of a natural gas pipeline and appurtenant aboveground facilities and would not increase population or require substantial additional workforce (see Section 3.8 regarding anticipated workforce requirements to construct the Proposed Project). Ongoing operations and maintenance of the pipelines, the compressor station, and associated facilities would be primarily performed by the Applicant's existing staff; any potential increase in staff is anticipated to be minimal. Based on these considerations, the Proposed Project would result in a less than significant impact with respect to air quality plans.

b) *Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

Construction

Potentially Significant Impact. Construction of the Proposed Project would result in a temporary addition of pollutants to the local airshed caused by soil disturbance, fugitive dust emissions, and combustion pollutants from on-site construction equipment, as well as from off-site trucks hauling construction materials. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions. Therefore, such emission levels can only be approximately estimated, with a corresponding uncertainty in precise ambient air quality impacts.

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Implementation of the Proposed Project would generate construction-related air pollutant emissions from three general activity categories: entrained dust, equipment and vehicle exhaust emissions, and architectural coatings. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM₁₀ and PM_{2.5} emissions. Exhaust from internal combustion engines used by construction equipment, hauling trucks (dump trucks), vendor trucks (i.e., delivery trucks), and worker vehicles results in emissions of NO_x, VOCs, CO, PM₁₀, and PM_{2.5}. The application of architectural coatings, such as exterior/interior paint and other finishes, would also produce VOC emissions.

The Proposed Project would be required to comply with MDAQMD Rules 401 and 403.2 and SCAQMD Rules 403 and 403.1 to control fugitive dust emissions generated during excavation, land clearing, and other grading activities. Standard construction practices that would be employed to reduce fugitive dust emissions would be implemented in accordance with **APM-AIR-1**. The Proposed Project would also be required to comply with MDAQMD Rule 431 and SCAQMD Rules 431.1 and 431.2 regarding the sulfur content in fuels; MDAQMD Rule 1103 and SCAQMD Rules 1108 and 1108.1 regarding asphalt, if applicable; and MDAQMD Rule 1113 and SCAQMD Rule 1113 regarding architectural coatings. These measures would assist in minimizing project-generated fugitive dust emissions and combustion and other air pollutants.

Given the amount of concurrent construction required and the scale of the Proposed Project, there would likely be short-term, unavoidable impacts to air quality during construction, mostly from fugitive dust and minor increases in certain criteria air pollutants such as VOCs, NO_x, CO, SO₂, PM₁₀, and PM_{2.5}. These impacts would be localized, would not occur in the same location along the alignment for a prolonged period of time, would be short-term at the compressor station location, and would end after construction has been completed. **APM-AIR-2** would be implemented to quantify air quality emissions and develop emissions reduction strategies, as appropriate, for emissions that exceed applicable significance thresholds. Until further analysis has been conducted and appropriate APMs have been identified, impacts would be considered potentially significant.

Operation

Pipeline Maintenance

Less than Significant Impact. No long-term, operational emissions would result from operation of the natural gas pipelines and associated aboveground structures. Once the pipeline and appurtenant aboveground structures are constructed, limited operational and maintenance activities would be required. As with operation of existing natural gas pipelines, the Applicant would ensure that maintenance would occur in accordance with safety regulations. The Applicant would perform pipeline patrols on an annual or twice-a-year basis,

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and leak surveys of the Applicant’s pipelines would also be conducted. Maintenance and safety procedures are not considered to be a long-term source of emissions, and impacts would therefore be less than significant.

Compressor Station

Less than Significant Impact with APMs Incorporated. The Proposed Project includes infrastructure replacement at the existing Adelanto Compressor Station.

Estimated air pollutant emissions anticipated for operation of the modified compressor station are shown in Table 5.3-11 based on the permitted baseline for the compressor station facility. See Appendix A for details regarding the assumptions that were used to calculate the estimated emissions.

**Table 5.3-11
Estimated Compressor Station Criteria Pollutant Emissions**

Criteria Pollutant	Cold Weather (2 units)		Hot Weather (3 units)		Annual tons/yr
	lbs/hr	lbs/day	lbs/hr	lbs/day	
VOC	0.6	15.0	0.7	17.3	2.9
NO _x	2.2	53.9	2.6	62.3	10.6
CO	2.7	65.6	3.2	75.9	12.9
SO _x	0.2	3.8	0.2	4.4	0.7
PM ₁₀	3.0	72.8	3.5	84.2	14.3
PM _{2.5}	3.0	72.8	3.5	84.2	14.3

Source: Yorke 2014. See Appendix A.

Notes: lbs/day: pounds per day; tons/yr: tons per year

Table 5.3-12 presents estimated maximum daily and total annual emissions anticipated for operational conditions of the modified compressor station and compares these estimates to the MDAQMD significance thresholds.

**Table 5.3-12
Estimated Compressor Station Emissions Compared to MDAQMD Significance Thresholds**

Pollutant	Maximum Daily Emissions	Daily Threshold	Exceed Thresholds?	Annual Emissions	Annual Threshold	Exceed Thresholds?
	lbs/day	lbs/day		tons/yr	tons/yr	
VOC	17.3	137	No	2.9	25	No
NO _x	62.3	137	No	10.6	25	No
CO	75.9	548	No	12.9	100	No
SO _x	4.4	137	No	0.7	25	No

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**Table 5.3-12
Estimated Compressor Station Emissions Compared to MDAQMD Significance Thresholds**

Pollutant	Maximum Daily Emissions	Daily Threshold	Exceed Thresholds?	Annual Emissions	Annual Threshold	Exceed Thresholds?
	<i>lbs/day</i>	<i>lbs/day</i>		<i>tons/yr</i>	<i>tons/yr</i>	
PM ₁₀	84.2	82	Yes	14.3	15	No
PM _{2.5}	84.2	82	Yes	14.3	15	No

Source: Yorke 2014. See Appendix A.

Notes: lbs/day: pounds per day; tons/yr: tons per year

As shown in Table 5.3-12, all criteria pollutant emissions are below the MDAQMD thresholds, with the exception of daily PM₁₀ and PM_{2.5}. Daily PM₁₀ and PM_{2.5} emissions would only be exceeded in the summer and only by very small amount (2.2 lbs/day).

Table 5.3-13 presents estimated potential to emit (PTE) emissions associated with operation of the existing equipment and the net change in emissions from the compressor station. The PTE values are based on the compressor station NO_x limit of 90 ppmv as provided in the facility's MDAQMD Federal Operating Permit and do not represent actual existing emissions (Permit 3100066, Effective May 30, 2005). Calculation of existing emissions would require current operating data, which was not available at the time this analysis was prepared. **APM-AIR-3** is provided to ensure that emissions are calculated based on actual emissions, instead of using permitted emissions limit.

As shown in Table 5.3-13, assuming NO_x emissions at full load (PTE), NO_x emissions from the existing gas turbine would be approximately 160 tons/year.

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**Table 5.3-13
Net Change in Criteria Pollutant Emissions**

Pollutant	Existing Equipment Potential to Emit		Net Change	Annual Threshold	Exceed Thresholds?
	lbs/day	tons/yr	tons/yr	tons/yr	
VOC	5.54	1.01	1.94	25	No
NO _x	875.22	159.73	-149.13	25	No
CO	216.48	39.51	-26.60	100	No
SO _x	1.72	0.31	0.44	25	No
PM ₁₀	17.42	3.18	11.14	15	No
PM _{2.5}	17.42	3.18	11.14	15	No

Source: Federal Operating Permit 3100066, EPA 1998/2000, CR 2013

Note: Values presented in the table are based on potential to emit. Actual operating data will need to be obtained to estimate the existing emissions.

BACT: Best Available Control Technology

PTE: potential to emit

lb/MMBtu: pounds per million British thermal unit

MMBtu: million British thermal unit per hour

lbs/hr: pounds per hour

lbs/day: pounds per day

tons/yr: tons per year

Although the proposed compressor station would result in PM₁₀ and PM_{2.5} emissions greater than the MDAQMD significance thresholds, the net change in PM₁₀ and PM_{2.5} emissions compared to the existing equipment operation would be less than these thresholds. Operational impacts at the compressor station are anticipated to decrease relative to existing conditions; however, **APM-AIR-3** is required to confirm that no significant impacts would occur.

- c) *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?***

The MDAB is a nonattainment area for O₃, PM₁₀, and PM_{2.5} under the NAAQS and/or CAAQS. The SCAB is a nonattainment area for O₃, NO₂, PM₁₀, and PM_{2.5} under the NAAQS and/or CAAQS. The poor air quality in the MDAB and SCAB is the result of cumulative emissions from motor vehicles, off-road equipment, commercial and industrial facilities, and other emission sources. Projects that emit these pollutants or their precursors (e.g., VOC and NO_x for O₃) potentially contribute to poor air quality.

Construction

Potentially Significant Impact. It is anticipated that construction emissions from the Proposed Project would exceed the MDAQMD significance thresholds or the SCAQMD construction daily thresholds; however, this would be confirmed through implementation of **APM-AIR-2**.

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Construction of the Proposed Project would be required to comply with MDAQMD and SCAQMD rules and regulations, including rules related to visible emissions, fugitive dust, and liquid fuels sulfur content. Until further analysis has been conducted and appropriate APMs have been identified, impacts would be considered potentially significant.

Operation

Less than Significant Impact with APMs Incorporated. It is not anticipated that the proposed pipeline would generate operational emissions. As shown in Table 5.3-12, the proposed modifications to the Adelanto Compressor Station would not exceed MDAQMD annual significance thresholds for all criteria pollutant emissions. Emissions generated by the compressor station would be below the MDAQMD daily thresholds for all criteria pollutants, except daily PM₁₀ and PM_{2.5} (minimal exceedance of 2.2 lbs/day).

As shown in Table 5.3-13, the proposed modifications to the Adelanto Compressor Station would result in a net change in emissions relative to the existing emissions that would not exceed the MDAQMD significance thresholds, and in the case of NO_x and CO, the modifications would result in a net benefit to air quality.

Furthermore, the Proposed Project would not conflict with the MDAQMD 2004 or 2008 Ozone Attainment Plans, which address the cumulative emissions in the MDAB and account for emissions associated with construction activity in the MDAB. Additionally, the Proposed Project would not conflict with the SCAQMD 2012 AQMP, which addresses cumulative emissions in the SCAB. Accordingly, the Proposed Project would not be expected to result in a cumulatively considerable increase in emissions of nonattainment pollutants. **APM-AIR-3** would ensure that operational emissions are quantified using appropriate baseline data and that emission increases are not cumulatively considerable.

d) Would the project expose sensitive receptors to substantial pollutant concentrations?

There is a strong connection between health risk and the proximity of the source of air pollution. Local jurisdictions have the responsibility for determining land use compatibility for sensitive receptors. A sensitive receptor is a person in the population who is particularly susceptible to health effects due to exposure to an air contaminant.

The MDAQMD considers residences, schools, daycare centers, playgrounds, and medical facilities to be sensitive receptor land uses (MDAQMD 2011). The SCAQMD states that sensitive receptor locations include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, hospitals, and retirement homes (SCAQMD 2005).

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The nearest sensitive receptors located within the Proposed Project vicinity include residences located immediately adjacent to the proposed alignment, although most receptors are located at least 50 to 100 feet from the proposed pipeline. The closest sensitive receptors to the compressor station include residences and schools, as identified in Table 5.3-14.

Construction

Less than Significant Impact with APMs Incorporated. The greatest potential for TAC emissions during construction would be diesel particulate emissions associated with heavy equipment operations. Health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. “Individual Cancer Risk” is the likelihood that a person continuously exposed to concentrations of TACs over a 70-year lifetime will develop cancer based on the use of standard risk assessment methodology. Given the short-term construction schedule of approximately one year and given that pipeline construction would not occur in any location for a long period, it is not anticipated that the Proposed Project would result in a long-term (i.e., 70-year) source of TAC emissions. In addition, construction-related health risk assessments are typically completed for large, stationary construction projects that generate high emissions in one location near sensitive land uses and often include high volumes of truck trips. The potential for continuous TAC exposure is low given the low-density rural area and the transient nature of the construction activity. In addition, diesel equipment would also be subject to the CARB ATCM for in-use off-road diesel fleets, which would minimize diesel particulate matter emissions. Therefore, impacts related to emissions of TACs during construction are expected to be less than significant.

Construction activities at the Adelanto Compressor Station site would result in emissions of diesel particulate matter from heavy construction equipment and trucks accessing the site. Due to the temporary nature of the construction at the compressor station, the absence of sensitive receptors within 1 mile (see Table 5.3-14), and because the construction activities would not generate substantial diesel emissions from construction equipment or trucks, the construction activity at the compressor station would not be expected to result in a significant health risk.

Although construction impacts would not be expected to result in a significant impact, an evaluation of localized air quality impacts to sensitive receptors in the immediate vicinity of the Proposed Project as a result of construction activities has not been performed at this time. With implementation of **APM-AIR-4**, TAC emissions would be quantified and the less than significant level of impact determination would be confirmed.

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Operation

Natural Gas Pipeline

Less than Significant Impact. As described under 5.3(b), pipeline maintenance and safety procedures are not considered to be a long-term source of emissions. Operation of the proposed pipeline and appurtenant aboveground structures would not expose potential nearby sensitive receptors to substantial pollutant emissions, and impacts would therefore be less than significant.

Compressor Station

Less than Significant Impact with APMs Incorporated. A screening HRA was performed to estimate potential health risk associated with operation of the proposed modifications to the Adelanto Compressor Station. The assessment evaluated health impacts at 10 sensitive receptors located within 3.5 miles of the station and included residential developments to the northeast and to the southeast and eight schools. The closest residential receptor is located approximately 1.1 miles from the station and the closest commercial receptor is located approximately 1.7 miles from the station.

The names or a description of the off-site receptors, the direction from the compressor station site, and the distance from the station are shown in Table 5.3-14, Sensitive Receptors, for those receptors at which impacts were evaluated in the screening HRA.

**Table 5.3-14
Sensitive Receptors**

Receptor	Direction from Compressor Station	Distance	
		<i>Kilometers</i>	<i>Miles</i>
Residential Developments	NE	1.78	1.11
George Visual and Performing Arts Magnet Middle School	NE	2.91	1.81
Westside Park Elementary School	NE	3.64	2.26
Adelanto Elementary School	NE	4.25	2.64
Residential Developments	SE	3.58	2.22
Victoria Magathan Elementary School	SE	3.63	2.25
Don Bradach Elementary School	SE	3.84	2.39
Adelanto High School	SE	2.68	1.66
Desert Trails Elementary School	SE	5.57	3.46
Columbia Middle and Theodore Vick Elementary Schools	SE	5.09	3.16

Source: Yorke 2014

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It was assumed that the modified Adelanto Compressor Station would operate 24 hours per day, 365 days per year, for a total of 8,760 hours per year, and have a stack height of 46 feet.

Table 5.3-15 presents estimated maximum individual cancer risk, chronic hazard index, and acute hazard index for residential and commercial receptors. The results for cancer risks and chronic hazard indices are presented for the annual operating conditions only because they are based on annual TAC emissions. The results for acute hazard indices are presented for the two daily operating conditions only because they are based on hourly TAC emissions.

**Table 5.3-15
TAC Screening Health Risk Assessment**

Health Impacts	Cold Weather (2 units)	Hot Weather (3 units)	Annual
Residential Maximum Individual Cancer Risk	—	—	3.7×10^{-8}
Commercial Maximum Individual Cancer Risk	—	—	6.6×10^{-9}
Residential Maximum Chronic Hazard Index	—	—	0.00070
Commercial Maximum Chronic Hazard Index	—	—	0.00067
Residential Maximum Acute Hazard Index	0.0012	0.0010	—
Commercial Maximum Acute Hazard Index	0.0012	0.0009	—

Sources: Yorke 2014

Notes: See Appendix A for assumptions and detailed results.

Table 5.3-16 presents estimated maximum individual cancer risk, chronic hazard index, and acute hazard index and compares them to the MDAQMD thresholds to determine potential impacts.

**Table 5.3-16
TAC Screening Health Risk Assessment**

Toxic Air Contaminants Risks	Risk	MDAQMD Significance Threshold	Threshold Exceeded?
Individual Cancer Risk	3.7×10^{-8}	10×10^{-6}	No
Chronic Hazard Index	0.00070	1.0	No
Acute Hazard Index	0.0011	1.0	No

Sources: Yorke 2014; MDAQMD 2011.

Notes: See Appendix A for assumptions and detailed results.

The screening HRA concluded that the proposed modified compressor station would not result in a significant individual cancer risk or chronic or acute health impacts. Furthermore, TAC emissions associated with the proposed gas turbines, which would incorporate oxidation catalysts for VOC control, would be considerably lower than the TAC emissions of the existing compressor station, resulting in a net decrease in operational TAC emissions. With implementation of **APM-AIR-3**, criteria air pollutant emissions would be quantified and the less-than-significance determination would be confirmed.

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- e) Would the project create objectionable odors affecting a substantial number of people?

Odors are a form of air pollution that is most obvious to the general public and can present problems for both the source and surrounding community. Although offensive odors seldom cause physical harm, they can be annoying and cause concern.

Construction

Less than Significant Impact. Potential sources that may emit odors during construction activities include diesel equipment exhaust, gasoline fumes, coatings, and asphalt. Odors from these sources would be localized and generally confined to the immediate area surrounding the Proposed Project site. In addition, the Proposed Project would utilize typical construction techniques, and the odors would be typical of most construction sites and temporary in nature.

Residences and other sensitive receptors located within the Proposed Project vicinity are not anticipated to be affected by construction odors. The release of potential odor-causing compounds would also tend to occur during the workday, when many residents would not be home. Construction activity would not occur in one location for an extended period of time as the pipeline would generally be constructed in a linear sequence.

Additionally, the Proposed Project would utilize typical construction techniques in compliance with SCAQMD Rule 402 and MDAQMD Rule 402. Both rules state that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property.

As such, construction activities would not cause an odor nuisance, and odor impacts would be less than significant.

Operation

Less than Significant Impact. Land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993). The Proposed Project, which includes modifications to an existing compressor station, a natural gas pipeline, and appurtenant aboveground structures, would not entail land uses commonly associated with odors.

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Natural Gas Pipeline

Pipeline natural gas transmission would not be a routine source of odor. Natural gas is desulfurized during cleaning and processing, resulting in pipeline natural gas that is primarily methane, which is odorless.

As a safety measure, the Applicant adds a distinctive odor to natural gas, so leaks can be more readily detected by customers. The odor level is monitored at least monthly at representative locations for verification of odorization adequacy. SoCalGas Rule No. 30, Transportation of Customer-Owned Gas, Gas Delivery Specifications, includes a hydrogen sulfide specification, which states that the gas may not contain more than 0.25 grain of hydrogen sulfide, measured as hydrogen sulfide, per 100 standard cubic feet (equivalent to 4 ppmv). Regarding mercaptan sulfur, Rule No. 30 also states that the gas may not contain more than 0.3 grains of mercaptan sulfur, measured as sulfur, per 100 standard cubic feet (equivalent to 5 ppmv).

Under normal operations, no odors would be associated with pipeline operation. The Applicant is responsible for the inspection of all its natural gas pipelines. The CPUC conducts audits of the design, construction, maintenance, and operation practices of the Applicant to verify that they are in compliance with state and federal laws, and the Applicant maintains and operates its pipelines in accordance with the safety regulations. The Applicant conducts leak surveys of its pipelines at specified frequencies. Leaks identified posing the highest potential of risk are prioritized, continuously monitored and repaired promptly. In addition, pipeline patrols are performed on an annual or twice-a-year basis, depending on the size of the facility, to look for indications of pipeline leaks, missing pipeline markers, construction activity and other factors that may threaten the pipeline.

Due to the routine maintenance procedures for natural gas pipelines described above, impacts involving odors would be less than significant.

Compressor Station

Less than Significant Impact. As with the transmission of natural gas through pipelines, operation of the compressor station would not result in odors. As currently occurs, the compressor station would operate using natural gas from the pipeline. As stated above, pipeline natural gas fuel contains no significant amounts of sulfur compounds (a maximum of 4 ppmv under CPUC regulations). Under normal operating conditions, all sulfur would be oxidized and converted to sulfur dioxide.

Based on these considerations, the Proposed Project would result in a less-than-significant impact with respect to odors during operation of the compressor station.

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Greenhouse Gases

- a) **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Potentially Significant Impact. Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. However, it is generally believed that an individual project is of insufficient magnitude by itself to influence climate change or to result in a substantial contribution to the global GHG inventory as scientific uncertainty regarding the significance a project's individual and cumulative effects on global climate change remains. Thus, GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective (CAPCOA 2008). This approach is consistent with that recommended by the CNRA, which noted in its Public Notice for the proposed CEQA amendments that evidence indicates that in most cases, the impact of GHG emissions should be considered in the context of a cumulative impact, rather than a project-level impact (CNRA 2009a). Similarly, the *Final Statement of Reasons for Regulatory Action on the CEQA Amendments* confirms that an EIR or other environmental document must analyze the incremental contribution of a project to GHG levels and determine whether those emissions are cumulatively considerable (CNRA 2009b). Accordingly, further discussion of the Proposed Project's GHG emissions and their impact on global climate are addressed below.

Construction

Potentially Significant Impact. Construction of the Proposed Project would result in GHG emissions, which are primarily associated with use of off-road construction equipment, on-road hauling and vendor trucks, and worker vehicles.

The MDAQMD has established GHG emissions thresholds that would apply to the portion of the Proposed Project located within the MDAB; however, the MDAQMD Guidance for determining potential significance of GHG emissions does not differentiate between construction and operational GHG emissions. Accordingly, the adopted daily and annual GHG thresholds of 548,000 pounds/day of CO₂E and 100,000 tons/year of CO₂E, respectively, are applicable to both short-term and long-term emissions. As stated in Section 5.3.4, The SCAQMD has adopted a quantitative GHG threshold for industrial projects for which the construction-generated emissions are amortized over a 30-year project lifetime and added to the operational GHG emissions. Thus, the total construction GHG emissions would be calculated, amortized over 30 years, and added to the total operational emissions associated with the Proposed Project for comparison with the GHG significance threshold of 10,000 MT CO₂E for the SCAQMD.

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As with project-generated construction air pollutant emissions, GHG emissions generated during construction would be short-term in nature, lasting only for the duration of the construction period, and they would not represent a long-term source of GHG emissions. Although significant impacts would not be anticipated, **APM-AIR-2** would be implemented to determine the potential for Proposed Project construction to cause a cumulatively considerable contribution to climate change. Pending further study, construction impacts are considered to be potentially significant.

Operation

Natural Gas Pipeline

Less than Significant Impact. No long-term, operational emissions would result from operation of the natural gas pipeline. Once the pipeline has been constructed, no routine daily activities would be required. As with operation of existing natural gas pipelines, the Applicant will ensure that maintenance would occur in accordance with safety regulations. The Applicant would perform pipeline patrols on an annual or twice-a-year basis and leak surveys of its pipelines are also conducted. Maintenance and safety procedures are not considered to be a long-term source of GHG emissions. Impacts would therefore be less than significant.

Compressor Station

Potentially Significant Impact. Estimated hourly and daily CO₂, CH₄, N₂O, and CO₂E emissions associated with operation of the modified Adelanto Compressor Station in both cold weather and hot weather, as well as annual emissions, are presented in Table 5.3-17.

**Table 5.3-17
Estimated Compressor Station GHG Emissions**

Greenhouse Gas	Cold Weather (2 units)		Hot Weather (3 units)		Annual
	kg/hr	MT/day	kg/hr	MT/day	MT/yr
CO ₂	12,931	310	14,960	359	122,163
CH ₄	0.93	0.02	1.07	0.03	8.7
N ₂ O	0.22	0.01	0.25	0.01	2.1
CO ₂ E	13,019	312	15,063	362	122,999

Source: Yorke 2014

Estimated maximum daily and annual CO₂E emissions anticipated for operation of the modified compressor station are presented in Table 5.3-18 and compared to the MDAQMD daily and annual thresholds, respectively. The MDAQMD annual CO₂E threshold is measured in tons; therefore, the estimated MT of CO₂E per year emissions presented in Table 5.3-17 was converted to tons per year in Table 5.3-18.

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**Table 5.3-18
CEQA Significance Thresholds**

Pollutant	Maximum Daily Emissions	Daily Emissions Threshold	Threshold Exceeded?	Annual Emissions	Annual Emissions Threshold	Threshold Exceeded?
	<i>lbs/day</i>	<i>lbs/day</i>		<i>tons/yr</i>	<i>tons/yr</i>	
CO ₂ E	797,000	548,000	Yes	135,583	100,000	Yes

Source: Yorke 2014

As shown in Table 5.3-18, project-generated compressor station emissions would exceed the MDAQMD GHG daily and annual thresholds. Because the compressor station is located within the San Bernardino County portion of the MDAB and is under the jurisdiction of the MDAQMD, no other significance thresholds would apply.

Table 5.3-19 presents estimated the potential GHG emissions associated with operation of the existing gas turbine and the net change in emissions from the modified compressor station, and compares the net change in GHG emissions to the MDAQMD threshold. Calculation of existing emissions would require current operating data, which was not available at the time this analysis was prepared.

**Table 5.3-19
Net Change in GHG Emissions**

Pollutant	Existing Equipment Potential to Emit		Net Change		Annual Emissions Threshold	Threshold Exceeded?
	<i>MT/yr</i>	<i>tons/yr</i>	<i>MT/yr</i>	<i>tons/yr</i>	<i>tons/yr</i>	
CO ₂ E	51,479	56,746	71,520	78,837	100,000	No

Source: Yorke 2014

Note: Values presented in the table are based on potential to emit. Actual operating data will need to be obtained to estimate the existing emissions.

As shown in Table 5.3-19, the net change in emissions resulting from proposed modifications to the Adelanto Compressor Station is estimated to be 71,520 MT CO₂E/year.

Because operation of the modified compressor station could still exceed the applicable MDAQMD GHG significance thresholds, the Proposed Project's cumulative GHG impact would be potentially significant. With the implementation of **APM-AIR-3**, further analysis would be conducted to estimate historical operating emissions and to determine feasibility of potential GHG reduction strategies, if necessary. Therefore, until further analysis has been conducted and appropriate measures have been identified, impacts would be considered potentially significant.

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b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Potentially Significant Impact. The Climate Change Scoping Plan, approved by CARB on December 12, 2008, provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. As such, the Scoping Plan is not directly applicable to specific projects. Moreover, the Final Statement of Reasons for the amendments to the CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that "[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009b). Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., Low Carbon Fuel Standard,)) among others. While state regulatory measures would ultimately reduce GHG emissions associated with the Proposed Project through their effect on these sources, no statewide plan, policy, or regulation would be specifically applicable to reductions in GHG emissions from the proposed pipeline construction or operation.

The Adelanto Compressor Station is located in the City of Adelanto and is under the jurisdiction of the City and the MDAQMD. The Adelanto to Moreno pipeline would be located within the jurisdictions of the City of Adelanto, City of Victorville, USFS, San Bernardino County, City of San Bernardino, City of Colton, City of Loma Linda, City of Moreno Valley, Riverside County, the MDAQMD, and the SCAQMD. The Moreno to Whitewater pipeline would be located within the jurisdictions of Riverside County, the City of Beaumont, the City of Banning, the BLM, the City of Palm Springs, and the SCAQMD.

Currently, neither the MDAQMD nor the SCAQMD have adopted an applicable plan (such as a climate action plan), policy, or regulation to reduce GHG emissions or GHG-reduction measures that would apply to the GHG emissions associated with the Proposed Project. At the time this analysis was prepared, however, a comprehensive research of potential applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions has not been completed, as the Proposed Project is located in numerous jurisdictions. San Bernardino County adopted a *Final GHG Emissions Reduction Plan* in March 2014 and Riverside County prepared a Draft Climate Action Plan in May 2012; however, the Proposed Project's consistency with the adopted San Bernardino County plan has not yet been evaluated.

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As with the Scoping Plan, it is common for rules and regulations adopted by cities, counties, and other agencies relevant to GHG emissions to primarily focus on long-term sources of emissions, such as mobile, area, and stationary source emissions. Although construction of the Proposed Project would occur along the entire proposed alignment (which extends through all of the jurisdictions listed above), construction activities would not represent a long-term source of GHG emissions. Furthermore, natural gas pipeline installation and construction associated with modifying the compressor station would follow standard construction practices and would be required to comply with MDAQMD and SCAQMD rules and regulations, which would potentially result in a reduction in GHG emissions associated with internal combustion engines used by construction equipment. Substantial daily operational GHG emissions are only anticipated to result from the proposed compressor station located in the City of Adelanto within the jurisdiction of the City and the MDAQMD and would not occur in the other jurisdictions that the proposed alignment traverses.

Although it is not anticipated that short-term Proposed Project construction would conflict with applicable GHG reduction or climate action plans, policies, or regulations adopted by the various jurisdictions within the proposed alignment, **APM-AIR-5** would be implemented to ensure that further study is conducted. Pending further study of applicable plans, policies, and regulations, this cumulative impact is considered potentially significant and would require additional analysis.

5.3.5 Applicant Proposed Measures

APM-AIR-1 Construction Fugitive Dust Control Plan. The Applicant will develop a Fugitive Dust Emission Control Plan (FDECP) for construction work. The plan will be completed prior to construction and approved by the appropriate agency. Measures to be incorporated into the plan will include, but will not be limited to the following:

- Non-toxic soil binders, equivalent or better in efficiencies than the CARB approved soil binders, shall be applied per manufacturer recommendations to active unpaved roadways, unpaved staging areas, and unpaved parking area(s) throughout construction to reduce fugitive dust emissions. On USFS lands, the Applicant will obtain USFS approval of any soil binders to be used.
- Water the disturbed areas of the active construction sites as needed if uncontrolled fugitive dust is noted.
- Enclose, cover, and/or apply non-toxic soil binders according to manufacturer's specifications to exposed piles with a 5% or greater silt content.
- Maintain unpaved road vehicle travel to the lowest practical speeds, and no greater than 15 miles per hour (mph), to reduce fugitive dust emissions.

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- Cover all trucks hauling soil and other loose material, or require at least two feet of freeboard.
- Establish a vegetative ground cover (in compliance with biological resources impact mitigation measures) or otherwise create stabilized surfaces on all unpaved areas at each of the construction sites within 21 days after active construction operations have ceased.

APM-AIR-2 Construction Emissions Analysis. The Applicant will prepare an analysis of potential project-generated air quality and GHG construction impacts. This analysis will include an estimation of criteria air pollutant emissions and GHG emissions associated with the Proposed Project including construction of the natural gas pipelines and the modifications to the existing Adelanto Compressor Station facility. Estimated construction emissions will be based on anticipated schedule (e.g., overall construction duration, phasing and phase timing) and probable construction activities (e.g., construction equipment type and quantity, workers, and haul trucks). The significance of potential air quality and GHG impacts resulting from construction activities within the MDAQMD's jurisdiction will be determined using the MDAQMD daily criteria air pollutant and GHG thresholds. For construction activities located within the SCAQMD's jurisdiction, estimated emissions will be compared to the SCAQMD daily construction thresholds and annual GHG thresholds for industrial projects to determine the significance of potential impacts. Measures will be identified as appropriate to reduce air quality impacts that exceed applicable significance thresholds.

APM-AIR-3 Existing Operational Emissions of the Adelanto Compressor Station. The Applicant will calculate existing criteria air pollutant emissions and GHG emissions generated by the current compressor station equipment based on current operating data. These emissions will represent the baseline to determine the net change in operational criteria air pollutant emissions and GHG emissions associated with the modifications to the compressor station. Measures will be identified, as appropriate, to reduce air quality impacts that exceed applicable thresholds.

APM-AIR-4 Sensitive Receptors. For portions of the Proposed Project within the SCAQMD, the Applicant will prepare an evaluation of localized air quality impacts to sensitive receptors in the immediate vicinity of the Proposed Project as a result of construction and operational activities. The localized significance threshold analyses are intended to assess whether development of a project—primarily the carbon monoxide (CO), oxides of nitrogen (NO_x), and particulate matter (PM₁₀ and PM_{2.5}) emissions generated during construction and operation—would cause or contribute to exceedances of ambient air quality standards at sensitive receptors near the Proposed Project. The localized

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significance threshold analysis will be prepared in accordance with SCAQMD guidance (SCAQMD 2008). Measures will be identified, as appropriate, to reduce localized air quality impacts that exceed applicable significance thresholds.

APM-AIR-5 Local Climate Action Plans. The Applicant will perform a comprehensive analysis and research of potentially applicable plans, policies, or regulations (e.g., GHG reduction plans and climate action plans) adopted for the purpose of reducing GHG emissions by the jurisdictions the Proposed Project is located within to determine if the Proposed Project would potentially conflict with such plans, policies, or regulations.

5.3.6 References

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5.4 Biological Resources

This section describes the biological resources that may be affected by the Proposed Project.

5.4.1 Environmental Setting

This section describes the vegetation communities, special-status plant and wildlife species, and potentially jurisdictional waters that are present within the proposed alignment and a 650-foot buffer on either side of the proposed alignment (study area).

Methodology

Biological resources potentially occurring within the study area were determined through a literature review as described below. Field surveys had not been conducted at the time of this PEA; however, the Applicant would conduct biological surveys as described in **APM-BIO-1**.

Vegetation Communities

Vegetation community mapping within the study area was conducted through a review of an in-house repository of data and publicly available data, including the following: *Vegetation Map in Support of the Desert Renewable Energy Conservation Plan* (CDFG 2012), vegetation map from the Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP) (County of Riverside 2003), and National Gap Analysis Program (GAP) vegetation mapping (USGS GAP 2013). The GAP analysis data is mapped at the most coarse level; therefore, the other two data sets were used to provide additional information in order to assess habitat.

The vegetation classification between these data sets is somewhat different, but there can be a translation between the classifications that allows a “cross-walk.” Vegetation community classifications used in this report follow the *Manual of California Vegetation* (Sawyer et al. 2009) and were mapped at the macrogroup level. The macrogroup level was selected because that was the level that was consistently provided among all three data sets. Where there was a defined alliance or association available, the community was then cross-walked back to the larger/more generalized macrogroup level within the *Manual of California Vegetation*. Where there was not a defined alliance or association available, literature review of the data sources as well as classifications used in Holland (1986) were cross-referenced in order to place the community into the appropriate macrogroup. Two vegetation communities that were not previously described in the literature, developed and disturbed land and open water, were mapped to accurately describe the vegetation present on site.

Following completion of the data review, all vegetation polygons were combined using ArcGIS and a GIS layer was created. Once in ArcGIS, the acreage of each vegetation community and land cover present on site was determined.

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Special-Status Vegetation Communities

The *List of California Terrestrial Natural Communities* (CDFG 2010) includes a global and state rarity rank based on the NatureServe Standard Heritage Program methodology (NatureServe 2013). The conservation status of a vegetation community is designated by a number from 1 to 5, preceded by a letter reflecting the appropriate geographic scale of the assessment (G = global and S = subnational). The numbers have the following meaning (NatureServe 2013):

- 1 = critically imperiled
- 2 = imperiled
- 3 = vulnerable
- 4 = apparently secure
- 5 = secure.

For example, G1 indicates that a vegetation community is critically imperiled across its entire range (i.e., globally). A rank of S3 would indicate the vegetation community is vulnerable and at moderate risk within a particular state or province, though it may be more secure elsewhere. The *List of California Terrestrial Natural Communities* (CDFG 2010) is considered an authority for ranking the conservation status of vegetation communities in California.

If an alliance has a global ranking of G1, G2, or G3, the vegetation community is considered a high priority for inventory by the California Department of Fish and Wildlife (CDFW; CDFG 2010)¹² and is considered a sensitive vegetation community. Due to the level of detail available in the existing vegetation data, vegetation communities could not be consistently mapped to the alliance level and, therefore, state rarity rank could not be determined.

Special-status communities include those with a ranking of G1, G2, or G3; wetland and riparian communities, communities providing habitat for special-status species, and communities designated as locally important by a local jurisdiction.

¹² The California Department of Fish and Wildlife (CDFW) officially changed its name from the California Department of Fish and Game (CDFG) effective January 1, 2013. In this PEA, references to guidance or documents from the agency before that date refer to CDFG, whereas references after that date refer to CDFW.

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Special-Status Species Literature Review

The following definitions were used when determining special-status species potentially occurring within the study area.

Special-status wildlife include species federally and/or state-listed as endangered or threatened; having state designations such as California Species of Special Concern, Watch List species, Special Animals List species, and Fully Protected species; and other designations such as Western Bat Working Group species. Special-status species also include San Bernardino National Forest designated Management Indicator Species, Sensitive Species, and Watch List species.

Special-status plants include those federally and/or state-listed as endangered or threatened, plants listed as state rare, and those with a California Rare Plant Rank (CRPR) of 1 or 2.

To determine special-status species occurring in the vicinity of the Proposed Project, the following resources were queried within a 5-mile radius of the study area utilizing GIS software: the California Natural Diversity Database (CNDDDB) (CDFW 2014), U.S. Fish and Wildlife Service (USFWS) occurrences and Critical Habitat (USFWS 2014), Desert Renewable Energy Conservation Plan (DRECP) occurrence data (Dudek 2013), DRECP modeled habitat (Dudek 2013a), WRMSHCP occurrence data (Dudek 2000), San Bernardino National Forest occurrence data (Dudek 2012b), and Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) modeled habitat (CVAG 2007). Further, the USFS list of sensitive species (USDA 2006) was reviewed to determine if any of those species have the potential to occur within or adjacent to the study area. A potential to occur for each species was determined based on vegetation communities, elevation data, and knowledge of the area.

Common and scientific names used for wildlife include: Crother (2008) for reptiles and amphibians, American Ornithologists' Union (AOU) (2012) for birds, Wilson and Reeder (2005) for mammals, North American Butterfly Association (NABA) (2001), and Moyle (2002) for fish. Common and scientific names for plant species with a California Rare Plant Rank (formerly California Native Plant Society List) follow the California Native Plant Society (CNPS) On-Line Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2014). For plant species without a California Rare Plant Rank, Latin names follow the Jepson Interchange List of Currently Accepted Names of Native and Naturalized Plants of California (Jepson Flora Project 2013) and common names follow the United States Department of Agriculture (USDA) NRCS Plants Database (USDA 2013).

Jurisdictional Waters

Potentially jurisdictional waters include waters of the United States, waters of the state, and jurisdictional streambeds and lakes, and are defined as follows:

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Waters of the United States, including wetlands, are defined in the Code of Federal Regulations (33 CFR 328.3(a)) and are regulated by the ACOE pursuant to Section 404 of the Clean Water Act (CWA).

Waters of the state are defined under the California Water Code as “any surface water or groundwater, including saline waters, within the boundaries of the state” (Section 13050(e)) and are regulated by the RWQCB or SWRCB pursuant to Section 401 of the federal CWA and the Porter-Cologne Water Quality Control Act (Porter-Cologne Act).

Jurisdictional streambeds and lakes are those regulated by the CDFW. Pursuant to Section 1602 of the Fish and Game Code, the CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. In 14 CCR 1.72, CDFW defines a “stream” (including creeks and rivers) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.” In 14 CCR 1.56, CDFW’s definition of “lake” includes “natural lakes or man-made reservoirs.” Diversion, obstruction, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife requires authorization from CDFW by means of entering into an agreement pursuant to Section 1602 of the Fish and Game Code.

The potential for jurisdictional waters was determined through a review of aerial photographs (Google Earth 2014), U.S. Geological Survey (USGS) topographic quadrangles (USGS 2014), USFWS National Wetlands Inventory GIS Data (USFWS 2013), and USGS National Hydrography Dataset (NHD) (USGS 2013). For purposes of this assessment, it was assumed that all surface waters within the study area flow to a Traditional Navigable Water (TNW) and are waters of the United States as described in the June 2007 ACOE and EPA guidance (ACOE/EPA Rapanos Guidance) on the geographic extent of jurisdiction under the federal CWA, based on the U.S. Supreme Court’s interpretation of the CWA in *Rapanos v. United States* and *Carabell v. Army Corps of Engineers*, 126 S. Ct. 2208 (Rapanos v. United States 2006).

This assessment identified potentially jurisdictional waters based on available data. It is common for jurisdictional waters, including drainages, streams, and wetlands, to be present that are not mapped in available data. An accurate mapping and quantification of all jurisdictional waters potentially impacted by the Proposed Project would be completed by the Applicant as described in **APM-BIO-1**.

Physiographic Background

The proposed alignment traverses a range of ecoregions, each with a unique climate, topography, and vegetation composition. The alignment begins at the northwest end within the southern Mojave Desert, referred to as the high desert, then continues south through the mountainous San Bernardino National Forest (between the San Gabriel and San Bernardino Mountains), continues through the San Bernardino Valley, then the San Bernardino Mountains of western Riverside County, and terminates in the Sonoran

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Desert (low desert). Descriptions of the ecoregions through which the alignment passes are described below as provided in the Jepson Manual (Baldwin et. al., 2012):

Mojave Desert Region (DMoj): The Mojave Desert Region occupies the northern two-thirds of the Desert Province and exhibits greater temperature ranges and more extreme elevation relief than the Sonoran Desert, also known as the Colorado Desert, to the south. Joshua tree (*Yucca brevifolia*) and Mojave yucca (*Yucca schidigera*) are conspicuous, widespread members of the Mojave Desert that are absent from the Sonoran Desert.

San Gabriel Mountains (SnGb): The San Gabriel Mountains are a topographically well-defined mountain range situated northeast of Los Angeles. This mountain range is bounded by the Desert Province to the north and northeast, the Western Transverse Ranges to the northwest and west, the South Coast to the south, and the San Bernardino Mountains District to the east. The San Gabriel Mountains eco-region is separated from the San Bernardino Mountains by the northwest-southeast oriented Cajon Canyon, which is occupied by Highway 138 and I-15. Mount San Antonio (“Old Baldy”), straddling the Los Angeles-San Bernardino county line at 10,073 feet, is the highest point in the San Gabriel Mountains. The San Gabriel Mountains supports alpine taxa near its summit.

South Coast Subregion (SCo): The South Coast Subregion extends along the Pacific Coast, from Point Conception of the Central Coast to Central Western California to Mexico. It is hotter and drier than the other coastal ecoregions and extends to the San Geronio Pass at Banning, which marks the boundary with the Desert Province. Coastal-sage scrub and chaparral vegetation predominated in the South Coast Subregion before urbanization.

Sonoran Desert Region (DSon): The Sonoran Desert, also known as the Colorado Desert, is situated south of the Mojave Desert and occupies the southern one-third of the Desert Province. The physiographic line separating the two desert regions is not always clear, but overall the Sonoran Desert is lower, warmer, and somewhat distinct floristically. Conspicuous members of the flora in the Sonoran Desert that are absent from the Mojave Desert (or confined to the southeastern limits of the Mojave Desert) include the blue palo verde (*Parkinsonia florida*), ocotillo (*Fouquieria splendens*), chuparosa (*Justicia californica*), and ironwood (*Olneya tesota*).

The proposed alignment is depicted in seven discrete segments on Figure 3-1. General geographic information is provided for each segment in Table 5.4-1, Physiographic Setting.

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**Table 5.4-1
Physiographic Setting**

Segment	USGS Quads	Approximate Elevation (feet above mean sea level)		Eco-region	Major Geographic Features	Major Waterbodies
		low	high			
1	Adelanto Baldy Mesa	2,960	4,200	DMoj	Mojave Desert Baldy Mesa	California Aqueduct Manzanita Wash Oro Grande Wash
2	San Bernardino North	2,600	4,200	DMoj SnGb	San Bernardino National Forest Cajon Pass	(unnamed streams)
3	Cajon Devore San Bernardino North San Bernardino South	1,000	2,600	SnGb SCo	San Bernardino Valley	Cajon Wash Cable Creek East Twin Creek City Creek Gage Canal Warm Creek Santa Ana River San Timoteo Wash
4	San Bernardino South Redlands Sunnymead	1,300	2,400	SCo	Reche Canyon	Reche Canyon
5	El Casco Beaumont	1,560	2,600	SCo	Badlands	(unnamed ephemeral streams)
6	Beaumont	2,360	2,640	SCo	San Gorgonio Pass	Potrero Creek Smith Creek Montgomery Creek
7	Beaumont Cabazon Whitewater Desert Hot Springs	1,140	2,360	SCo DSon	San Gorgonio Pass Morongo Indian Reservation	Smith Creek San Gorgonio River Millard Creek Colorado River Aqueduct Whitewater River

Vegetation Communities and Land Covers

Thirteen land cover types were identified within the study area, including ten native vegetation communities. A summary of land cover acreages is provided by Segment in Table 5.4-2 and their spatial distributions are presented on Figure 5.4-1.

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**Table 5.4-2
Summary of Land Covers within the Study Area**

Land Cover ¹	Acreage							Total
	Segment 1	Segment 2	Segment 3	Segment 4	Segment 5	Segment 6	Segment 7	
<i>Native Vegetation Communities</i>								
California Annual and Perennial Grassland	--	0.2	--	354.8	77.2	310.7	374.7	1,117.6
California Chaparral	21.9	1,341.4	503.1	387.2	590.3	3.4	--	12,847.30
California Coastal Scrub	8.31	195.5	950.02	250.6	406.5	10.6	135.6	1,957.13
Cool Semi-desert wash and disturbance scrub	207.3	--	--	--	--	--	--	207.3
Intermountain Basins Pinyon-Juniper Woodland	14.9	--	--	--	--	--	--	14.9
Inter-Mountain Dry Shrubland and Grassland	266.9	--	--	--	--	--	--	266.9
Mojavean – Sonoran Desert Scrub	804.1	--	--	--	--	--	1,949.2	2,753.3
Southwestern North American Riparian, Flooded, and Swamp Forest	--	--	--	1.3	2.4	--	--	3.7
Warm Interior Chaparral	252.3	55.5	--	--	--	--	--	307.8
Western North America Tall Sage Shrubland and Steppe	14.3	--	--	--	--	--	--	14.3
<i>Other Land Cover Types</i>								
Agriculture	5.04	--	10.0	630.0	395.8	219.4	28.1	1,288.3
Developed and Disturbed Land	393.5	8.3	2,599.6	622.4	31.8	300.0	305.0	4,260.6
Open Water	6.9	--	--	--	--	--	2.9	9.8
Total	1,995.4	1,600.8	4,062.7	2,246.3	1,504.0	844.1	2,795.4	15,048.7

¹ Total does not sum due to rounding.

Special-Status Vegetation Communities

Based on the data available for vegetation communities within the study area, vegetation communities could not be determined at an alliance or association level as required to determine a special-status community. A representative list of special-status communities expected to occur in the study area is provided below. A complete list of all special-status vegetation communities will be compiled as part of the vegetation community mapping described in **APM-BIO-1**. The following vegetation communities are an example of special-status vegetation communities expected to occur within the study area:

- Joshua tree woodland (*Yucca brevifolia*) has a G4S3 ranking and is known to occur within the DRECP mapping area overlapping Segment 1.

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- Riparian, wetlands and/or wash communities also occur throughout the study area and may fall under the jurisdiction of the ACOE and/or the CDFW (e.g., alliances or associations under the macrogroup “Southwestern North American Riparian, Flooded, and Swamp Forest”). Therefore, although a community may not be considered a high priority for inventory per CDFW (CDFG 2010), it may be included as a special-status community based on the potential to support waters or wetlands.
- Open water is not a vegetation community; therefore, it is not included in the *List of California Terrestrial Natural Communities*. However, this land cover is usually a non-wetland waters of the United States and/or waters of the state and as such is considered a special-status resource.
- Riversidean sage scrub is known to occur within the study area. This has been cross-walked to the macrogroup “California Coastal Scrub.” Some alliances and associations under this macrogroup are not considered a high priority for inventory per CDFW (CDFG 2010); however, because this community is the obligate habitat type for the federally listed threatened California gnatcatcher (*Polioptila californica californica*) within their elevation range, it is considered a special-status vegetation community.

Special-Status Species

Appendix B provides a table of all special-status species identified in the literature review whose geographic ranges fall within the general Proposed Project vicinity. Species potentially occurring based on habitat relationships are identified as having a moderate or high potential to occur, and species for which there is little or no suitable habitat are identified as not expected to occur or having low potential to occur. Species with a high or moderate potential to occur are summarized below.

Listed Species

The proposed alignment overlaps USFWS designated Critical Habitat for 6 species. Additionally species habitat modeled by the DRECP and the CVMSHCP overlaps the alignment for some listed species. Table 5.4-3 summarizes the acreage of Critical Habitat and modeled habitat within the study area (see Figure 5.4-2).

**Table 5.4-3
Mapped Habitat within the Study Area for Listed Species**

Species Name (Scientific Name)	Status (Federal/ State/ SBNF or CRPR)	Critical Habitat (acres)	DRECP Modeled Habitat (acres)	CVMSHCP Modeled Habitat (acres)
Arroyo toad (<i>Anaxyrus californicus</i>)	FE/SSC/ Y	493	--	--
California condor <i>Gymnogyps californianus</i>	FE/SE/ N-H	--	808	--

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**Table 5.4-3
Mapped Habitat within the Study Area for Listed Species**

Species Name (Scientific Name)	Status (Federal/ State/ SBNF or CRPR)	Critical Habitat (acres)	DRECP Modeled Habitat (acres)	CVMSHCP Modeled Habitat (acres)
Coachella Valley milkvetch <i>(Astragalus lentiginosus var. coachellae)</i>	FE/None/1B.2	14	--	35
Coastal California gnatcatcher <i>Polioptila californica californica</i>	FT/SSC/ Y-P	436	--	--
Desert tortoise <i>Gopherus agassizii</i>	FT/ST/ Y-P	--	1,063	138
Least Bell's vireo <i>Vireo bellii pusillus</i>	FE/SE/ Y	--	1,564	--
Mohave ground squirrel <i>Xerospermophilus mohavensis</i>	None/ST/ N	--	497	--
Mojave tarplant <i>(Deinandra mohavensis)</i>	None/SE/1B.3	--	518	710
San Bernardino kangaroo rat <i>Dipodomys merriami parvus</i>	FE/SSC/ Y	754	--	--
Santa Ana sucker <i>Catostomus santaanae</i>	FT/ SSC/ N	21	--	--
Southwestern willow flycatcher <i>Empidonax traillii extimus</i>	FE/SE/ Y	12	1,101	--
Swainson's hawk <i>Buteo swainsoni</i>	None/ST/ N	--	2,121	--
Triple ribbed milkvetch <i>(Astragalus tricarinatus)</i>	FE/None/1B.2	--	--	17
Yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	FC/SE/ Y-P	--	460	--

Status Codes

Federal Status:

FC = Federal Candidate for Listing
FE = Federally Endangered
FT = Federally Threatened

SBNF Front Country District Occurrence Information:

No = Outside known distribution/range of the species or not included on SBNF special-status species list
No-U = Occurrence of the species is unlikely based on habitat present.
No-H = Part of the historical range but the species has been extirpated.
Yes = Species is known to occur.

CRPR Status:

CRPR 1A: Plants presumed extinct in California
CRPR List 1B: Plants rare, threatened, or endangered in California and elsewhere
CRPR List 2: Plants rare, threatened, or endangered in California but more common elsewhere
.1 Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)
.2 Fairly endangered in California (20% to 80% of occurrences threatened)
SBNF = San Bernardino National Forest; CRPR = California Rare Plant Rank

State Status:

SE = State-listed as Endangered
ST = State-listed as Threatened
FP = California Department of Fish and Wildlife Fully Protected Species

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In addition to the species in Table 5.4-3, the following listed species also have the potential to occur within the study area:

- Wildlife:** Swainson’s hawk (ST), Stephens’ kangaroo rat (*Dipodomys stephensi*) (FE/ST), Peninsular bighorn sheep (*Ovis canadensis nelson*) (FE/ST, FP), unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*) (FE/SE, FP), Riverside fairy shrimp (*Streptocephalus woottoni*) (FE),
- Plants:** bird-foot checkerbloom (*Sidalcea pedata*) (FE, SE), Braunton’s milk-vetch (*Astragalus brauntonii*) (FE), California dandelion (*Taraxacum californicum*) (FE), California Orcutt grass (*Orcuttia californica*)(FE, SE), Gambel’s water cress (*Nasturtium gambelii*) (FE, ST), Nevin’s barberry (*Berberis nevinii*) (FE, SE), San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*) (FE), Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorum*) (FE, SE), slender-horned spineflower (*Dodecahema leptoceras*) (FE, SE), salt marsh bird’s-beak (*Chloropyron maritimum* ssp. *maritimum*) (FE, SE), San Bernardino blue grass (*Poa atropurpurea*) (FE), spreading navarretia (*Navarretia fossalis*) (FT), thread-leaved brodiaea (*Brodiaea filifolia*) (FT, SE).

Non-Listed Special-Status Species

Modeled habitat for non-listed special-status species overlaps the study area and is summarized in Table 5.4-4.

**Table 5.4-4
Mapped Habitat within the Study Area for Non-Listed Special-Status Wildlife Species**

Species Name (Scientific Name)	Status (Federal/ State/ SBNF or CRPR)	DRECP Modeled Habitat (acres)	CVMSHCP Modeled Habitat (acres)
Nelson’s bighorn sheep <i>Ovis canadensis nelsoni</i>	None/None/Y	289	—
Burrowing owl <i>Athene cucularia</i>	None/SSC/None/Y	10,364	—
Coachella Valley Jerusalem cricket <i>Stenopelmatus cahuilaensis</i>	None/None/ N	—	26
LeConte’s thrasher <i>Toxostoma lecontei</i>	None/SSC/ Y	—	189
Pallid bat <i>Antrozous pallidus</i>	None/ SSC/ N	1,520	—
Palm Springs ground squirrel <i>Xerospermophilus tereticaudus</i>	None/SSC/N	—	56

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**Table 5.4-4
Mapped Habitat within the Study Area for Non-Listed Special-Status Wildlife Species**

Species Name (Scientific Name)	Status (Federal/ State/ SBNF or CRPR)	DRECP Modeled Habitat (acres)	CVMSHCP Modeled Habitat (acres)
Palm Springs pocket mouse <i>Perognathus longimembris bangsi</i>	None/SSC/N	—	108
Parish's phacelia <i>Phacelia parishii</i>	None/None/1B.1	—	303
Summer tanager <i>Piranga rubra</i>	None/SSC/ Y	—	2
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	None/SSC/ U	1,220	—
Yellow-breasted chat <i>Icteria virens</i>	None/SSC/ Y	—	2
Yellow warbler <i>Setophaga petechial</i> [= <i>Dendroica petechia brewsteri</i>]	None/SSC/ Y	—	—

Status Codes

Federal Status:

FC = Federal Candidate for Listing
FE = Federally Endangered
FT = Federally Threatened
FSC = Federal Species of Concern

State Status:

SE = State-listed as Endangered
ST = State-listed as Threatened
FP = California Department of Fish and Wildlife Fully Protected Species

SBNF Front Country District Occurrence Information:

No = Outside known distribution/range of the species or not included on SBNF special-status species list

No-U = Occurrence of the species is unlikely based on habitat present.

No-H = Part of the historical range but the species has been extirpated.

Yes = Species is known to occur.

Yes-P = Occurrence of the species is possible; suitable habitat exists.

Yes-L = Occurrence of the species is likely; suitable habitat exists and the species is known from nearby locations.

U=Unknown

* These are USFS-derived designations for the entire Front Country District and may not represent the habitats or elevations represented by this project.
SBNF = San Bernardino National Forest; CRPR = California Rare Plant Rank; DRECP = Desert Renewable Energy Conservation Plan; CVMSHCP = Coachella Valley Multiple Species Habitat Conservation Plan

In addition to the species in Table 5.4-4, the following special-status wildlife species have a high or moderate potential to occur within the study area:

Fish: Santa Ana speckled dace (*Rhinichthys osculus* ssp.)

Amphibians: Western spadefoot (*Spea hammondi*), coast range newt (*Taricha torosa torosa*)

Reptiles: Silvery legless lizard (*Anniella pulchra pulchra*), Belding's orange-throated whiptail (*Aspidoscelis hyperythrus beldingi*), northern red diamond rattlesnake (*Crotalus ruber ruber*), San Bernardino ringneck snake (*Diadophis punctatus modestus*), coastal rosy boa (*Lichanura trivirgata rosafusca*), San Diego horned lizard (*Phrynosoma coronatum blainvillii*), coast patch-nosed snake (*Salvadora hexalepis virgultea*)

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Raptors: Cooper’s hawk (*Accipiter cooperii*), golden eagle (*Aquila chrysaetos*), long-eared owl (*Asio otus*), ferruginous hawk (*Buteo regalis*), northern harrier (*Circus cyaneus*), white-tailed kite (*Elanus leucurus*), merlin (*Falco columbarius*), prairie falcon (*Falco mexicanus*), American peregrine falcon (*Falco peregrinus anatum*)

Other Birds: Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) grasshopper sparrow (*Ammodramus savannarum*), California horned lark (*Eremophila alpestris actia*), western least bittern (*Ixobrychus exilis hesperis*), loggerhead shrike (*Lanius ludovicianus*), purple martin (*Progne subis*)

Bats: Pallid bat (*Antrozous pallidus*), western red bat (*Lasiurus blossevillii*), western yellow bat (*Lasiurus xanthinus*), California leaf-nosed bat (*Macrotus californicus*)

Other mammals: Dulzura pocket mouse (*Chaetodipus californicus femoralis*), San Diego pocket mouse (*Chaetodipus fallax fallax*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), San Diego desert woodrat (*Neotoma lepida intermedia*), southern grasshopper mouse (*Onychomys torridus ramona*), Los Angeles pocket mouse (*Perognathus longimembris brevinasus*), American badger (*Taxidea taxus*).

Table 5.4-5 summarizes the special-status plant species potentially occurring within the study area.

**Table 5.4-5
Non-Listed Special-Status Plant Species Potentially Occurring within the Study Area**

Non-Listed Special-Status Species	Status Blooming Period
Bear Valley checkerbloom	CRPR 1B.2; May-Aug
Beaver dam breadroot (<i>Pediomelum castoreum</i>)	CRPR 1B; April-May
Black bog-rush (<i>Schoenus nigricans</i>)	CRPR 2B.2; Aug-Sept
Bristly sedge (<i>Carex comosa</i>)	CRPR 2.3; May-Sept
California satintail (<i>Imperata brevifolia</i>)	CRPR 2.3; Sept-May
Chaparral sand-verbena (<i>Abronia villosa</i> var. <i>aurita</i>)	CRPR 1B.1; Jan-Sept
Cliff spurge (<i>Euphorbia misera</i>)	CRPR 2.3; Dec-Aug
Coulter's goldfields (<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>)	CRPR 1B.1, WRMSHCP; Feb-Jun
Coulter's saltbush (<i>Atriplex coulteri</i>)	CRPR 1B.2; Mar-Oct
Davidson's saltscale (<i>Atriplex serenana</i> var. <i>davidsonii</i>)	CRPR 1B.2; Apr-Oct
Desert beardtongue (<i>Penstemon pseudospectabilis</i> ssp. <i>pseudospectabilis</i>)	CRPR 2.3; Jan-May
Desert spike-moss (<i>Selaginella eremophila</i>)	CRPR 2.3 ; Jun-Jul
Horn's milk-vetch (<i>Astragalus hornii</i> var. <i>hornii</i>)	CRPR 1B.1; May-Oct
Hot springs fimbriatylis (<i>Fimbristylis thermalis</i>)	CRPR 2B.2; Jul-Sep
Jaeger's bush milk-vetch (<i>Astragalus pachypus</i> var. <i>jaegeri</i>)	CRPR 1B.1; Dec-Jun
Lemon lily (<i>Lilium parryi</i>)	CRPR 1B.2; Jul-Aug
Little San Bernardino Mtns. Linanthus (<i>Linanthus maculatus</i>)	1B.2; CVMSHCP; Mar-May
Los Angeles sunflower (<i>Helianthus nuttallii</i> ssp. <i>parishii</i>)	CRPR 1A; Aug-Oct
Mesa horkelia (<i>Horkelia cuneata</i> var. <i>puberula</i>)	CRPR 1B.1 Feb-Jul

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**Table 5.4-5
Non-Listed Special-Status Plant Species Potentially Occurring within the Study Area**

Non-Listed Special-Status Species	Status Blooming Period
Mojave milkweed (<i>Asclepias nyctaginifolia</i>)	CRPR 2.3; May–Jun
Mud nama (<i>Nama stenocarpum</i>)	2.3; WRMSHCP; Jan–Jul
Palmer's mariposa lily (<i>Calochortus palmeri</i> var. <i>palmeri</i>)	CRPR 2.3; Apr–Jul
Parish's alumroot (<i>Heuchera parishii</i>)	CRPR 1B.3; Jun–Aug
Parish's desert-thorn (<i>Lycium parishii</i>)	CRPR 2.3; Mar–Apr
Parish's gooseberry (<i>Ribes divaricatum</i> var. <i>parishii</i>)	CRPR 1A; Feb–Apr
Parish's yampah (<i>Perideridia parishii</i> ssp. <i>parishii</i>)	CRPR 2B.2; Jun–Aug
Parry's spineflower (<i>Chorizanthe parryi</i> var. <i>parryi</i>)	CRPR 1B.1, WRMSHCP; Apr–Jun
Prairie wedge grass (<i>Sphenopholis obtusata</i>)	CRPR 2.3; Apr–Jul
Pringle's monardella (<i>Monardella pringlei</i>)	CRPR 1A; May–Jun
Round-leaved filaree (<i>California macrophylla</i>)	CRPR 1B.1, WRMSHCP; Mar–May
San Bernardino aster (<i>Symphotrichum defoliatum</i>)	CRPR 1B.2; Jul–Nov
San Jacinto mariposa lily (<i>Calochortus palmeri</i> var. <i>munzii</i>)	CRPR 1B.2; May–July
Sagebrush loeflingia (<i>Loeflingia squarrosa</i> var. <i>artemisiarum</i>)	CRPR 2.3; April–May
Salt spring checkerbloom (<i>Sidalcea neomexicana</i>)	CRPR 2.3; Mar–Jun
San Antonio milk-vetch (<i>Astragalus lentiginosus</i> var. <i>antonius</i>)	CRPR 1B.3; Apr–Jul
Shaggy-haired alumroot (<i>Heuchera hirsutissima</i>)	CRPR 1B.3; Jun–Jul
Short-joint beavertail (<i>Opuntia basilaris</i> var. <i>brachyclada</i>)	CRPR 1B; April–June
Singlewhorl burrobrush (<i>Ambrosia monogyra</i>)	CRPR 2.3; Aug–Nov
Slender cottonheads (<i>Nemacaulis denudata</i> var. <i>gracilis</i>)	CRPR 2.3; Apr–May
Smooth tarplant (<i>Centromadia pungens</i> ssp. <i>laevis</i>)	CRPR 1B.1, WRMSHCP; Apr–Sept
Sonoran maiden fern (<i>Thelypteris puberula</i> var. <i>sonorensis</i>)	CRPR 2B.2; Jan–Sep
Spiny-hair blazing star (<i>Mentzelia tricuspis</i>)	CRPR 2.3; Mar–May
White-bracted spineflower (<i>Chorizanthe xanti</i> var. <i>leucotheca</i>)	CRPR 1B.2; Apr–Jun
Wright's trichocoronis (<i>Trichocoronis wrightii</i> var. <i>wrightii</i>)	CRPR 2.3; WRMSHCP; May–Sept
Yucaipa onion (<i>Allium marvinii</i>)	CRPR 1B.1, WRMSHCP; Apr–May

Status Code

CRPR 1A: Plants presumed extinct in California

CRPR List 1B: Plants rare, threatened, or endangered in California and elsewhere

CRPR List 2: Plants rare, threatened, or endangered in California but more common elsewhere

.1 Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)

.2 Fairly endangered in California (20% to 80% of occurrences threatened)

.3 Not very endangered in California (less than 20% of occurrences threatened or no current threats known).

WRMSHCP: Covered by the WRMSHCP

Potential Jurisdictional Waters

Waterbodies identified in the literature review that may be jurisdictional waters are summarized below by watershed.

Mojave River Watershed

The northernmost portion of the proposed alignment is located in the Mojave River Watershed, which encompasses approximately 4,500 square miles (County of San Bernardino, 2014). The Mojave River, which travels approximately 110 miles northeast from its headwaters in the San Bernardino Mountains

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to its terminus near Soda Lake (County of San Bernardino, 2014), is the dominant surface hydrologic feature in the watershed. The Mojave River is a water of the United States under the jurisdiction of the ACOE and RWQCB. Surface flows in the high desert are to the northeast, ultimately flowing to the Mojave River. All tributaries to the Mojave River are presumed to be waters of the United States under the jurisdiction of the ACOE and RWQCB as well as streambeds under the jurisdiction of CDFW. Within Segment 1, there are two named systems, Manzanita Wash and Oro Grande Wash, as well as 7 unnamed streams mapped by NHD that are tributary to the Mojave River. Based on a review of Google Earth imagery, there are additional unnamed streams within Segment 1 not mapped by NHD which likely meet the criteria for jurisdictional waters.

Ephemeral streams in the high desert region are typically shallow braided, ephemeral washes. Due to the flashy nature of storm events in the desert regions, streams are often unvegetated as a result of scouring from large storm events. There are no desert riparian vegetation communities or wetlands mapped within Segment 1. It is unlikely that jurisdictional wetlands occur within Segment 1.

Santa Ana River Watershed

South of the Mojave Watershed, the proposed alignment travels through the Santa Ana River Watershed, encompassing portions of Segments 2 and 3. The Santa Ana River Watershed is approximately 1,946 square miles and is drained by the Santa Ana River and its tributaries. The Santa Ana River begins in the San Bernardino Mountains and travels approximately 75 miles southwest to the Pacific Ocean (OCWD 2014). The Santa Ana River is a Relatively Permanent Water flowing to the Pacific Ocean, a TNW, and is a water of the United States. Therefore, tributaries to the Santa Ana River are presumed to be waters of the United States under the jurisdiction of the ACOE and RWQCB as well as streambeds under the jurisdiction of CDFW. Streams within the Santa Ana River watershed vary from unvegetated ephemeral drainages to large, braided alluvial washes (such as Cajon Wash and portions of the Santa Ana River), to riparian systems with well-defined bed and banks (portions of City Creek and Santa Ana River). Within the Santa Ana River watershed there are also maintained flood control facilities with engineered beds and slopes of varying materials (combinations of earthen, concrete, riprap). Potentially jurisdictional waters in the study area within the Santa Ana River watershed are summarized by segment below.

Segment 2: Segment 2 crosses the San Bernardino National Forest which is characterized by steep slopes and canyons with ephemeral drainages in the canyons resulting in 19 unnamed waterbody crossings in this portion of the study area. The main drainage in this area is Cajon Wash, a broad, braided, ephemeral wash. This portion of the study area is generally comprised of upland vegetation including interior live oak (*Quercus wislizeni*), chaparral scrub oak (*Quercus john-tuckeri*) chaparral, Riversidian sage scrub, and annual grassland. Jurisdictional wetlands are expected to be limited; however, 2.2 acres of freshwater forested/shrub wetland is mapped by the National Wetlands Inventory

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at the southern end of the study area (Mile Post 22) where a wash flowing southwest through Lone Pine Canyon converges with Cajon Wash.

Segment 3: Cajon Wash continues to be the main drainage feature in the northern portion of Segment 3. The alignment moves away from Cajon Wash as it progresses into the San Bernardino Valley. In this more developed area, the waterbody crossings are confined, maintained systems including Twin Creek, City Creek, and Warm Creek. There are a total of 8 named waterbody crossings within Segment 3 (see Table 5.4-6), as well as 32 unnamed waterbody crossings. In addition to these waterbody crossings, the NHD depicts 6 lakes/ponds and 3 reservoirs which would be under the jurisdiction of CDFW as lakes and the RWQCB as isolated waters of the state. Although there is no riparian vegetation mapped within this portion of the study area, this does not preclude the possibility for riparian and/or wetland vegetation to be present. Riparian woodland and forest as well as emergent wetland habitat is well documented within the Santa Ana River watershed and may be present within the study area.

Segment 4: South of the Santa Ana River, the alignment enters Riverside County and follows Reche Canyon through the Box Springs Mountains. Reche Canyon Creek, a primarily unvegetated braided ephemeral wash, also follows the Canyon and occurs adjacent to the alignment. The alignment crosses Reche Canyon Creek in several locations as well as tributaries to Reche Canyon Creek, for a total of 22 waterbody crossings. There is no riparian vegetation or wetlands mapped within this portion of the study area; although, there is some potential for riparian scrub to occur along Reche Canyon Creek. There are two springs/seeps mapped by NHD adjacent to Reche Canyon Creek, one northwest of Mile Post 53 and one southwest of Mile Post 54. Springs/seeps may support wetland vegetation and may be wetland waters of the United States if they meet adjacency criteria.

Western Riverside County is known to support vernal pool habitat; however, there are no soils typically associated with vernal pools as described by the WRMSHCP (i.e., Willow/Travers/Dominos) mapped within this portion of the study area (USDA NRCS, 2013). There are also no clay soils mapped in this area; however, there are loam soils present which contain clay inclusions; therefore, the potential for vernal pools cannot be completely ruled out solely based on an analysis of soils.

San Jacinto Valley Watershed

South of the Santa Ana River Watershed, the proposed alignment crosses the northern portion of the San Jacinto Valley Watershed, which encompasses an area of approximately 766 square miles. This watershed is drained by the San Jacinto River and its tributaries, with drainage ultimately arriving at Lake Elsinore. Lake Elsinore has been designated a TNW and is a waters of the United States under the jurisdiction of the ACOE and RWQCB; therefore, tributaries to the San Jacinto River are assumed to be waters of the United States as well as jurisdictional streambeds.

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Segment 4: The alignment continues through Reche Canyon, crossing 8 unnamed ephemeral drainages, and then enters into a developed area (agriculture, rural residential, and single family residential) where it crosses 4 unnamed ephemeral drainages. Although there are no mapped wetlands, there are approximately 1.3 acres of riparian scrub approximately half way between Mile Posts 57 and 58 within a drainage located adjacent to residential development that appears to be receiving urban runoff. There is also a spring/seep mapped northwest of Mile Post 56 within Reche Canyon. The potential for vernal pools is similar as discussed above for Segment 4.

Segment 5: Segment 5 crosses the Badlands, a northwest to southeast trending mountain range comprised of steep hills and canyons with ephemeral drainages in the canyons. The alignment crosses 23 ephemeral drainages in this portion of the alignment. There are no wetlands or riparian habitat mapped in this portion of the study area.

Segment 6: The western portion of Segment 6 exits the Badlands and enters a developed region where there are two waterbody crossings: Potrero Creek and an unnamed ephemeral drainage. Potrero Creek appears to be an intermittent feature supported by urban runoff and supporting riparian woodland.

Whitewater Watershed

The eastern portion of the proposed alignment crosses the Whitewater Watershed, which covers an area of approximately 1,854 square miles. The San Gorgonio Pass divides the San Jacinto Valley Watershed to the west and the Whitewater River Watershed to the east. The Whitewater River is a major hydrologic feature of this watershed. The river has its headwaters in the San Gorgonio Mountains and terminates in the Salton Sea. The Salton Sea is a TNW under the jurisdiction of the ACOE and the Whitewater River has been accepted as a waters of the United States. Therefore, tributaries to the Whitewater River are assumed to be waters of the United States under the jurisdiction of the ACOE and RWQCB as well as streambeds under the jurisdiction of CDFW.

In the western portion of the watershed, within Segment 6, waterbody crossings consist of ephemeral desert drainages and washes. The alignment crosses two named streams in this portion, Smith Creek and Montgomery Creek, as well as one large unnamed stream. Montgomery Creek is relatively confined with portions of wooded vegetation adjacent to the drainage course. Smith creek is a large, braided, primarily unvegetated desert wash system and the unnamed stream is a smaller unvegetated desert wash. As the alignment progresses east into the Sonoran desert, the proposed alignment crosses the San Gorgonio River, the Whitewater River, and the Colorado River Aqueduct. Surface flows in this portion of the alignment are characterized by alluvial fans where streams flow through the canyons of the surrounding mountains and spread out onto the desert floor.

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Table 5.4-6 summarizes potentially jurisdictional waters within the study area identified during the literature review. A comprehensive quantification of jurisdictional waters occurring within the study area will be provided as described in **APM-BIO-1**.

**Table 5.4-6
Potentially Jurisdictional Waters within the Study Area**

Segment	Watershed ^a	Waters of the U.S. ^b (ACOE/RWQCB/CDFW)	Potential Wetlands ^c (ACOE/RWQCB/CDFW)	Waters of the State ² (RWQCB/CDFW)
1	Mojave River	California Aqueduct Manzanita Wash Oro Grande Wash 6 unnamed waterbody crossings	None	None
2	Mojave River	1 unnamed waterbody crossing	None	None
	Santa Ana River	19 unnamed waterbody crossings	Freshwater Forested/Shrub Wetland: 2.2 acres	Reservoir: 0.6 acres
3	Santa Ana River	Cajon Wash- Perennial Cable Creek East Twin Creek City Creek - Intermittent Gage Canal Warm Creek Santa Ana River San Timoteo Wash 32 unnamed waterbody crossings	None	6 lakes/ponds: 16 acres 3 reservoirs: 0.8 acres
4	Santa Ana River (Riverside County)	22 unnamed waterbody crossings	None (low potential for vernal pools)	2 springs/seeps
	San Jacinto Valley (Riverside County)	12 unnamed waterbody crossings	None (low potential for vernal pools)	1 Lake/Pond: 0.6 acres 1 spring/seep Riparian scrub: 1.3 acres
5	San Jacinto Valley (Riverside County)	23 unnamed waterbody crossings	None (low potential for vernal pools)	None
6	San Jacinto Valley	Potrero Creek 1 unnamed waterbody crossing	None	None
	Whitewater	Smith Creek Montgomery Creek 3 unnamed waterbody crossings	Riverine wetland: 10.2 acres	
7	Whitewater	Smith Creek San Gorgonio River Millard Creek Colorado River Aqueduct Whitewater River 36 unnamed waterbody crossings	Riverine wetland: 48.7 acres Freshwater Pond: 5.9 acres	Lake/Pond: 7.5 acres

^a State Water Resources Control Board Hydrologic Unit

^b This summarizes areas mapped by NHD. Although these areas frequently meet the criteria for jurisdictional waters, there may be additional jurisdictional waters present that are not mapped by NHD.

^c This summarizes areas mapped as a National Wetlands Inventory by the National Wetlands Inventory and may not necessarily meet the criteria for an ACOE wetland. There may also be areas not mapped by the National Wetlands Inventory that meet the criteria for wetlands.

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Existing Regional Habitat Conservation Plans

The Proposed Project passes through lands that are covered by three regional habitat conservation plans (HCPs): the WRMSHCP, the CVMSHCP, and the Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP). Demonstration of consistency with these HCPs is one of several options for which incidental take of special-status species may be obtained by a project proponent. These HCPs are briefly mentioned again below in Section 5.4.2 Regulatory Setting.

Western Riverside Multiple Species Habitat Conservation Plan

A portion of the Proposed Project, approximately 172,650 linear feet, is located within the boundaries of the WRMSHCP, a comprehensive, multi-jurisdictional HCP focusing on conservation of species and their associated habitats in Western Riverside County. The WRMSHCP allows Riverside County and its cities to better control local land-use decisions and maintain a strong economic climate in the region while addressing the requirements of the state and federal Endangered Species Acts.

The WRMSHCP serves as a HCP pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act of 1973, as well as a Natural Communities Conservation Plan (NCCP) under the NCCP Act of 2001. The ultimate goal of the WRMSHCP is to conserve approximately 500,000 acres and protect 146 plant and animal species and their habitats within 1.26 million acre plan area. The WRMSHCP received its federal permit and California state permit in June 2004. Under the WRMSHCP, the USFWS and CDFW have granted take authorization for otherwise lawful actions, such as public and private development that may incidentally take or harm individual species or their habitat outside of the WRMSHCP conservation area, in exchange for the assembly and management of a coordinated WRMSHCP conservation area. The WRMSHCP is implemented by the Western Riverside County Regional Conservation Authority.

The WRMSHCP is a criteria-based plan and does not rely on a hardline preserve map. Instead, the WRMSHCP reserve is being assembled over time from a smaller subset of the Plan Area referred to as the Criteria Area. The Criteria Area consists of Criteria Cells (Cells) or Cell Groupings, and flexible guidelines (Criteria) for the assembly of conservation within the Cells or Cell Groupings. Cells and Cell Groupings also may be included within larger units known as Cores, Linkages, or Non-Contiguous Habitat Blocks (conservation areas). The WRMSHCP Plan Area is divided into Area Plans, each with unique resources and conservation goals. The Proposed Project passes through the Reche Canyon/Badlands Area Plan and The Pass Area Plan. The conservation areas for each of these are described below.

In the Reche Canyon/Badlands Area Plan, approximately 1,594 acres of the study area fall within Criteria Cells between Mile Posts 50 to 56 of the Adelanto to Moreno alignment. These Criteria Cells contribute to Proposed Linkage 4, which is comprised of primarily uplands habitat in Reche Canyon. Proposed Linkage 4 provides habitat for species known to occur within chaparral and coastal sage scrub habitats including Bell's sage sparrow, Stephens' kangaroo rat, bobcat, and Nevin's barberry. This Linkage likely

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provides for movement of common mammals such as bobcat, connecting to Box Springs Reserve, the Badlands and San Bernardino County. The Reche Canyon area represents one of the largest intact Core Areas within this MSHCP Plan Area; therefore maintenance of existing large habitat blocks is important for species and reserve design. The Linkage is relatively unconstrained by adjacent planned Rural Mountainous land uses. Widening of existing Reche Canyon Road will need to consider wildlife crossings as part of the design. Table 5.4-7 summarizes the planning species, biological issues, and Criteria Cells through which the proposed alignment passes (see Figure 5.4-3).

In The Pass Area Plan, the Proposed Project overlaps approximately 195 acres of Criteria Cells that contribute to Proposed Core 3 (Badlands/Potrero) between Mile Post 1 to 7 of the Moreno to Whitewater alignment. The alignment continues to parallel the Conservation Area from Mile Post 7 to Mile Post 9. The Badlands/Potrero Core is connected to Proposed Linkage 12 (north San Timoteo Creek), Proposed Linkage 4 (Reche Canyon), Proposed Constrained Linkage 22 (east San Timoteo Creek), Existing Core H (Lake Perris), Existing Core K (San Jacinto Mountains), Proposed Linkage 11 (Soboba/Gilman Springs), and Proposed Constrained Linkage 21. The Core also functions as a Linkage, connecting the San Bernardino National Forest to the southwest with San Bernardino County and other conserved areas to the north of the Core. With a total acreage of approximately 24,920 acres, Proposed Core 3 is one of the largest WRMSHCP Core Areas. In addition, the Core is contiguous with Existing Core H (Lake Perris/Mystic Lake) and Existing Core K (San Jacinto Mountains), thus greatly enlarging the functional area of the Core. The Core has both a large proportion of its area unaffected by edge (approximately 23,420 acres of the total 24,940 acres) and is only partially constrained by existing agricultural use. Within the Core, important Live-In and movement Habitat is provided for Bell's sage sparrow, loggerhead shrike, cactus wren, Stephens' kangaroo rat, Southern California rufous-crowned sparrow, and mountain lion, which have key populations in the Badlands. Management of edge conditions will be necessary in the Badlands to maintain high quality Habitat for these species in areas which may be affected by covered facilities including Lambs Canyon Road, San Timoteo Canyon Road, and Gilman Springs Road.

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**Table 5.4-7
Summary of WRMSHCP Conservation Goals within Study Area**

Subunit	Planning Species	Biological Issues	Criteria Cells
<i>Reche Canyon/Badlands Area Plan</i>			
2: Reche Canyon	<ul style="list-style-type: none"> • Bell's sage sparrow • Bobcat • Stephens' kangaroo rat • Nevin's barberry 	<ul style="list-style-type: none"> • Conserve upland Habitat in the Badlands • Maintain a connection between Blue Mountain to the west and Reche Canyon to the east • Conserve existing populations of Bell's sage sparrow • Maintain Core Area for bobcat • Maintain Core and Linkage Habitat for mountain lion • Determine presence of potential small population of San Bernardino kangaroo rat; • Determine presence of potential Core Area for Los Angeles pocket mouse • Maintain Core Area for Nevin's barberry 	<ul style="list-style-type: none"> • Cell Group F: 99 • Cell Group G: 100, 151 • Cell Group J: 202, 152 • Cell Group K: 153, 203 • Cell Group M: 204 • Cell Group N: 205, 289, 374 • Cell Group O: 468, 561 • Cell Group P: 559 • Independent: 380, 381, 469, 470
3: Badlands North	<ul style="list-style-type: none"> • Bell's sage sparrow • Cactus wren • Loggerhead shrike • Southern California rufous-crowned sparrow • Bobcat • Los Angeles pocket mouse • Mountain lion • San Bernardino kangaroo rat • Stephens' kangaroo rat • Nevin's barberry 	<ul style="list-style-type: none"> • Conserve large habitat blocks in the Badlands • Maintain Core Area for bobcat • Maintain Core and Linkage Habitat for mountain lion • Maintain linkage area to San Jacinto Wildlife Area for Stephens' kangaroo rat • Determine potential for scattered populations of San Bernardino kangaroo rat along San Timoteo Creek • Determine presence of potential Core Area for Los Angeles pocket mouse in San Timoteo Creek and tributaries and Badlands • Maintain Core Area for Nevin's barberry. 	<ul style="list-style-type: none"> • Cell Group Q: 558 • Cell Group X: 1297, 1302 • Cell Group C': 1304, 1305, 1306, 1310, 1312, 1315 • Cell Group E': 1390, 1392, 1393, 1396, 1399

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**Table 5.4-7
Summary of WRMSHCP Conservation Goals within Study Area**

Subunit	Planning Species	Biological Issues	Criteria Cells
<i>The Pass Area Plan</i>			
1: Potrero/ Badlands	<ul style="list-style-type: none"> • Arroyo toad • Bell's sage sparrow • Cactus wren • Least Bell's vireo • Loggerhead shrike • Southern California rufous-crowned sparrow • Bobcat • Los Angeles pocket mouse • Mountain lion • San Bernardino kangaroo rat 	<ul style="list-style-type: none"> • Provide for a new Core Area focused on the Potrero Creek area. • Maintain large blocks of undisturbed Habitat for Core Area purposes. • Maintain large blocks of Habitat for large mammal movement between the northern and southern sections of the San Bernardino National Forest. • Conserve Potrero Creek and associated alluvial fan sage scrub for maintenance of key species such as the Stephens' kangaroo rat, Los Angeles pocket mouse and arroyo toad. • Maintain Core Area for bobcat. • Maintain Core and Linkage Habitat for mountain lion. • Maintain Core Area in Potrero Valley for Stephens' kangaroo rat. • Determine presence of possible scattered populations of San Bernardino kangaroo rat in the tributaries to San Jacinto River. • Determine presence of potential Core Area for Los Angeles pocket mouse in tributaries to San Timoteo Creek. 	Cell Group B: 1311, 1314, 1403, 1410, 1412, 1413

In addition to assemblage of conservation areas, the WRMSHCP has additional implementation measures outlined below.

- WRMSHCP Section 6.1.2, Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools. Riparian/riverine areas must be mapped and assessed for the potential to support riparian conservation species. Projects must also be assessed for the presence of vernal pools. Riparian/riverine and vernal pool habitat must be avoided or mitigated as described in this section of the WRMSHCP.
- WRMSHCP Section 6.1.3, Protection of Narrow Endemic Plant Species. The WRMSHCP has survey areas for certain Narrow Endemic Plant Species. If a project overlaps a Narrow Endemic Plant Species survey area, habitat assessments and focused surveys must be conducted and avoidance and mitigation measures implemented in accordance with this section.
- WRMSHCP Section 6.1.4, Guidelines Pertaining to the Urban/Wildlands Interface. If a project is located adjacent to conservation areas, avoidance measures must be implemented as described in this section.

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- WRMSHCP Section 6.3.2, Additional Survey Needs and Procedures. This section of the WRMSHCP outlines survey requirements for Criteria Area Plant Species, Burrowing Owl, Mammals, and Amphibians. If a project overlaps a designated survey area, habitat assessments and focused surveys must be conducted and avoidance and mitigation measures implemented in accordance with this section.

The Proposed Project overlaps five different survey areas as outlined in Sections 6.1.3 and 6.3.2 of the WRMSHCP, including Narrow Endemic Plant Species, Criteria Area Plant Species, burrowing owl, Los Angeles pocket mouse, and San Bernardino kangaroo rat. Acreages for each survey area are summarized in Table 5.4-8.

**Table 5.4-8
WRMSHCP Survey Areas within the Study Area**

Survey Area	Species	Acres
Narrow Endemic Plant Species (Area 3)	Many-stemmed dudleya Marvin's onion	1,268
Criteria Area Plant Species (Area 6)	Round-leaved filaree Nevin's barberry Smooth tarplant	631
Burrowing Owl	Burrowing owl	3,838
Mammal (Area 2)	Los Angeles pocket mouse	512
Mammal (Area 3)	San Bernardino kangaroo rat Los Angeles pocket mouse	1,031

Coachella Valley Multiple Species Habitat Conservation Plan

A portion of the Proposed Project, approximately 71,500 linear feet, is located within the boundaries of the CVMSHCP, a comprehensive, multi-jurisdictional HCP focusing on conservation of species and their associated habitats in eastern Riverside County. The CVMSHCP provides a regional vision for balanced growth to meet the requirements of federal and state endangered species laws, while promoting enhanced opportunities for recreation, tourism and job growth.

The CVMSHCP serves as a HCP pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act of 1973, as well as a Natural Communities Conservation Plan (NCCP) under the NCCP Act of 2001. The CVMSHCP aims to conserve over 240,000 acres of open space and protect 27 plant and animal species. The CVMSHCP also incorporates the existing Fringe-Toed Lizard Preserve. The CVMSHCP received its California state permit in September 2008 and its federal permit in October 2008. Under the CVMSHCP, the USFWS and CDFW have granted take authorization for otherwise lawful actions, such as public and private development that may incidentally take or harm individual species or their habitat outside of the CVMSHCP conservation area, in exchange for the assembly and management of a coordinated CVMSHCP conservation area. Approximately one-third of the land proposed for conservation (80,000 acres) has

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already been acquired. Overall management of the Plan is provided by the Coachella Valley Conservation Commission, a joint powers authority of elected representatives.

The CVMSHCP is a conservation area based program based on the conservation of a hardline Reserve System. The CVMSHCP has established 21 Conservation Areas within which development activities are limited. For each Conservation Area, conservation objectives are articulated for conserving Core Habitat for covered species, essential ecological processes necessary to maintain Habitat viability, and Biological Corridors and Linkages as needed. Table 5.4-9 summarizes the acreage within the study area that overlap Conservation Areas.

**Table 5.4-9
Acreage of CVMSHCP Conservation Areas Overlapping the Study Area**

Conservation Area	Acreage
Cabazon Conservation Area	285
Highway 111/I-10 Conservation Area	127
Snow Creek/Windy Point Conservation Area	134
Stubbe and Cottonwood Canyons Conservation Area	44
Whitewater Floodplain Conservation Area	188

The primary goals, ecological processes, target species, and linkages for each conservation area are described below.

Cabazon Conservation Area: The primary importance of the Conservation Area is that the San Gorgonio River and various tributaries function as a fluvial sand transport system for the Snow Creek/Windy Point Conservation Area and the Whitewater Floodplain Conservation Area. The San Gorgonio River and associated tributaries also provide value as a Biological Corridor between the San Bernardino Mountains and the San Jacinto Mountains. The Conservation Area does not provide Core Habitat for any of the Covered Species in the Plan Area; however, it does contain Essential Habitat for Peninsular bighorn sheep. The Conservation Area contains Other Conserved Habitat for Coachella Valley milkvetch, Coachella Valley Jerusalem cricket, desert tortoise, burrowing owl, gray vireo, least Bell's vireo, Le Conte's thrasher, southwestern willow flycatcher, summer tanager, yellow-breasted chat, yellow warbler, Coachella Valley round-tailed ground squirrel, Peninsular bighorn sheep, and Palm Springs pocket mouse. Most of the Habitat for the Coachella Valley milkvetch, Coachella Valley Jerusalem cricket, Coachella Valley round-tailed ground squirrel, and Palm Springs pocket mouse is in the floodplain area of the San Gorgonio River. Because of the extent of edge effects from existing Development and fragmentation in this area, the Conservation Objectives for this area do not include protecting the Habitat for these species except incidental to conserving the Biological Corridor in the Fornat Wash area.

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Highway 111/I-10 Conservation Area: This area does not provide Core Habitat for any species; however, contains Other Conserved Habitat for the Coachella Valley milkvetch, triple-ribbed milkvetch, Coachella Valley Jerusalem cricket, desert tortoise, Le Conte's thrasher, Coachella Valley round-tailed ground squirrel, and Palm Springs pocket mouse. This area includes part of the historic sand transport system of the Whitewater River to the Snow Creek/Windy Point Conservation Area and is adjacent to a Biological Corridor between the San Jacinto Mountains and the San Bernardino Mountains. This corridor also connects the Snow Creek/Windy Point Conservation Area and the Whitewater Canyon Conservation Area. The actual corridor is contained within the Whitewater Floodplain Conservation Area.

Snow Creek/Windy Point Conservation Area. This area protects a significant blowsand ecosystem at the western edge of the Plan Area. It provides Core Habitat for the Coachella Valley milkvetch, Coachella Valley giant sandreader cricket, Coachella Valley fringe-toed lizard, Coachella Valley Jerusalem cricket, Coachella Valley round-tailed ground squirrel, and Palm Springs pocket mouse. This Conservation Area also provides some Essential Habitat for Peninsular bighorn sheep. This Conservation Area provides Habitat for the burrowing owl that contributes to the protection of the burrowing owls. There has also been one documented sighting and at least two anecdotal reports of desert tortoise, and this area may serve as a connection between the desert tortoise population on the north side of I-10 and desert tortoise in the San Jacinto and Santa Rosa Mountains. Peninsular bighorn sheep Habitat extends from the adjacent mountains into the alluvial fan portion of this area. There is also Other Conserved Habitat for Coachella Valley milkvetch, Coachella Valley Jerusalem cricket, Palm Springs pocket mouse, Le Conte's thrasher, and gray vireo. The area is also important for neotropical migrants (birds that breed in the United States and winter to the south of the United States) moving through the San Gorgonio Pass. Some of these, including least Bell's vireo, southwestern willow flycatcher, yellow warbler, yellow-breasted chat, and summer tanager, could nest in the adjacent canyons in the Santa Rosa and San Jacinto Mountains Conservation Area.

Stubbe and Cottonwood Canyons Conservation Area: The portions of the San Bernardino Mountains included in this area are a sand source for blowsand habitat areas in the Snow Creek/Windy Point Conservation Area and Whitewater Floodplain Conservation Area. Stubbe Canyon Wash provides fluvial sand transport from the San Bernardino Mountains to the San Gorgonio River in the western portion of the Snow Creek/Windy Point Conservation Area. Additionally, the desert tortoise population in this Conservation Area is potentially the most dense tortoise population within the Plan Area. The desert tortoise population in this Conservation Area centers on the mesas to the west of the Whitewater River. Stubbe Canyon and Cottonwood Canyon contain suitable migration and breeding Habitat for least Bell's vireo, southwestern willow flycatcher, summer tanager, yellow-breasted chat, and yellow warbler. Given the scarcity of riparian Habitat in the desert, all riparian Habitat is considered important for these species, and is likely to contribute to the Conservation of these species in their respective ranges. There is also Other Conserved Habitat for Coachella Valley milkvetch, Coachella Valley Jerusalem cricket,

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desert tortoise, gray vireo, Le Conte's thrasher, burrowing owl, Coachella Valley round-tailed ground squirrel, and Palm Springs pocket mouse.

Whitewater Floodplain Conservation Area. The Whitewater River, after it joins the San Gorgonio River, provides fluvial sand transport to the existing Whitewater Floodplain Preserve. The area along the Whitewater River provides a Linkage and Biological Corridor between the Snow Creek/Windy Point Conservation Area and the Core Habitat portion of the Whitewater Floodplain Conservation Area, as well as with the Whitewater Canyon Conservation Area. This Conservation Area provides Core Habitat for the Coachella Valley milkvetch, Coachella Valley giant sand-treader cricket, Coachella Valley fringe-toed lizard, Coachella Valley round-tailed ground squirrel, and Palm Springs pocket mouse. The area also provides some Other Conserved Habitat for the Coachella Valley milkvetch, triple-ribbed milkvetch, desert tortoise, flat-tailed horned lizard, burrowing owl, Le Conte's thrasher, Coachella Valley round-tailed ground squirrel, and Palm Springs pocket mouse.

Stephens Kangaroo Rat Habitat Conservation Plan

A portion of the Proposed Project, approximately 97,500 linear feet, is located within the SKR HCP. The SKR HCP is a single-species HCP that establishes a regional mechanism for obtaining incidental take of Stephens' kangaroo rat without having to secure individual permits from the USFWS and CDFW. Under the federal ESA, both the Stephens' kangaroo rat and its habitat were protected from any type of disturbance resulting in take of the species. A long-term HCP for the Stephens' kangaroo rat was approved by the USFWS and CDFW (previously CDFG) on May 6, 1996. At the time of approval, the HCP covered approximately 533,954 acres within RCHCA-member jurisdictions, including an estimated 30,000 acres of occupied Stephens' kangaroo rat habitat. The Riverside County Habitat Conservation Agency (RCHCA), a Joint Powers Agreement agency, functions as the oversight agency formed for the purpose of planning, acquiring, and managing habitat for the Stephens' kangaroo rat.

This HCP is made up of a mosaic of fee areas and Core Reserve areas. There are seven Core Reserve areas established as hardline conservation areas: Lake Mathews - Estelle Mountain, Sycamore Canyon, Steele Peak, Motte / Rimrock, San Jacinto/Lake Perris, Southwestern Riverside County Multi-Species, Potrero ACEC, and Potrero. In 2003, with the acquisition of the Potrero site, the USFWS and CDFW confirmed that the land acquisition portion of the reserve expansion requirement was satisfied. Generally, any development within the Core Reserve area that is outside of existing private utility right-of-way is not permitted. The study area for the Proposed Project is not located in any of the Core Reserve areas.

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5.4.2 Regulatory Setting

Federal

Federal Endangered Species Act

The federal Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.), as amended, is administered by USFWS for most plant and animal species, and by the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service for certain marine species. This legislation is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend and provide programs for the conservation of those species, thus preventing extinction of plants and wildlife. The federal Endangered Species Act defines an endangered species as “any species that is in danger of extinction throughout all or a significant portion of its range.” A threatened species is defined as “any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” Under the federal Endangered Species Act, it is unlawful to take any listed species, and “take” is defined as, “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.”

The federal Endangered Species Act allows for the issuance of incidental take permits (ITPs) for listed species under Section 7, which is generally available for projects that also require other federal agency permits or other approvals, and under Section 10, which provides for the approval of HCPs on private property without any other federal agency involvement. Upon development of an HCP, USFWS can issue ITPs for listed species.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA; 16 U.S.C. 703 et seq.) regulates and prohibits taking, killing, possession of, or harm to migratory bird species listed in 50 CFR 10.13. This international treaty for the conservation and management of bird species that migrate through more than one country is enforced in the United States by the USFWS. Additionally, Section 3513 of the California Fish and Game Code states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA. Some common species are not covered under the MBTA and include the European starling (*Sturnus vulgaris*), the house sparrow (*Passer domesticus*), the rock pigeon (*Columba livia*), and game species such as grouse, turkey, and ptarmigan. This state statute provides the CDFW with enforcement authority for project-related impacts that would result in the take of bird species protected under the MBTA. The MBTA was amended in 1972 to include protection for migratory birds of prey (raptors).

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 U.S.C. 668–668c), enacted in 1940 and amended several times since then, prohibits anyone, without a permit issued by the Secretary of the Interior, from taking

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bald eagles, including their parts, nests, or eggs. The act provides criminal penalties for persons who “take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof.” The Act defines “take” as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb.” “Disturb” means “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.” In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle’s return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death, or nest abandonment.

Clean Water Act

Pursuant to Section 404 of the CWA, the ACOE regulates the discharge of dredged and/or fill material into waters of the United States. The term “waters of the United States” (waters) is defined in the “Definition of Waters of the United States” in ACOE regulations (33 CFR 328.3(a)) as (1) all waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (2) all interstate waters including interstate wetlands; (3) all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect foreign commerce; (4) all impoundments of waters otherwise defined as waters of the United States under the definition; (5) tributaries of waters identified in paragraphs (a) (1) through (4) of this section; and (6) wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1) through (6) of this section.

The term “wetlands” (a subset of waters) is defined in 33 CFR 328.3(b) as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.”

The discharge of dredge or fill material into waters, including wetlands, requires authorization from ACOE prior to impacts. For impacts to wetlands or waters under ACOE jurisdiction, either an Individual Permit or a Nationwide Permit would be required in accordance with Section 404 of the CWA. If a project fails to comply with the terms and regulations specified in the Nationwide Permit guidelines, then an Individual Permit to ACOE must be prepared.

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Pursuant to Section 401 of the federal CWA, the RWQCB regulates discharging waste, or proposing to discharge waste, within any region that could affect a water of the state (California Water Code, Section 13260(a)), pursuant to provisions of the Porter-Cologne Act. “Waters of the state” are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (California Water Code, Section 13050(e)). Before ACOE will issue a CWA Section 404 permit, applicants must receive a CWA Section 401 Water Quality Certification from the RWQCB. If a CWA Section 404 permit is not required for the Proposed Project, the RWQCB may still require a permit (i.e., Waste Discharge Requirement) for impacts to waters of the state under the Porter-Cologne Act.

San Bernardino National Forest Land Management Plan

As stated in Part 2 of the USDA’s Land Management Plan for the San Bernardino National Forest, the San Bernardino National Forest’s resources is divided into six programs: wildlife, fish, rare plants and invasive species; vegetation; soil, geology, water and air; land ownership and adjustment; specially designated areas (including wilderness); and heritage resources. It also includes managing the data of these resources.

The Wildlife, Fisheries and Plant Program manages habitat to help meet the needs of threatened, endangered, and sensitive species, along with other species such as black bear, mule deer and rainbow trout. Management includes prevention and eradication efforts to reduce the effects of invasive nonnative species within these habitats.

The Invasive Species Program emphasis includes protecting forest and rangeland ecosystems by preventing the introduction and spread of invasive nonnative species across the national forest. Priority locations for eradication are riparian and threatened, endangered, proposed, candidate, and sensitive species habitat; roadsides, fuel treatment areas, and areas within the national forest that have been disturbed by wildland fire and fire suppression activities. The national forest expects to survey and map the locations of invasive species, and to implement eradication measures on approximately 1-2 miles per year of riparian habitat and approximately 5-100 acres per year of uplands habitat (IS 1 - Invasive Species Prevention and Control).

Vegetation management is carried out to reduce hazardous fuels for various objectives, to maintain or enhance habitat and to recover burned or otherwise damaged vegetation. The Forest Restoration Program incorporates an integrated set of vegetation management actions designed to meet multiple objectives including restoration of forest health and community protection. Close coordination between the Fire and Aviation Management staff and Resource Management staff is required.

Also, in 2005, a USFS Handbook Supplement FSH 2509.22-2005-1, Soil and Water Conservation Practices Handbook, established guidance for the delineation and management of Riparian Conservation Areas on the San Bernardino National Forest.

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State

California Endangered Species Act

The California Endangered Species Act defines an endangered species as “a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.” The California Endangered Species Act defines a threatened species as “a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the California Fish and Game Commission (Fish and Game Commission) as rare on or before January 1, 1985, is a threatened species.” A candidate species is defined as “a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the Fish and Game Commission has published a notice of proposed regulation to add the species to either list.” The California Endangered Species Act does not list invertebrate species.

CDFW administers the California Endangered Species Act, which prohibits the take of plant and animal species designated by the Fish and Game Commission as endangered or threatened in the state of California. Under Section 86 of the act, “take” is defined as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” California Endangered Species Act Section 2053 stipulates that state agencies may not approve projects that will “jeopardize the continued existence of any endangered species or threatened species, or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy.”

The California Endangered Species Act authorizes the taking of threatened, endangered, or candidate species if take is incidental to an otherwise lawful activity and if specific criteria are met. These provisions also require CDFW to coordinate consultations with USFWS for actions involving federally listed species that are also state-listed species. In certain circumstances, the act allows CDFW to adopt a California Endangered Species Act incidental take authorization as satisfactory for CEQA purposes based on finding that the federal permit adequately protects the species and is consistent with state law.

California Fish and Game Code Sections 3503, 3503.5, and 3513

Fish and Game Code Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Fish and Game Code Section 3503.5 protects all birds of prey (raptors) and their eggs and nests.

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Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA. These regulations could require that elements of the Proposed Project (particularly vegetation removal or construction near nest trees) be reduced or eliminated during critical phases of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds will not be disturbed, subject to approval by CDFW and/or USFWS.

California Fish and Game Code Sections 3511, 4700, 5050, and 5515

Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code designate certain species as “fully protected.” Fully protected species, or parts thereof, may not be taken or possessed at any time except as part of an approved Natural Community Conservation Plan (NCCP) that treats such species as “covered species” or in connection with statutory-specified actions pursuant to the “Quantification Settlement Agreement” involving water transfer from the Imperial Irrigation District to the Metropolitan Water District of Southern California. The California Fish and Game Commission may authorize the collecting of such species for necessary scientific research. Legally imported and fully protected species or parts thereof may be possessed under a permit issued by CDFW.

California Fish and Game Code Sections 1600-1616

Sections 1600–1616 of the California Fish and Game Code requires a state or local governmental agency or public utility to notify CDFW before beginning construction on a project that will (1) divert, obstruct, or change the natural flow or the bed, bank, channel, or bank of any river, stream, or lake; (2) use materials from a streambed; or (3) result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resource. These modifications are formalized in a Streambed Alteration Agreement that becomes part of the plans, specifications, and estimates documents for the project.

The term “stream,” which includes creeks and rivers, is defined in the California Code of Regulations (CCR) as follows: “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation” (14 CCR 1.72). In addition, the term stream can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFG 1994). Stream-dependent riparian habitat is defined in the California Fish and Game Code (Section 2785) as “lands which contain habitat which grows close to and which depends upon soil moisture from a nearby freshwater source.” Removal of stream-dependent riparian vegetation may also require a Streambed Alteration Agreement from CDFW.

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Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Act, the State Water Resources Control Board (SWRCB) has the ultimate authority over State water rights and water quality policy. However, the Porter-Cologne Act also establishes nine RWQCBs to oversee water quality on a day-to-day basis at the local/regional level. One of the most important functions of these boards is preparing and periodically updating Basin Plans (water quality control plans). Each Basin Plan establishes: beneficial uses of water designated for each waterbody to be protected; water quality standards, known as water quality objectives, for both surface water and groundwater; and actions necessary to maintain these standards in order to control non-point and point sources of pollution to the State's waters. Permits issued to control pollution must implement Basin Plan requirements (i.e. water quality standards), taking into consideration beneficial uses to be protected. In addition, any person proposing to discharge waste within any region must file a report of waste discharge with the appropriate regional board. No discharge may take place until the Regional Board issues waste discharge requirements or a waiver of the waste discharge requirements, and 120 days have passed since complying with reporting requirements.

Local

WRMSHCP

As mentioned above in Section 5.4.1 Environmental Setting *Existing Regional Conservation Plans*, the WRMSHCP serves as a HCP pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act of 1973, as well as a Natural Communities Conservation Plan (NCCP) under the NCCP Act of 2001. Permittees in the WRMSHCP include the cities of Banning, Beaumont, Calimesa, Canyon Lake, Corona, Eastvale, Hemet, Jurupa Valley, Lake Elsinore, Menifee, Moreno Valley, Murrieta, Norco, Perris, Riverside, San Jacinto, Temecula, and Wildomar, and the County of Riverside, Riverside County Flood Control and Water Conservation District, Riverside County Regional Parks and Open Space District, Riverside County Transportation Commission, and Caltrans.

The WRMSHCP includes a provision specific for non-permittees to obtain take of covered species and habitat should a project proponent choose to become a Participating Special Entity (PSE). The benefits of becoming a PSE in the WRMSHCP include: providing a streamlined environmental review process; providing long term conservation of native species and their habitats; conserving land to provide additional public recreation opportunities; newly designated conservation lands and existing conservation lands will be managed together by permittees operating under the same guidelines and processes; and enhancing the predictability of future federal, state, and local regulations.

CVMSHCP

As mentioned above in Section 5.4.1 Environmental Setting *Existing Regional Conservation Plans*, the CVMSHCP serves as a HCP pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act of

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1973, as well as a Natural Communities Conservation Plan (NCCP) under the NCCP Act of 2001. Permittees in the CVMSHCP include the cities of Cathedral City, Coachella, Desert Hot Springs, Indian Wells, Indio, La Quinta, Palm Desert, Palm Springs, Rancho Mirage as well as County of Riverside, Coachella Valley Water District, Imperial Irrigation District, Mission Springs Water District, Coachella Valley Association of Governments (CVAG) and Caltrans.

The CVMSHCP includes a provision specific for non-permittees to obtain take of covered species and habitat should a project proponent choose to become a PSE. The benefits of becoming a PSE in the CVMSHCP include: providing a streamlined environmental review process; providing long term conservation of native species and their habitats; conserving land to provide additional public recreation opportunities; newly designated conservation lands and existing conservation lands will be managed together by permittees operating under the same guidelines and processes; and enhancing the predictability of future federal, state, and local regulations.

SKR HCP

As mentioned above in Section 5.4.1 Environmental Setting Existing Regional Conservation Plans, the SKR HCP serves as a HCP pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act of 1973, and received a California Endangered Species Permit pursuant to Section 2081 of the California Fish and Game Code. RCHCA's Joint Powers agency is composed of the cities of Corona, Hemet, Lake Elsinore, Moreno Valley, Murrieta, Perris, Riverside, and Temecula and the County of Riverside.

The SKR HCP area falls primarily within the WRMSHCP area, meaning there is some geographical overlap between the two HCPs. Where there is no overlap, the WRMSHCP provides coverage of Stephens' kangaroo rat if a project proponent chooses this mechanism for obtaining incidental take. Where overlap does occur between the two HCPs, incidental take for Stephens' kangaroo rat if needed may be obtained through the SKR HCP. However, the SKR HCP does not offer a PSE or related provision as a mechanism for private utilities to obtain incidental take. In special cases, a private utility may be able to obtain incidental take for Stephens' kangaroo rat through a letter agreement with RCHCA and with concurrent by USFWS and CDFW.

City of Adelanto Municipal Code: 17.57.040 – Plant Protection and Management

This section of code requires development projects to comply with the requirements of the County of San Bernardino for the relocation of Joshua trees. The Building Department will review relocation plans and monitor the relocation of any Joshua trees.

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San Bernardino County Municipal Code: Chapter 88.01 – Plant Protection and Management

The provisions of this chapter apply to the removal or relocation of regulated trees or plants and to any encroachment within the protected zone of a regulated tree or plant on all private land within the unincorporated areas of San Bernardino County and on public lands owned by the County, unless otherwise specified. The intent is to: (a) Promote and sustain the health, vigor and productivity of plant life and aesthetic values within the County through appropriate management techniques; (b) Conserve the native plant life heritage for the benefit of all, including future generations; (c) Protect native trees and plants from indiscriminate removal and to regulate removal activity; (d) Provide a uniform standard for appropriate removal of native trees and plants in public and private places and streets to promote conservation of these valuable natural resources; (e) Protect and maintain water productivity and quality in local watersheds; and (f) Preserve habitats for rare, endangered, or threatened plants and to protect animals with limited or specialized habitats.

General Plans

California Government Code Section 65300 et seq. requires cities and counties to prepare and adopt a comprehensive, long-term general plan for the physical development of the county or the city. Section 65302 of this code requires cities and counties to include a variety of elements in their general plan, each of which must describe goals and policies to guide development relative to the issue area characterized in the element. One of the required elements is the “conservation element.” Section 65302 requires this element to provide for the “conservation, development, and utilization of natural resources including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources” (Government Code Section 65302(d)(1)). Thus, each jurisdiction within the Proposed Project area has an adopted general plan, and each general plan addresses the conservation of biological resources. For example, the County of San Bernardino General Plan includes a goal and a variety of corresponding policies requiring the county to maintain and enhance biological diversity and healthy ecosystems within its jurisdiction (County of San Bernardino 2007). Similarly, the County of Riverside General Plan’s Multipurpose Open Space element, which serves the function of a conservation element, includes a policy requiring the County to maintain and conserve superior examples of native trees, natural vegetation, stands of established trees, and other features for ecosystem, aesthetic, and water conservation purposes” (County of Riverside 2014).

5.4.3 Significance Criteria

The significance criteria used to evaluate impacts to biological resources are based on criteria listed in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.). A significant impact would occur if the project would:

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- Have a substantial adverse effect, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service
- Have a substantial adverse effect on a riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means
- Interfere substantially with the movement of a native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites
- Conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5.4.4 Impact Analysis

The boxes in the chart below have been checked accordingly to characterize the level of significance for each CEQA criterion. The rationale for the anticipated significance levels is provided below the chart in each of the corresponding sections.

Would the project:	Potentially Significant Impact	Less Than Significant with APMs Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Would the project:	Potentially Significant Impact	Less Than Significant with APMs Incorporated	Less Than Significant Impact	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Less than Significant Impact with APMs Incorporated. The Proposed Project has the potential to result in significant impacts to special-status species as described below; however, with incorporation of the APMs set forth below, impacts to special-status species would be less than significant.

Listed Special-Status Species

Potential impacts to listed species are described below. Table 5.4-10 summarizes APMs for each of the species listed below that would avoid and minimize potential significant impacts to listed species. Each of the APMs in the summary are more fully described in Section 5.4.5.

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Arroyo Toad

The study area overlaps arroyo toad Critical Habitat between Mile Posts 21 to south of Mile Post 27, where the alignment parallels Cajon Wash. In this area, the pipeline would be installed in the public right-of-way of city and county roads and is unlikely to affect Primary Constituent Elements of arroyo toad Critical Habitat. There are documented occurrences of arroyo toad in the vicinity (but outside the right-of-way) from approximately Mile Post 18 to Mile Post 32 and again at Mile Post 37. The alignment would cross streams within which arroyo toad have been documented and there's a potential for indirect effect resulting from hazardous spills or erosion.

Implementation of APMs as listed in Table 5.4-10 would reduce potential impacts to Arroyo toad to less than significant.

California Condor

The majority of the study area within Segment 1 overlaps condor habitat as modeled by the DRECP. The Proposed Project would not affect condor nest sites or significantly reduce foraging habitat. The Proposed Project could result in indirect effects to nesting condors from adult birds picking up microtrash from Proposed Project construction activities and bringing it back to the nest.

Implementation of APMs as listed in Table 5.4-10 would reduce potential impacts to California condor to less than significant.

Desert Tortoise

Suitable habitat for desert tortoise overlaps Segment 1 and Segment 7. The Proposed Project has the potential to result in effects to desert tortoise through crushing of individuals during construction, increased predation by attracting predators such as ravens, and loss of habitat.

Implementation of APMs as listed in Table 5.4-10 would avoid and minimize potential direct and indirect impacts to individuals and temporary removal of habitat.

The Proposed Project may result in the permanent loss of occupied desert tortoise habitat, resulting in a significant impact. The Applicant will compensate for permanent loss of habitat as described in **APM-BIO-27**. With implementation of APMs, potential impacts to desert tortoise would be less than significant.

Coastal California Gnatcatcher

Critical Habitat for coastal California gnatcatcher overlaps the study area from approximately Mile Posts 47 to 55. In this area, the pipeline would be installed in public right-of-way of city and county roads and is unlikely to affect Primary Constituent Elements of coastal California gnatcatcher Critical Habitat. There

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are documented occurrences in the vicinity of the proposed alignment from approximately Mile Post 23 to 38. If suitable habitat occurs adjacent to the construction right-of-way and construction takes place during the breeding season, significant impacts could occur to coastal California gnatcatcher as a result of increased noise and human presence.

Implementation of APMs as listed in Table 5.4-10 would avoid and minimize potential impacts direct and indirect impacts to individuals and temporary removal of habitat.

The Proposed Project may result in the permanent loss of designated Critical Habitat or occupied habitat resulting in a significant impact. The Applicant will compensate for permanent loss of habitat as described in **APM-BIO-27**. With implementation of APMs, potential impacts to coastal California gnatcatcher would be less than significant.

Mohave Ground Squirrel

Modeled habitat is mapped within the northern portion of the study area from the Adelanto Compressor Station to south of Mile Post 5. There is also a 2014 occurrence less than 1 mile southeast of the Adelanto Compressor Station. Construction of the Adelanto Compressor Station as well as construction activities associated with pipeline construction could result in take of this species and loss of suitable habitat.

Implementation of APMs as listed in Table 5.4-10 would avoid and minimize potential direct and indirect impacts to individuals and temporary removal of habitat.

The Proposed Project may result in the permanent loss of occupied habitat resulting in a significant impact. The Applicant will compensate for permanent loss of habitat as described in **APM-BIO-27**. With implementation of APMs, potential impacts to Mohave ground squirrel would be less than significant.

Peninsular Bighorn Sheep

Suitable habitat for this species occurs within the vicinity of the Proposed Project; however, suitable habitat does not intersect with the construction right-of-way. Additionally, suitable habitat for this species is buffered from the Proposed Project by the I-10; therefore, the Proposed Project would not result in impacts to this species.

Riverside Fairy Shrimp

Suitable habitat for Riverside fairy shrimp has potential to occur within Segments 4, 5, and 6. If suitable habitat exists, the Proposed Project has the potential to result in effects to Riverside fairy shrimp through hydrologic modification, toxins, crushing of individuals during construction, and loss of habitat.

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Surveys for vernal pool and fairy shrimp habitat would be conducted as described under **APM-BIO-1**. If suitable fairy shrimp habitat occurs, implementation of APMs as listed in Table 5.4-10 would avoid and minimize potential direct and indirect impacts to individuals and temporary removal of habitat. If the Proposed Project would result in permanent removal of vernal pool habitat, this loss would be compensated by implementation of **APM-BIO-27**.

With implementation of APMs, potential impacts to Riverside fairy shrimp would be less than significant.

San Bernardino Kangaroo Rat

The study area overlaps San Bernardino kangaroo rat Critical Habitat where the alignment parallels Cajon Wash between Mile Posts 22 to south of Mile Post 27. In this area, the pipeline would be installed in public right-of-way of city and county roads and is unlikely to affect Primary Constituent Elements of San Bernardino kangaroo rat Critical Habitat. There is also Critical Habitat mapped with documented occurrences present from Mile Post 43 to Mile Post 44 within and adjacent to the Santa Ana River. HDD would be used to construct the pipeline across the Santa Ana River which would reduce potential impacts to San Bernardino kangaroo rat; however, there is a potential for impacts to San Bernardino kangaroo rat and occupied habitat at this location.

Implementation of APMs as listed in Table 5.4-10 would avoid and minimize potential direct and indirect impacts to individuals and temporary removal of habitat.

The Proposed Project may result in the permanent loss of occupied Critical Habitat, resulting in a significant impact. Permanent removal of Critical Habitat or occupied habitat would be compensated by implementation of **APM-BIO-27**. With implementation of APMs, potential impacts to San Bernardino kangaroo rat would be less than significant.

Santa Ana Sucker

Critical Habitat is mapped for Santa Ana sucker within the Santa Ana River. Impacts are not anticipated as HDD will be used to cross the Santa Ana River and avoid Critical Habitat. There are documented occurrences of Santa Ana sucker within the Santa Ana River downstream of this crossing. The Proposed Project has the potential to indirectly affect this species through accidental release of hazardous materials into the river. With implementation of APMs as listed in Table 5.4-10, impacts to Santa Ana sucker would be less than significant.

Stephens' Kangaroo Rat

There is suitable habitat for Stephens' kangaroo rat throughout Segments 4, 5, and 6. Although the pipeline would be installed in public right-of-way, there is the potential for take of this species through

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crushing of individuals and occupied burrows during construction as well as effects to habitat adjacent to the right-of-way.

Implementation of APMs as listed in Table 5.4-10 would avoid and minimize potential direct and indirect impacts to individuals and temporary removal of habitat.

The Proposed Project may result in the permanent loss of occupied habitat, resulting in a significant impact. If the Proposed Project would result in permanent removal of occupied habitat, this loss would be compensated by implementation of **APM-BIO-27**. With implementation of APMs, potential impacts to Stephens' kangaroo rat would be less than significant.

Swainson's Hawk

The majority of the study area within Segments 1 through 7 overlaps Swainson's hawk migration habitat. The Proposed Project would not affect Swainson's hawk nest sites or significantly reduce foraging habitat. The Proposed Project could result in indirect effects to migrating hawks by project construction activities.

Implementation of avoidance measures as listed in Table 5.4-10 would reduce potential impacts to Swainson's hawk to less than significant.

Unarmored Threespine Stickleback

Unarmored threespine stickleback has been documented in the vicinity of the Proposed Project; however, it is unlikely to occur within waterbodies crossed by the Proposed Project due to lack of suitable habitat at those locations. Additionally, implementation of **APM-BIO-8**, Avoidance and Minimization of Impacts to Jurisdictional Waters, and **APM-BIO-9**, Special-Status Species BMPs, would reduce potential indirect effects to this species. Potential impacts to this species would be less than significant.

Riparian Birds

Critical Habitat for southwestern willow flycatcher occurs within the Santa Ana River. Impacts are not anticipated as HDD will be used to cross the Santa Ana River and avoid Critical Habitat. Southwestern willow flycatcher is documented within the vicinity of the proposed alignment (within 0.6 mile at the closest occurrence) in the northern portion of Segment 2 (from Mile Post 12 to 16) and least Bell's vireo is documented throughout the vicinity of the Proposed Project. The Proposed Project has the potential to impact listed riparian bird species through removal of occupied habitat, direct removal of nests, and impacts to nests through increased noise and human disturbance.

Implementation of APMs as listed in Table 5.4-10 would avoid and minimize potential direct and indirect impacts to individuals and temporary removal of habitat.

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The Proposed Project may result in the permanent loss of occupied habitat, resulting in a significant impact. The Applicant will compensate for permanent loss of habitat as described in **APM-BIO-27**. With implementation of APMs, potential impacts to riparian birds would be less than significant.

Triple Ribbed Milkvetch and Coachella Valley Milkvetch

Suitable habitat and documented occurrences for triple ribbed milkvetch and Coachella Valley milkvetch occur throughout Segment 7. Modeled habitat for triple ribbed milkvetch is mapped near the eastern end of the Moreno to Whitewater Segment, east and west of Mile Post 31.

Critical Habitat for Coachella Valley milkvetch occurs southeast of Mile Post 27 of the Moreno to Whitewater Segment; however, it is separated from the proposed pipeline by the I-10 freeway and impacts are not expected to occur to this area of Critical Habitat. Critical Habitat for Coachella Valley milkvetch also crosses the alignment immediately east of Mile Post 31 and modeled habitat is mapped from Mile Post 25 east to the end of the alignment.

Although the pipeline would be constructed within existing right-of-way, Primary Constituent Elements of Coachella Valley milkvetch Critical Habitat may be present immediately adjacent to the pipeline and construction activities could result in effects to Critical Habitat for Coachella Valley milkvetch and, potentially, take of both species.

Implementation of APMs as listed in Table 5.4-10 would avoid and minimize potential direct and indirect impacts to individuals and temporary removal of habitat.

The Proposed Project may result in the permanent loss of designated Critical Habitat or occupied habitat resulting in a significant impact. The Applicant will compensate for permanent loss of habitat as described in **APM-BIO-27**. With implementation of APMs, potential impacts would be less than significant.

Mojave Tarplant

Modeled habitat for Mojave tarplant is mapped intermittently throughout the study area, including Segment 3 between Mile Posts 18 and 26, Segment 4 between Mile Posts 54 and 56, Segment 7 between Mile Posts 18 and 20, and Segment 6 between Mile Posts 7 and 11. The only documented occurrences are mapped in the vicinity of Segment 7; however, these occurrences are not within the construction right-of-way. Although the proposed alignment would be constructed within existing right-of-way where there is a potential for Mojave tarplant, suitable habitat occurs adjacent to the alignment. Mojave tarplant has the potential to occur near proposed construction activities and the Proposed Project could result in take of Mojave tarplant.

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Implementation of APMs as listed in Table 5.4-10 would avoid and minimize potential direct and indirect impacts to individuals and temporary removal of habitat.

The Proposed Project may result in the permanent loss of occupied habitat, resulting in a significant impact. The Applicant will compensate for permanent loss of habitat as described in **APM-BIO-27**. With implementation of APMs, potential impacts would be less than significant.

Other Listed Plant Species

There is the potential for several listed plant species to occur within the vicinity of the proposed alignment. Focused surveys for these species will be conducted as described in **APM-BIO-1**. Should these species be documented within or adjacent to the disturbance areas, avoidance measures would be implemented as listed in Table 5.4-10 to avoid and minimize potential direct and indirect impacts to individuals and temporary removal of habitat.

The Proposed Project may result in the permanent loss of occupied habitat, resulting in a significant impact. The Applicant will compensate for permanent loss of habitat as described in **APM-BIO-27**. With implementation of APMs, potential impacts would be less than significant.

**Table 5.4-10
APMs for Listed Special-Status Species**

Species Name	Relevant APMs
Arroyo Toad	APM-BIO-1, Biological Surveys APM-BIO-2, Preconstruction Surveys APM-BIO-3, Biological Monitoring APM-BIO-8, Avoidance and Minimization to Jurisdictional Waters APM-BIO-10, Worker Environmental Awareness Program APM-BIO-15, Arroyo Toad Avoidance APM-BIO-22 Endangered Species Permits
California Condor	APM-BIO-3, Biological Monitoring APM-BIO-10, Worker Environmental Awareness Program APM-BIO-16, Condor Avoidance
Coachella Valley Milkvetch	APM-BIO-1, Biological Surveys APM-BIO-2, Preconstruction Surveys APM-BIO-3, Biological Monitoring APM-BIO-4, Minimization of Disturbance to Native Vegetation APM-BIO-5, Establishment of ESAs APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-9, Special-status Species BMPs APM-BIO-10, Worker Environmental Awareness Program APM-BIO-14, Preconstruction Plant Surveys APM-BIO-22 Endangered Species Permits APM-BIO-23, Avoidance of Special-Status Plants APM-BIO-27, Compensation for Loss of Sensitive Communities

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**Table 5.4-10
APMs for Listed Special-Status Species**

Species Name	Relevant APMs
Coastal California Gnatcatcher	APM-BIO-1, Biological Surveys APM-BIO-2, Preconstruction Surveys APM-BIO-3, Biological Monitoring APM-BIO-4, Minimization of Disturbance to Native Vegetation APM-BIO-5, Establishment of ESAs APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-9, Special-status Species BMPs APM-BIO-10, Worker Environmental Awareness Program APM-BIO-13, Nesting Bird Management Plan APM-BIO-19, Coastal California Gnatcatcher Avoidance APM-BIO-22, Endangered Species Permits APM-BIO-27, Compensation for Loss of Sensitive Communities
Desert Tortoise	APM-BIO-1, Biological Surveys APM-BIO-2, Preconstruction Surveys APM-BIO-3, Biological Monitoring APM-BIO-4, Minimization of Disturbance to Native Vegetation APM-BIO-5, Establishment of ESAs APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-9, Special-status Species BMPs APM-BIO-10, Worker Environmental Awareness Program APM-BIO-21, Avoidance of Desert Tortoise APM-BIO-22, Endangered Species Permits APM-BIO-27, Compensation for Loss of Sensitive Communities
Least Bell's Vireo	APM-BIO-1, Biological Surveys APM-BIO-2, Preconstruction Surveys APM-BIO-3, Biological Monitoring APM-BIO-4, Minimization of Disturbance to Native Vegetation APM-BIO-5, Establishment of ESAs APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-8, Avoidance and Minimization to Jurisdictional Waters APM-BIO-9, Special-status Species BMPs APM-BIO-10, Worker Environmental Awareness Program APM-BIO-13, Nesting Bird Management Plan APM-BIO-20, Riparian Birds Avoidance APM-BIO-22 Endangered Species Permits APM-BIO-27, Compensation for Loss of Sensitive Communities
Mohave Ground Squirrel	APM-BIO-1, Biological Surveys APM-BIO-2, Preconstruction Surveys APM-BIO-3, Biological Monitoring APM-BIO-4, Minimization of Disturbance to Native Vegetation APM-BIO-5, Establishment of ESAs APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-9, Special-status Species BMPs APM-BIO-10, Worker Environmental Awareness Program APM-BIO-17, Mohave Ground Squirrel Avoidance

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**Table 5.4-10
APMs for Listed Special-Status Species**

Species Name	Relevant APMs
	APM-BIO-21, Avoidance of Desert Tortoise APM-BIO-22, Endangered Species Permits APM-BIO-27, Compensation for Loss of Sensitive Communities
Mojave Tarplant	APM-BIO-1, Biological Surveys APM-BIO-2, Preconstruction Surveys APM-BIO-3, Biological Monitoring APM-BIO-4, Minimization of Disturbance to Native Vegetation APM-BIO-5, Establishment of ESAs APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-9, Special-status Species BMPs APM-BIO-14, Preconstruction Plant Surveys APM-BIO-10, Worker Environmental Awareness Program APM-BIO-22, Endangered Species Permits APM-BIO-23, Avoidance of Special-Status Plants APM-BIO-27, Compensation for Loss of Sensitive Communities
Riverside Fairy Shrimp	APM-BIO-1, Biological Surveys APM-BIO-2, Preconstruction Surveys APM-BIO-3, Monitors APM-BIO-4, Minimization of Disturbance to Native Vegetation APM-BIO-5, Establishment of ESAs APM-BIO-6, Avoidance of Vernal Pools APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-8, Avoidance and Minimization of Impacts to Jurisdictional Waters APM-BIO-9, Special-status Species BMPs APM-BIO-10, Worker Environmental Awareness Program APM-BIO-22 Endangered Species Permits APM-BIO-27, Compensation for Loss of Sensitive Communities
San Bernardino Kangaroo Rat	APM-BIO-1, Biological Surveys APM-BIO-2, Preconstruction Surveys APM-BIO-3, Monitors APM-BIO-4, Minimization of Disturbance to Native Vegetation APM-BIO-5, Establishment of ESAs APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-9, Special-status Species BMPs APM-BIO-10, Worker Environmental Awareness Program APM-BIO-18, Listed Kangaroo Rat Avoidance APM-BIO-22 Endangered Species Permits APM-BIO-27, Compensation for Loss of Sensitive Communities
Stephens' Kangaroo Rat	APM-BIO-1, Biological Surveys APM-BIO-2, Preconstruction Surveys APM-BIO-3, Monitors APM-BIO-4, Minimization of Disturbance to Native Vegetation APM-BIO-5, Establishment of ESAs APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-9, Special-status Species BMPs

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**Table 5.4-10
APMs for Listed Special-Status Species**

Species Name	Relevant APMs
	APM-BIO-10, Worker Environmental Awareness Program APM-BIO-18, Listed Kangaroo Rat Avoidance APM-BIO-22 Endangered Species Permits APM-BIO-27, Compensation for Loss of Sensitive Communities
Santa Ana Sucker	APM-BIO-1, Biological Surveys APM-BIO-2, Preconstruction Surveys APM-BIO-3, Monitors APM-BIO-5, Establishment of ESAs APM-BIO-8, Avoidance and Minimization to Jurisdictional Waters APM-BIO-10, Worker Environmental Awareness Program APM-BIO-22 Endangered Species Permits
Southwestern Willow Flycatcher	APM-BIO-1, Biological Surveys APM-BIO-2, Preconstruction Surveys APM-BIO-3, Monitors APM-BIO-4, Minimization of Disturbance to Native Vegetation APM-BIO-5, Establishment of ESAs APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-8, Avoidance and Minimization to Jurisdictional Waters APM-BIO-9, Special-status Species BMPs APM-BIO-10, Worker Environmental Awareness Program APM-BIO-13, Nesting Bird Management Plan APM-BIO-20, Riparian Birds Avoidance APM-BIO-22 Endangered Species Permits APM-BIO-27, Compensation for Loss of Sensitive Communities
Swainson's Hawk	APM-BIO-1, Biological Surveys APM-BIO-2, Preconstruction Surveys APM-BIO-3, Monitors APM-BIO-9, Special-status Species BMPs APM-BIO-10, Worker Environmental Awareness Program APM-BIO-13, Nesting Bird Management Plan APM-BIO-22 Endangered Species Permits APM-BIO-25, Raptor Nest Avoidance
Triple Ribbed Milkvetch	APM-BIO-1, Biological Surveys APM-BIO-2, Preconstruction Surveys APM-BIO-3, Monitors APM-BIO-4, Minimization of Disturbance to Native Vegetation APM-BIO-5, Establishment of ESAs APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-9, Special-status Species BMPs APM-BIO-10, Worker Environmental Awareness Program APM-BIO-14, Preconstruction Plant Surveys APM-BIO-22 Endangered Species Permits APM-BIO-23, Avoidance of Special-Status Plants APM-BIO-27, Compensation for Loss of Sensitive Communities

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Table 5.4-10
APMs for Listed Special-Status Species

Species Name	Relevant APMs
Yellow-billed Cuckoo	APM-BIO-1, Biological Surveys APM-BIO-2, Preconstruction Surveys APM-BIO-3, Monitors APM-BIO-4, Minimization of Disturbance to Native Vegetation APM-BIO-5, Establishment of ESAs APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-8, Avoidance and Minimization to Jurisdictional Waters APM-BIO-9, Special-status Species BMPs APM-BIO-10, Worker Environmental Awareness Program APM-BIO-13, Nesting Bird Management Plan APM-BIO-20, Riparian Birds Avoidance APM-BIO-22 Endangered Species Permits APM-BIO-27, Compensation for Loss of Sensitive Communities

Non-Listed Special-Status Species

Coachella Valley Jerusalem Cricket

Modeled habitat and documented occurrences for Coachella Valley Jerusalem cricket occurs in Segment 7 from approximately Mile Post 26 to Mile Post 30. This species does not have any protection status; however, it is conserved under the CVMShCP. The pipeline would be constructed within existing right-of-way in this area and there is undeveloped habitat surrounding the alignment providing opportunity for this species to move away from construction activities. Impacts to habitat adjacent to existing right-of-way is not a significant impact in context of the large area of undisturbed habitat in the immediate area. Similarly, potential impacts to individuals of this species as a result of the Proposed Project is not expected to significantly affect the local population. The Proposed Project would not result in significant impacts to Coachella Valley Jerusalem cricket.

Santa Ana Speckled Dace

Santa Ana speckled dace has been documented in the Cajon Wash and in City Creek upstream of the Proposed Project's crossing with the Santa Ana River. The Proposed Project's crossings with these systems are dry crossings; therefore, it is unlikely the Proposed Project would result in impacts to this species, which requires perennial flows. Additionally, implementation of **APM-BIO-8**, Avoidance and Minimization of Impacts to Jurisdictional Waters, and **APM-BIO-9**, Special-Status Species BMPs, would reduce potential indirect effects to this species. Potential impacts to this species are less than significant.

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Reptiles

The Proposed Project has the potential to impact special-status reptile individuals as well as their habitat. Preconstruction surveys, as prescribed in **APM-BIO-2**, will be conducted and avoidance measures implemented as described in **APM-BIO-9**. Impacts to habitat would be avoided and minimized through establishment of ESAs (**APM-BIO-5**), minimization of disturbance to native vegetation (**APM-BIO-4**), revegetation of temporarily disturbed areas (**APM-BIO-7**), and avoidance of vernal pools (**APM-BIO-6**). With implementation of these APMs, impacts to these species would be less than significant.

Amphibians

The Proposed Project has the potential to impact individuals of western spadefoot and coast range newt as well as their habitat. Preconstruction surveys, as prescribed in **APM-BIO-2**, will be conducted and avoidance measures implemented as described in **APM-BIO-9**. Impacts to habitat would be avoided and minimized through establishment of ESAs (**APM-BIO-5**), minimization of disturbance to native vegetation (**APM-BIO-4**), revegetation of temporarily disturbed areas (**APM-BIO-7**), and avoidance of vernal pools (**APM-BIO-6**). With implementation of these APMs, impacts to these species would be less than significant.

Burrowing Owl

Modeled habitat for burrowing, as well as documented presence of burrowing owl, occurs throughout the study area. The Proposed Project has the potential to result in direct impact to individuals of this species during construction, crushing of burrows, and removal of suitable habitat as well as indirect impacts from increased noise and human disturbance.

As described in **APM-BIO-24**, the Proposed Project would implement a Burrowing Owl Management Plan. With implementation of this plan, impacts to burrowing owl would be less than significant.

Raptors

Raptors have the potential to nest within and adjacent to the study area. Construction activities could affect raptors if activities occur during nesting season by disturbing nests through increased noise and human presence. Because the Proposed Project would primarily be constructed in existing right-of-way and disturbed areas, it would not result in significant effects on raptor foraging habitat.

Implementation of **APM BIO-25**, Raptor Nest Avoidance, and **APM-BIO-13**, Nesting Bird Management Plan, would reduce potential impacts to less than significant.

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Riparian Birds

Potential impacts to special-status riparian bird species would be similar to those for listed riparian bird species and would be less than significant with implementation of APMs as described for riparian bird species in Table 5.4-10.

Other Birds

Special-status birds have the potential to occur throughout the study area and to be impacted by the Proposed Project. Potential impacts would be avoided and minimized through implementation of the following APMs: establishment of ESAs (**APM-BIO-5**), minimization of disturbance to native vegetation (**APM-BIO-4**), revegetation of temporarily disturbed areas (**APM-BIO-7**), avoidance measures implemented as described in **APM-BIO-9**, and implementation of the Nesting Bird Management Plan (**APM-BIO-13**). With implementation of these APMs, impacts to special-status bird species would be less than significant.

Bats

Roosting habitat for bat species may occur throughout the alignment. Focused bat surveys conducted for the Proposed Project (**APM-BIO-1**) would identify bat species and suitable roosting sites present throughout the Proposed Project area. Roosting habitat would be avoided as described in **APM-BIO-13**. With implementation of this APM, impacts to bat roost sites would be less than significant. The Proposed Project is located primarily within existing right-of-way and disturbed habitat. Impacts to native vegetation would be linear in nature and would not result in the removal of large blocks of habitat; therefore, impacts to foraging bats would be less than significant.

Small Mammals

The Proposed Project has the potential to impact special-status small mammals, including Palm Springs ground squirrel, Palm Springs pocket mouse, and Los Angeles pocket mouse. Suitable habitat for these species will be identified during implementation of **APM-BIO-1**. Preconstruction surveys, as prescribed in **APM-BIO-2**, will be conducted and avoidance measures implemented as described in **APM-BIO-9**. Impacts to habitat would be avoided and minimized through establishment of ESAs (**APM BIO-5**), minimization of disturbance to native vegetation (**APM-BIO-4**), and revegetation of temporarily disturbed areas (**APM-BIO-7**). With implementation of these APMs, impacts to these species would be less than significant.

American Badger

American badger has the potential to occur throughout the Proposed Project area and could be impacted through direct impact to individuals during construction, crushing of burrows, and removal of

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suitable habitat as well as indirect impacts from increased noise and human disturbance. Avoidance measures would be implemented as described in **APM-BIO-26**.

Nelson's Bighorn Sheep

Nelson's bighorn sheep have the potential to graze in vicinity of construction activities. With implementation of **APM BIO-26**, Avoidance of Other Special-status Wildlife, impacts would be less than significant.

Rare Plants

Special-status plant species have the potential to occur throughout the proposed alignment. Focused surveys will be conducted as described under **APM-BIO-1** and avoidance and minimization measures implemented under **APM-BIO-14**, Preconstruction Plant Surveys, and **APM BIO-23**, avoidance of special-status plants. Impacts to special-status plants would be significant if the Proposed Project removes a population of a special-status plant species. Compensation for loss of a population would be implemented as described in **APM-BIO-27**, compensation for sensitive vegetation communities and habitat. With implementation of APMs, impacts to special-status plants would be less than significant.

b) *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

Less than Significant Impact with APMs Incorporated. Proposed Project construction would require ground-disturbance activities and resultant removal of vegetation communities, which may result in the loss of or impacts to sensitive communities as described below. Construction may result in the removal of native desert vegetation regulated under the County of San Bernardino Development Code and General Plan. Within the National Forest, the pipeline may affect Riparian Conservation Areas managed under the National Forest Land Management Plan.

Although more than two thirds of the Adelanto Compressor Station is area has been previously disturbed, undisturbed native desert vegetation is present within some areas where work would occur. Construction activities, clearing and grading; over-excavation and re-compaction for equipment and building foundations; and installation of buildings, equipment, infrastructure, and piping would result in the permanent loss of the native vegetation.

Installation of the pipeline would require a construction width of 50 feet in urbanized areas to 300 feet in remote rural areas. When compaction of the trench is completed, the pipeline right-of-way would be restored to its original condition to an extent that is reasonably possible. New valve stations would result in permanent removal of vegetation at their location. For some areas of the proposed alignment, the ground disturbance would occur directly adjacent to roads in developed areas or within previously disturbed right-of-way and would have minimal effects to

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sensitive communities in these areas. Sensitive communities may be affected where new right-of-way is required (Adelanto to Moreno: Mile Post 11-13, near Mile Post 46, Mile Post 54–56; Moreno to Whitewater Mile Posts 18–20; Mile Posts 22–26) or where it is present adjacent to existing or new right-of-way. Riparian areas may also be affected at waterbody crossings.

Access roads associated with the Proposed Project would also result in ground disturbance. Existing access roads would be used to the extent possible. Existing access roads would be graded and may need to be widened. Sensitive communities may be impacted where they occur adjacent to access roads. Permanent access roads would be established in select locations as needed and may result in loss of sensitive communities.

Ground disturbance could also result from laydown yards and staging areas; however, these would be sited in existing disturbed areas and effects to sensitive communities are not anticipated in these locations.

Construction activities at the pressure limiting stations would occur within existing disturbed areas and would not result in impacts to sensitive communities.

As described in **APMs BIO-1** (Biological Surveys), **BIO-4** (Minimize Disturbance to Native Vegetation), **BIO-5** (Establish ESAs), and **BIO-7** (Revegetation of Temporarily Disturbed Areas), sensitive communities would be mapped and avoided during construction to the maximum extent practicable. Construction areas would be restored and revegetated. Nevertheless, permanent loss of sensitive communities would be a potentially significant impact. Permanent loss of sensitive communities would be compensated as described in **APM-BIO-27** (Compensation for sensitive vegetation communities, habitat, and plants). Implementation of APMs would result in less than significant impacts to sensitive communities.

- c) ***Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?***

Less than Significant Impact with APMs Incorporated. The Proposed Project would affect (wetland and non-wetland) waters of the United States under the jurisdiction of the ACOE and RWQCB as well as streambeds under the jurisdiction of CDFW. There is also the potential to affect isolated waters of the state. Impacts to jurisdictional waters would be avoided and minimized where practicable through use of HDD and bored crossings. These techniques would avoid direct impacts to the beds of the channels and would minimize impacts to the banks and associated riparian vegetation, if present. These techniques would be used for significant waterbody crossings such as the California Aqueduct and Santa Ana River. Trenching would be used for other waterbody crossings resulting in direct temporary impacts to jurisdictional

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waters. As described in **APM-BIO-8**, the Applicant would avoid and minimize impacts to jurisdictional waters and would obtain a permit pursuant to Section 404 of the CWA, a water quality certification pursuant to Section 401 of the CWA, and a Streambed Alteration Agreement pursuant to Fish and Game Code. The Proposed Project would also comply with the Porter-Cologne Act and obtain a Waste Discharge Requirement (WDR) if necessary. The Proposed Project would comply with all permit conditions. Due to the construction techniques implemented, impacts to jurisdictional waters are expected to be temporary in nature and would be restored as described in **APM-BIO-7**. Permanent loss to jurisdictional waters would be significant and would be compensated as described in **APM-BIO-27**. With implementation of APMs, impacts to jurisdictional waters and wetlands would be less than significant.

- d) ***Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?***

Less than Significant Impact with APMs Incorporated. The Proposed Project occurs largely within existing right-of-way and disturbed areas. The Proposed Project would not result in the removal of large contiguous habitat blocks. The proposed alignment would be underground and would not result in significant new above ground structures which would impede local wildlife movement. New permanent structures (such as the Adelanto Compressor Station and Pressure Limiting Stations) are within existing disturbed areas and would not result in new impediments to wildlife movement. During construction, local wildlife may be prevented from moving through active construction areas due to increased air and noise pollution and human presence; however, construction would occur in discrete spreads and would only affect wildlife movement temporarily on a localized level. The Proposed Project has the potential to affect migratory nesting birds; however, implementation of **APM-BIO-13**, Nesting Bird Management Plan, would minimize impacts to migratory birds. Potential impacts to wildlife movement would be short term and localized and, with implementation of APMs, would be less than significant.

- e) ***Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

Less than Significant Impact with APMs Incorporated. Construction activities may result in the removal of native trees and Joshua trees regulated under the County of San Bernardino Development Code, County of San Bernardino General Plan, City of Adelanto Municipal Code and City of Victorville General Plan. A tree inventory consistent with these policies and ordinances will be conducted as described in **APM-BIO-1**, Biological Surveys. Removal of regulated trees, if required, would be conducted in a manner consistent with these policies and ordinances. Trees would be salvaged and replaced as described in **APM-BIO-28**, Regulated Trees. To avoid spread of root disease, cut tree stumps would be treated as described in **APM-**

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BIO-11. With implementation of APMs, the Proposed Project would not be in conflict with local policies or ordinances.

The San Bernardino National Forest outlines management goals in the National Forest Land Management Plan. The Proposed Project would be consistent with the Riparian Area Conservation Policy through mapping of Riparian Conservation Areas as described in **APM-BIO-1**, Biological Surveys and avoidance of Riparian Conservation Areas as described in **APM-BIO-5**, Establish ESAs, **APM-BIO-7**, Revegetation of Temporarily Disturbed Areas, and **APM-BIO-8**, Avoidance and Minimization of Impacts to Jurisdictional Waters. The Proposed Project would also be consistent with the San Bernardino National Forest invasive weed management policy through implementation of a Weed Control Plan as described in **APM-BIO-12**.

f) ***Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?***

Less than Significant Impact with APMs Incorporated. The Proposed Project passes through three HCPs, the WRMSHCP, the CVMSHCP, and the SKR HCP. The Proposed Project's consistency with these plans is described below.

WRMSHCP

SoCalGas is not a permittee under the WRMSHCP and has not, at the time of this PEA, sought to become a PSE; therefore, for the purpose of this PEA, the Proposed Project is not seeking take authorization under the WRMSHCP and does not need to comply with the implementation measures of the WRMSHCP. However, the Proposed Project must not be in conflict with the conservation goals of the WRMSHCP.

The Adelanto to Moreno alignment crosses through the Reche Canyon conservation area (Proposed Linkage 4) between Mile Posts 50 to 56. The proposed alignment would be installed within existing right-of-way between Mile Post 50 to 54 and would not be contrary to the goals of the Conservation Area as it would not result in removal of large habitat blocks or constrain wildlife movement. From Mile Post 54 to 56 the proposed alignment would traverse private property. Although this area is not currently right-of-way, the proposed alignment primarily follows existing unpaved roads. Although some native habitat may be removed adjacent to existing disturbed areas during installation of the pipeline, the Proposed Project would not result in the removal of large swaths of habitat. Areas temporarily disturbed by pipeline construction would be restored as described in **APM-BIO-7**, Revegetation of Temporarily Disturbed Areas. Installation of the pipeline would not constrain wildlife movement as there would be no significant aboveground structures impeding wildlife movement. There are also no

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new access roads proposed for this portion of the proposed alignment and the Proposed Project would not widen Reche Canyon Road; therefore, there would be no new roads or crossings that would constrain wildlife movement. As there would be no impacts to large areas of habitat or constraints to wildlife movement, the Proposed Project would not be in conflict with the goals of Proposed Linkage 4.

The Moreno to Whitewater alignment crosses through the Badlands/Potrero conservation area (Proposed Core 3) between Mile Posts 1 to 7. In this location, the Proposed Project generally parallels SoCalGas' 36-inch pipeline known as Line 5000 and will generally be located within SoCalGas' existing private right-of-way; therefore, new disturbance areas would be limited to construction activities adjacent to the existing right-of-way. The Proposed Project would not result in removal of large swaths of habitat. Proposed Core 3 has a large proportion of its area unaffected by edge effects; therefore, introduction of new edge effects would be a new impact to this conservation area. Long, linear projects can result in edge effects by creating opportunity for invasive species to establish in the disturbance area and providing increased opportunity for off-road vehicles and human activities. Potential for edge effects will be reduced through implementation of **APM-BIO-29**, wildland/urban interface guidelines, as well as **APM-BIO-7**, restoration and revegetation of disturbance areas. Night lighting will be avoided and shielded as described in **APM-BIO-9**. With implementation of these APMs, the Proposed Project would not be in conflict with the conservation goals of Proposed Core 3.

The Proposed Project also overlaps survey areas for burrowing owl, Los Angeles pocket mouse, San Bernardino kangaroo rat, Narrow Endemic Plant Species, and CAPS. The Proposed Project will conduct biological surveys, including focused surveys for these species (**APM-BIO-1**), and will implement avoidance and minimization measures if special-status species are present, including implementation of a burrowing owl management plan (**APM-BIO-24**), avoidance of small mammals (**APM-BIO-26**), and avoidance of special-status plants (**APM-BIO-23**). The Proposed Project would also avoid and minimize impacts to jurisdictional waters and riparian areas as described in **APM-BIO-4** (Minimize Disturbance to Native Vegetation), **APM-BIO-5** (Establish ESAs), **APM-BIO-6** (Avoidance of Vernal Pools), **APM-BIO-7** (Revegetation of Temporarily Disturbed Areas), and **APM-BIO-8** (Avoidance and Minimization of Impacts to Jurisdictional Waters). The Proposed Project would also implement minimization measures for construction adjacent to conservation areas (**APM-BIO-29**). Further, the Proposed Project would be required to demonstrate that it would not be in conflict with any regional HCP (**APM-BIO-30**). With implementation of these APMs, the Proposed Project would not be in conflict with the provisions of the WRMSHCP.

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CVMSHCP

The proposed alignment passes through five conservation areas of the CVMSHCP. Through this portion of the alignment, the pipeline would be installed primarily within existing right-of-way, minimizing the potential for new disturbance to conservation areas and habitats for conserved species. Protection of windblown and Aeolian sand is one of the primary conservation goals in these conservation areas. As there would be limited new aboveground structures, the Proposed Project would not significantly affect windblown sand processes. Additionally, wildlife movement through the Whitewater River and San Gorgonio River is also a conservation goal. The Proposed Project would not result in significant permanent impacts to these rivers as the pipeline would be installed under the river and would not affect wildlife movement. As described in **APM-BIO-1**, Biological Surveys, surveys would be conducted for species conserved by the CVMSHCP and, if species or their habitat is present, avoidance and minimization measures would be implemented as described in **APM-BIO-1** through **APM-BIO-27**. Further, the Proposed Project would be required to demonstrate that it would not be in conflict with any regional HCP (**APM-BIO-30**). With implementation of these APMs, the Proposed Project would not conflict with the goals of the CVMSHCP.

SKR HCP

The proposed alignment does not cross any of the Core Reserve areas. As described in **APM-BIO-1**, Biological Surveys, surveys would be conducted for Stephens' kangaroo rat and, if Stephens' kangaroo rat or its habitat is present, avoidance and minimization measures would be implemented as described in **APM-BIO-1** through **APM-BIO-27**. Further, the Proposed Project would be required to demonstrate that it would not be in conflict with any regional HCP (**APM-BIO-30**). Because the proposed alignment does not cross Core Reserve areas, and APMs would be implemented as appropriate, the Proposed Project would not conflict with the goals of the SKR HCP.

5.4.5 Applicant Proposed Measures

APM-BIO-1 Biological Surveys. Biological surveys will be conducted for the Proposed Project to determine the extent of sensitive biological resources and will serve to inform avoidance and minimization measures. Biological surveys will include vegetation community mapping, habitat assessments for special-status species, special-status plant surveys, focused wildlife surveys, vernal pool assessment, delineation of jurisdictional waters and wetlands, tree surveys, and invasive weed survey.

- **Vegetation mapping.** Mapping of vegetation will be conducted within the study area and will be consistent with the *Protocols for Surveying and Evaluating Impacts to Special-status Native Populations and Natural Communities* (CDFG 2009), and

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vegetation communities will be identified using the *Manual of California Vegetation, Second Edition* (Sawyer et al. 2009).

- **Jurisdictional delineation.** The delineation of jurisdictional waters and wetlands will be conducted within the right-of-way and within 100 feet of proposed disturbance areas. The delineation will be completed according to agency guidelines (ACOE, RWQCB, and CDFW) and generally accepted practices.
- **Tree surveys.** Certified arborists will conduct an inventory of regulated trees within 25 feet of all impact areas and as required by City of Adelanto Municipal Code (Section 17.57.040), City of Highland (Chapter 8.36), and San Bernardino County Municipal Code (Chapter 88.01) policy. Regulated trees include Joshua trees, native oaks over 5 inches diameter at breast height (DBH), native trees over 6 inches DBH, three or more palm trees in linear plantings, 50 feet or greater in length; and heritage trees.
- **Townsend's big-eared bat.** Passive acoustic bat surveys will be conducted to determine general bat presence, activity levels, and species composition along high-probability areas, and representative areas of the alignments. Broadband acoustic detectors (Anabat II zero-crossing ultrasonic detectors and CF-ZCAIM storage units) will be programmed to record bat calls each day from one half-hour before sunset to one half-hour after sunrise each day of the study.
- **Burrowing owl.** Focused burrowing owl surveys will be conducted within all suitable habitat within the study area in accordance with the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012b) or WRMSHCP protocol, as appropriate.
- **Breeding raptor survey.** Breeding raptor surveys will be conducted in accordance with the methods described by Fuller and Mosher (1987). In general, these methods involve conducting road surveys early in the breeding season with follow-up road or walking surveys to provide additional locations.
- **Desert tortoise.** Desert tortoise focused surveys will be conducted in accordance with the USFWS 2010 protocols.
- **California gnatcatcher.** Coastal California gnatcatcher focused surveys will be conducted in accordance with the USFWS 1997 protocols.
- **Riparian birds:** Southwestern willow flycatcher and least Bell's vireo focused surveys will be conducted in accordance with the latest protocols (Sogge et al. 1997; USFWS 2000; USFWS 2001; USFWS 2004)
- **Small mammals.** Trapping surveys will be conducted for Mohave ground squirrel (Starr 1991), Stephens' kangaroo rat (Dudek & Associates 1996), San Bernardino kangaroo rat (Braden et al. 2000), Los Angeles pocket mouse (Biological Monitoring

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Team 2007), Palm Springs pocket mouse (Barrows et al. 2009), and Coachella Valley round-tailed ground squirrel (CVAG 2007).

- **Focused special-status plant surveys.** Will conform to *CNPS Botanical Survey Guidelines* (CNPS 2001); *Protocols for Surveying and Evaluating Impacts to Special-status Native Populations and Natural Communities* (CDFG 2009); and *U.S. Fish and Wildlife Services General Rare Plant Survey Guidelines* (Cypher 2002).
- **Habitat assessment.** A habitat assessment will be completed for all other special-status species with potential to occur within the Proposed Project area and will be based on the vegetation mapping and observations during other focused surveys.

APM-BIO-2 Preconstruction Surveys. Pre-construction biological clearance surveys will be performed to minimize impacts on special-status plants or wildlife species. These preconstruction surveys will be completed in accordance with accepted protocols where applicable.

APM-BIO-3 Biological Monitoring. Biological monitors will be assigned to the Project and will be responsible for overseeing the Proposed Project's environmental protection and mitigation measures related to biological resources. The monitors will be responsible for inspection and monitoring procedures in compliance with requirements set forth in the CEQA document, NEPA document, and any special conditions that will be required as part of other federal and/or state permits, approvals, or licenses. Where appropriate, monitors will flag the boundaries of areas where activities need to be restricted to protect sensitive communities, habitats, and/or native plants and wildlife or special-status species. These restricted areas will be monitored to protect the species during construction. Where necessary, the Biological Monitor will hold the required permits or Memoranda of Understanding (MOU) with appropriate federal and state agencies for the survey for or handling of any listed species. The Biological Monitor will have the ability to temporarily halt construction should a federally listed, state listed, or special-status species be found or encountered during construction activities so that procedures may be implemented to either relocate the species (if applicable) or notify the appropriate agency personnel.

APM-BIO-4 Minimize Disturbance to Native Vegetation. Efforts will be made to minimize vegetation removal and permanent loss at construction sites. Prior to the start of construction, work areas (including, but not limited to, staging areas, access roads, and sites for temporary placement of construction materials and spoils) will be delineated with orange construction fencing or staking in areas with sensitive resources to clearly identify the limits of work and will be verified by the Biological Monitor prior to ground-disturbing activities.

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- Fencing/staking will remain in place for the duration of construction activities.
- Where practicable, spoils will be stockpiled in disturbed areas lacking native vegetation or where habitat quality is poor.
- All disturbances, vehicles, and equipment will be confined to the fenced/flagged areas.

APM-BIO-5 Establish Environmentally Sensitive Areas (ESAs). ESAs include areas to be avoided during construction due to the presence of a sensitive biological resource. ESAs will be identified in advance of construction as a result of biological surveys and preconstruction surveys and will include jurisdictional waters and wetlands, sensitive communities, occupied special-status species habitats, and raptor nesting locations. The locations of ESAs will be clearly depicted on construction drawings, as appropriate, which will also include avoidance and minimization measures on the margins of the construction plans. ESAs may also be identified during preconstruction surveys or nesting bird surveys. ESAs will be clearly delineated in the field with temporary construction fencing and signs prohibiting movement of the fencing or sediment controls under penalty of work stoppages and additional compensatory mitigation. ESAs will also be clearly identified (with signage or by mapping on site plans) unless infeasible. The construction materials used to delineate environmentally sensitive areas will be removed no later than 30 days following completion of construction.

Areas for spoils, equipment, vehicles, and materials storage areas; parking; equipment and vehicle maintenance areas, and wash areas will be placed at least 100 feet from ESAs, unless infeasible. The Biological Monitor will conduct weekly monitoring of the ESAs during construction activities and will have the ability to stop construction activities in the vicinity (within 100 feet) of an ESA if it is determined as a result of monitoring that corrective actions are necessary to avoid and protect the ESA.

APM-BIO-6 Avoidance of Vernal Pools. If vernal pools are mapped within the disturbance area, they will be flagged as ESAs and avoided to the maximum extent practicable. The ESA will include the extent of the vernal pool and a 250-foot buffer around the pool to maintain hydrologic integrity. If a vernal pool cannot be avoided, the Applicant will provide compensation in coordination with the resource agencies (USFWS, ACOE, CDFW). Where practicable, topsoil will be salvaged from the vernal pool and used for vernal pool creation site.

APM-BIO-7 Revegetation of Temporarily Disturbed Areas. A qualified botanist/restoration ecologist will prepare restoration and revegetation plans to be reviewed and approved by the USFS and the resource agencies (ACOE, SWRCB, CDFW, and USFWS) prior to initiation of vegetation-disturbing activities. The plans will detail the methods for topsoil salvage and

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storage, recontouring of temporarily disturbed areas to pre-construction conditions; revegetation using salvaged native desert plants and special-status plants from the Proposed Project footprint, nursery grown container plants, and/or native seed mixes; interim (5-year) maintenance, monitoring and reporting, and long-term management and monitoring of restoration areas. Restoration and revegetation will be detailed for temporary disturbance to sensitive communities, habitat occupied by special-status species, jurisdictional waters, and, in the USFS, Riparian Conservation Areas. The plan will include at a minimum: (a) soil preparation measures, including locations of topsoil salvage, and storage, recontouring, decompacting, imprinting, or other treatments; (b) detailed methods for top soil salvage and storage, as applicable; (c) plant material collection and acquisition guidelines, including guidelines for salvaging, storing, and handling plants from the Proposed Project site, as well as obtaining plants and seed from appropriate sources; (d) a plan view drawing or schematic depicting the temporary disturbance areas; (e) a schedule for the optimal time of planting or seeding and the installation methodologies for salvaged plants, container plants, and/or seed mix(es); (f) a description of the temporary irrigation system, if used; (g) measures to control invasive weeds, as appropriate; (h) success criteria; and (i) a detailed monitoring program, commensurate with the Plan's goals. This Plan will also contain contingency measures for failed revegetation and restoration efforts (efforts not meeting success criteria).

APM-BIO-8 **Avoidance and Minimization of Impacts to Jurisdictional Waters.** Prior to initiation of construction activities, the Applicant will secure a Streambed Alteration Agreement from CDFW, a permit from the ACOE pursuant to Section 404 of the Clean Water Act (CWA), and a Water Quality Certification from the RWQCB (collectively, "waters permits"), as required. The Applicant will implement all conditions and measures contained within the waters permits. At a minimum, the following BMPs will be implemented to avoid potential impacts to jurisdictional waters:

- Jurisdictional waters will be flagged as ESAs and impacts avoided and minimized (as described in APM BIO-4) to the maximum extent practicable
- Minimize indirect effects from erosion by implementing a SWPPP as described in APM HYDRO- 1
- Avoid maintenance and refueling of equipment within 100 feet of jurisdictional waters and as described in **APM-HYDRO-2**, Equipment Maintenance and Refueling Near Sensitive Areas, and **APM-HAZ-3**, Procedures for Fueling and Maintenance of Construction Equipment.
- Avoid and minimize impacts from unintentional frac-out at crossings implementing HDD technology by implementing **APM-HYDRO-4**, Frac-Out Contingency Plan, and **APM-HAZ-5**, Containment and Disposal of HDD Drilling Waste.

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- Avoid and minimize impacts from unintentional spills by implementing **APM-HAZ-6**, Spill Prevention, Countermeasure, and Control Plan and Hazardous Materials Business Plan and **APM-HAZ-4**, Emergency Response Plan.
- Avoid and minimize impacts from unintentional spills by implementing **APM-HAZ-7**, Hazardous Materials Contingency Plan.

APM-BIO-9 BMPs for Avoidance and Minimization of Impacts to Special-status Wildlife Species. Construction and operations crews will be directed to use BMPs where applicable. These measures will be identified prior to construction and incorporated into the construction activities. BMPs to avoid and minimize impacts to special-status species will include the following:

- Minimize Noise Impacts.** To minimize disturbance to wildlife nesting or breeding activities in surrounding habitat, loud construction activities will be avoided adjacent to habitat to the extent feasible from February 1 to August 31. Loud construction activities may be permitted from February 1 to August 31 only according to the provisions of the Nesting Bird Management Plan as described in **APM-BIO-13**. Measures may include noise barriers and/or biological monitor to ensure no take of nests as a result of noise.
- Light.** Night time construction will be avoided to the extent feasible adjacent to sensitive habitat, including habitat occupied by special-status species, riparian areas, and conservation areas identified in the WRMSHCP, CVMSHCP, and SKR HCP. If night time construction cannot be avoided, lighting will be shielded away from sensitive habitat.
- Avoid Wildlife Entrapment.** At the end of each work day, Biological Monitors will monitor the pitfalls (trenches, bores, temporary detention basins, and other excavations) have been backfilled, covered, or sloped to allow wildlife egress. All potential pitfalls will be backfilled, sloped at a 3:1 ratio to provide wildlife escape ramps at appropriate intervals, or covered completely to prevent wildlife access except as necessary for ongoing Project activities. Should wildlife become trapped, the Biological Monitor will remove and, if applicable, relocate it as described in APMs.
- Avoid entrapment of nesting or migratory birds.** All pipes or other construction materials or supplies will be covered, capped, or inspected in storage or laydown areas at the end of each work day. Netting will be installed to avoid entrapment and monitored and maintained as necessary to ensure compliance.

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- e. **Minimize Spills of Hazardous Materials.** All vehicles and equipment will be maintained in proper condition to minimize the potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. The Biological Monitor will be informed of any hazardous spills immediately. Hazardous spills will be immediately cleaned up and the contaminated soil will be properly handled or disposed of at a licensed facility. Servicing of construction equipment will take place only at a designated area as approved by the Biological Monitor. Service and maintenance vehicles will carry a spill kit.
- f. **Inspection of Vehicles.** Employees and contractors will carefully examine vehicles and construction equipment for the presence of special-status species prior to moving their vehicles. If a listed species is found underneath or near a vehicle or piece of equipment, the Biological Monitor will be notified immediately and no equipment will be moved until the animal has left voluntarily or is relocated by a biologist authorized to do so. Non-listed special-status species may be moved by construction personnel, as described in the WEAP training.
- g. **Wildlife Relocation.** Impacts on protected and special-status wildlife will be minimized by relocating any individuals observed within the immediate construction area to suitable habitat outside the development impact footprint, as feasible. Only a qualified biologist, possessing necessary permits, will relocate individuals (unless otherwise described in the WEAP). All relocations of special-status species will be documented and reported to the appropriate jurisdictional agencies.
- h. **Trash abatement.** A trash abatement program will be initiated during the pre-construction phases of the Proposed Project, and will continue through the duration of the Proposed Project. Trash and food items must be contained in closed (raven-proof) containers and removed regularly (at least once a week) to reduce attractiveness to opportunistic predators such as ravens and coyotes. Upon Project completion, all construction refuse, including, but not limited to, broken equipment parts, wrapping material, cords, cables, wire, rope, strapping, twine, buckets, metal or plastic containers, and boxes will be removed from the site and disposed of properly. Domestic dogs will be prohibited from the Project site and site access.
- i. **Speed Limits.** Except on county-maintained roads, vehicle and equipment speed limits will not exceed 15 miles per hour.

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- APM-BIO-10 Worker Environmental Awareness Program (WEAP).** A WEAP will be prepared, and all construction crews and contractors will be required to participate in WEAP training prior to starting work on the Proposed Project, where concurrence has been provided the appropriate regulatory agency prior to the commencement of construction activities. Training materials and briefings will include but not be limited to: discussion of the Federal and State Endangered Species Acts, Bald and Golden Eagle Protection Act, the Migratory Bird Treaty Act, CWA, and Fish and Game Code; the consequences of non-compliance with these acts; identification and values of plant and wildlife species and significant natural plant community habitats; fire protection measures; sensitivities of working on NFS lands and identification of USFS sensitive species; hazardous substance spill prevention and containment measures; a contact person in the event of the discovery of dead or injured wildlife; and review of mitigation requirements. A record of all personnel trained will be maintained.
- APM-BIO-11 Treat Cut Tree Stumps with Sporax.** All stumps of trees (conifers and hardwoods) 3 inches DBH or greater resulting from activities associated with construction of the Project will be treated with Sporax according to product directions to prevent the spread of annosus root disease. Only licensed applicators will apply Sporax. Sporax will not be used during rain events unless otherwise approved by the appropriate regulatory agencies.
- APM-BIO-12 Weed Control Plan.** The Applicant will prepare and implement a Weed Control Plan on USFS lands for pre-construction and construction invasive weed abatement. The Weed Control Plan will include adaptive provisions such as wheel and equipment washing, use of herbicide, manual, and mechanical methods applied with the authorization of the USFS. Herbicides will be applied by a Pest Control Advisor in compliance with all state and federal laws and regulations. Herbicides will not be applied during or within 72 hours of a scheduled rain event. In riparian areas only water-safe herbicides will be used. Herbicides will not be applied when wind velocities exceed 6 mph. Where manual and/or mechanical methods are used, disposal of the plant debris will follow the regulations set by the USFS.
- APM-BIO-13 Nesting Bird Management Plan.** Prior to initiation of construction activities, a Nesting Bird and Bat Management Plan will be developed and reviewed by CPUC, USFS and CDFW. The Nesting Bird Management Plan will detail methodology for preconstruction nesting bird surveys, a list of bird species expected to nest within the disturbance area, minimum buffers for each species based on species, habitat, and construction activity; noise reduction measures; and monitoring requirements. It would also identify potential bat roost sites present within the study area and measures for avoidance of maternal bat roosts or best practices for passively relocating other roost sites prior to disturbance.

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Generally, pre-construction surveys for nesting birds will be conducted if construction and removal activities are scheduled to occur during the breeding season and will be conducted in areas within 500 feet of laydown/staging areas, trench locations, and access/spur road locations. Surveys for birds will be conducted between February 1 and August 31. The required survey dates may be modified based on local conditions with the approval of the USFS and CDFW. The Applicant will be responsible for designating qualified biologists who can conduct pre-construction surveys and monitoring for breeding birds. The resume of the proposed biologists will be provided to the appropriate resource agencies prior to ground disturbance.

If breeding birds with active nests are found, a biological monitor will establish a no-activity buffer around the nest. The buffer will be established in the Nesting Bird Management Plan by species but will be a maximum of 300-foot buffer for non-raptors and a 500-foot buffer for raptors. Buffers may be adjusted by the qualified biologist to reflect existing conditions including ambient noise, topography, and disturbance. The biological monitors will conduct regular monitoring of the nest to determine success/failure and to ensure that Proposed Project activities are not conducted within the buffer(s) until the nesting cycle is complete or the nest fails. The biological monitors will be responsible for documenting the results of the surveys.

APM-BIO-14 Preconstruction Plant Surveys. Conduct preconstruction surveys for state and federally Threatened, Endangered, Proposed, Petitioned, and Candidate plants and avoid any located occurrences of listed plants, to the extent practicable. The Applicant will conduct pre-construction surveys for state and federally listed Threatened and Endangered, Proposed, Petitioned, and Candidate plants in all areas subject to ground-disturbing activity. The resume of the proposed biologists will be provided to the appropriate regulatory agencies for concurrence prior to ground disturbance.

APM-BIO-15 Arroyo Toad Avoidance. If arroyo toad is found during clearance surveys, the authorized biologist will halt all activities until appropriate corrective measures have been completed. No stockpiles of materials will occur in areas occupied by arroyo toad. Trash that may attract predators of the arroyo toad will be removed daily.

If the Proposed Project crosses or impacts occupied or suitable arroyo toad habitat, the following avoidance measures will be implemented during the activity period (between February and October):

- Ground-disturbing activities, such as grading, stream crossing upgrades, and parking will be avoided along access roads within a 1-kilometer buffer of occupied arroyo

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toad habitat unless hardpacked areas can be used exclusively and the path cleared each morning.

- Use of access roads will be limited within the 1-kilometer buffer area and restricted to daylight hours only.
- Alternatively, access roads can be fenced with toad-proof fencing to allow for use without monitoring, provided it is maintained in a toad-proof state. The plans and methods for the installation will be approved by the appropriate resource agencies if this option is chosen.
- Vehicle speeds will be limited to 15 mph.

APM-BIO-16 Condor Avoidance. Within suitable condor habitat, construction areas will be inspected daily for microtrash and all microtrash will be placed in closed trash containers.

APM-BIO-17 Mohave Ground Squirrel Avoidance. A trapping program for Mohave ground squirrels will be developed through consultation with CDFW and conducted within one year prior to construction activities. If the Mohave ground squirrel trapping survey results are positive, an incidental take permit (ITP) will be obtained. Habitat compensation and other mitigation measures will be specified in the ITP but will include preservation of habitat at a minimum 1:1 ratio. Other measures negotiated through the ITP process will be implemented.

APM-BIO-18 Listed Kangaroo Rat Avoidance. Focused surveys will be conducted for San Bernardino kangaroo rat and Stephens' kangaroo rat at least a year prior to construction activities. These surveys, conducted using the USFWS protocol and performed by an approved biologist permitted by the USFWS will identify the extent of occupied habitat. If survey results are positive, permits (Biological Opinion or Habitat Conservation Plan from USFWS and consistency determination from CDFW) will be obtained. Temporary disturbance areas within occupied habitat will be returned to grade as soon as practicable and be restored in accordance with the Proposed Project's Restoration and Revegetation Plan (**APM-BIO-7**). Specific measures will include:

- Pipeline construction within occupied habitat will occur outside the primary active season (approximately February 15 through October 1) for San Bernardino kangaroo rat when practicable.
- During construction within suitable habitat, "drift fences" (e.g., silt fence, or similar material) would be installed around stockpiles and other areas with the potential to attract or entrap these species within 300–500 feet of occupied habitat or

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designated Critical Habitat (depending on topography). The fence would be in place far enough ahead of the construction to effectively exclude kangaroo rats by trapping from the work space for a period of 24 hours prior to construction. Kangaroo rats trapped within construction workspaces and inside the fencing would be relocated outside of the active construction area and released in suitable habitat by a biologist permitted by the USFWS to handle these species. Fencing will be removed following regarding and restoration of the construction footprint.

- A qualified Biological Monitor will be present when construction occurs within, and/or 300-500 feet from occupied habitat. The Biological Monitor will check the trench and around equipment each morning for any trapped animals.

APM-BIO-19 Coastal California Gnatcatcher Avoidance. A focused habitat assessment will be conducted for suitable coastal California gnatcatcher. Focused surveys will be conducted for coastal California gnatcatcher within all suitable habitat prior to the initiation of construction activities. Construction activities within or adjacent to coastal California gnatcatcher suitable habitat will be avoided during the coastal California gnatcatcher breeding season (February 15 through August 31), to avoid take of active nests. If construction activities occur during coastal California gnatcatcher breeding season, a qualified biologist will survey the suitable habitat within 500 feet of construction activities to identify active nests. If active nests are found, construction activities will not occur within 500 feet of an active nest, or a sound barrier will be erected to reduce noise levels to below 60 A-weighted decibels equivalent level over a given time period (dBA L_{eq}), in conjunction with biological monitoring to avoid take. If no nesting activity is observed, then work may proceed, but weekly monitoring of the area will be required to ensure that no new nests have been built.

APM-BIO-20 Riparian Birds Avoidance. Proposed construction and maintenance activities within or adjacent to habitat suitable for riparian birds (including least Bell's vireo, southwestern willow flycatcher, yellow-billed cuckoo) habitat will avoid the breeding season for these species (approximately April–September 15) to the extent practicable. If any construction or maintenance activities occur during the breeding season, a qualified biologist will survey the area and identify nest locations prior to the construction or maintenance activity. Construction or maintenance activities would not occur within 500 feet of an active nest, unless a sound barrier is erected to reduce noise to below 60 dBA L_{eq} . A qualified biological monitor will be present for any activities within or adjacent to suitable habitat during breeding season and the Biological Monitor would have the authority to stop construction activities if the Biological Monitor observed behavior that indicates distress because of construction noise/activity. If no nests are

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present, then work may occur, but weekly monitoring must occur to determine if new nests have been built.

APM-BIO-21 Avoidance of Desert Tortoise. If the Proposed Project would affect occupied desert tortoise habitat, as determined by focused surveys conducted for the Proposed Project, a Desert Tortoise Avoidance and Translocation Plan will be prepared and approved by the USFWS prior to initiation of construction activities. The Plan will include methods for clearance surveys, tortoise handling, artificial burrow construction, egg handling, and other procedures. All methods will be consistent with those described in the USFWS' Desert Tortoise Field Manual (USFWS 2009) or more current guidance provided by CDFW and USFWS. The Applicant will also implement all terms and conditions described in the Biological Opinion (or Habitat Conservation Plan) for the Project, to be prepared by USFWS. An Authorized Biologist will be approved by the USFWS prior to initiation of construction activities. Applicable conditions and requirements include, but are not limited to, the following.

Pre-Construction Surveys for Desert Tortoise. Construction sites, staging areas, and access routes will be cleared by a qualified desert tortoise biologist before the start of construction, ground-disturbing activities, equipment or vehicle staging, or other actions with the potential to harm or kill desert tortoises or other special-status and protected wildlife. An Authorized Biologist(s) will survey the site for desert tortoises using agency-approved survey techniques. If construction occurs during the desert tortoise active season (March 1 through October 31), or when temperatures and environmental conditions are conducive to tortoise activity as determined by an authorized biologist, the survey would occur within 48 hours before surface disturbance. During the inactive season (November 1 through February 28, except as noted above), when conditions are not conducive to tortoise activity as determined by an authorized biologist, one survey must occur within 72 hours of surface disturbance or up to five days in advance of disturbance if conditions are not favorable for tortoise activity.

Desert Tortoise Burrows. All potential desert tortoise burrows found in the construction zone, whether occupied or not, will be excavated by an authorized biologist. Tortoises and nests found within the Proposed Project area will be relocated by an authorized tortoise biologist in accordance with the latest USFWS-approved protocol detailed in the Desert Tortoise Field Manual (USFWS 2009) and in accordance with Proposed Project permits. Unoccupied burrows would be collapsed or blocked to prevent tortoise re-entry. Any desert tortoise burrows and pallets that are observed outside of but within 50 feet of the construction work area must be flagged for avoidance. No stakes or flagging will be placed on the berm or in the mouth of a desert tortoise burrow. Desert

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tortoise burrows will not be marked in a manner that facilitates poaching. Avoidance flagging must be designed to be easily distinguished from access route or other flagging, and would be designed in consultation with experienced construction personnel and authorized biologists. All flagging will be removed following construction activities.

Excavated Desert Tortoises. Tortoise excavated from burrows must be relocated to unoccupied natural or artificially constructed burrows immediately following excavation. The artificial or unoccupied natural burrows should be located 150 to 300 feet from the original burrow. Relocated tortoises will not be placed in existing occupied burrows. If an existing burrow that is similar in size, shape, and orientation to the original burrow is unavailable, the authorized biologist would construct one. Desert tortoises moved during inactive periods will be monitored for at least two days after placement in the new burrows to ensure their safety. The authorized biologist would be allowed some judgment and discretion to ensure that survival of the desert tortoise is likely.

Aboveground Desert Tortoises. Desert tortoises that are found aboveground would be moved from the construction right-of-way by an authorized biologist, and be placed in the shade of a shrub located 150 to 300 feet from the point of encounter.

Desert Tortoise Handling Procedures. Procedures for handling tortoises would follow those described in the Desert Tortoise Field Manual (USFWS 2009) and as authorized by Proposed Project permits. The authorized biologist would document each tortoise encounter/handling.

Blasting. If blasting is required in desert tortoise habitat, a Biological Monitor will be assigned to each blasting crew or area in which blasting would occur. Prior to any blast, a 200-foot area around the blast site will be surveyed for desert tortoises. Aboveground tortoises will be relocated at least 500 feet from the blast site. Tortoises in burrows will be relocated in accordance with the Proposed Project's translocation plan and project permits.

Fuel and Waste Spills. Any fuel or hazardous waste leaks or spills will be stopped or repaired immediately and cleaned up at the time of occurrence. The storage and handling of hazardous materials will be excluded from the construction zone in areas within 100 feet of active tortoise burrows and wash crossings. Any unused or leftover hazardous products will be properly disposed of off site.

Pipes and Culverts Larger than 3 Inches in Diameter. In desert tortoise habitat, construction pipe, culvert, or similar structure with a diameter greater than 3 inches aboveground on the construction site for one or more nights will be inspected for

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tortoises before the material is moved, buried, or capped by the Applicant. As an alternative, structures may be capped before being stored on the construction site.

Environmental Inspection. Upon completion of construction, a thorough inspection of the site will be conducted by the biological monitor and authorized biologist to determine the extent of compliance with the conditions of USFWS's Biological Opinion. Within 90 days of completion of Project activities, the biological monitor and/or authorized biologist will submit a report to the USFWS. The report will document the numbers and locations of desert tortoises encountered, their disposition, effectiveness of protective measures, practicality of protective measures, recommendations for future measures that allow for better protection or more workable implementation, and the number of acres disturbed.

APM-BIO-22 Endangered Species Permits. If needed, appropriate permits will be obtained from the resource agencies (USFWS and CDFW) to authorize take of listed species including a Biological Opinion from the USFWS and an Incidental Take Permit from CDFW. All permit conditions will be implemented and a report will be provided to the resource agencies within 90 days of completion of construction activities documenting compliance with the permits.

APM-BIO-23 Avoidance of Special-Status Plants

Pre-construction surveys. Focused surveys will be conducted for special-status plant species prior to construction. Surveys will occur at the appropriate time to capture the characteristics necessary to identify the taxon. Location of each special-status plant population will be mapped and number of individuals for each population documented. The outer extent of each population will be flagged at the time of the survey. Surveys will be conducted by a qualified botanist knowledgeable in the biology of the local flora, and consistent with currently accepted protocols.

If a special-status plant is detected, the full extent of the population on-site will be recorded using GPS. All but the smallest populations (e.g., a population occupying less than 100 square feet) will be recorded as area polygons; the smallest populations may be recorded as point features. All GPS-recorded occurrences will include: the number of plants, phenology, and habitat or community type. The map of occurrences submitted with the final botanical report will be prepared for consistency with definition of an occurrence by CNDDDB, (i.e., occurrences found within 0.25 miles of another occurrence of the same taxon, and not separated by significant habitat discontinuities, will be combined into a single 'occurrence'). Data and completed CNDDDB forms for each 'occurrence' (as defined by CNDDDB) will be submitted to CNDDDB.

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Avoidance. Prior to the start of any ground- or vegetation-disturbing activities, a qualified biologist will establish ESAs to protect avoided special-status plants that occur outside of the disturbance areas and within 100 feet of disturbance areas. The ESA boundary will be based on the results of the focused plant survey and will be placed a minimum of 20 feet from the uphill side of the occurrence and 10 feet from the downhill side. Where this is not possible due to construction constraints, other protection measures, such as silt-fencing and sediment controls, may be employed to protect the occurrences.

APM-BIO-24 Burrowing Owl Avoidance and Mitigation. Focused surveys will be conducted for burrowing owl to identify suitable and occupied habitat. Prior to initiation of construction activities, a Burrowing Owl Management Plan will be prepared and approved by CDFW. The Management Plan will include detailed measures for the following: preconstruction surveys, avoidance measures and monitoring; burrowing owl relocation and mitigation plan. The relocation and mitigation plan will include the following:

- detailed description of available habitat and unoccupied burrows at the relocation site;
- details for construction and installation of artificial burrows if necessary;
- detailed methods and guidance for passive or active relocation of burrowing owls occurring during the non-breeding season;
- monitoring and management of relocation sites;
- habitat compensation for permanent loss of occupied habitat. Ratios typically include a minimum of 19.5 acres per nesting burrow lost; however, habitat compensation will be approved by CDFW and detailed in the Burrowing Owl Mitigation and Monitoring Plan.

APM-BIO-25 Raptor Nest Avoidance. Raptor nest surveys will be conducted within all disturbance areas and a buffer as approved by CDFW and USFWS, but will be wide enough to encompass potential avoidance buffers that may be implemented during construction (at least 500 feet). All active, inactive, and potential raptor nests will be recorded, including nests that may be common raven nests. Avoidance measures will be outlined in the nesting bird management plan described in **APM-BIO-13**.

APM-BIO-26 Avoidance of Other Special-status Wildlife

Badger. Prior to construction, measures will be taken to minimize impacts on badgers that are encountered. If a badger and its active burrow are found on site, a qualified biologist will monitor the burrow during construction. It is likely that the badger will leave the site once

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construction begins. One-way trap doors will be installed to passively exclude badgers from dens. Once the burrow is confirmed to be unoccupied, it will be collapsed.

Desert kit fox. Prior to construction, the site will be cleared of potential desert kit fox dens and potential burrows will be safely collapsed to prevent re-occupation. Closure will only occur where the project biologist believes that they will be in direct danger. Clearances will only occur outside of the February to June pupping season.

Nelson's Bighorn Sheep. The Proposed Project will avoid impacts to Nelson's bighorn sheep. Should Nelson's bighorn sheep be present in proximity to construction activities, a Biological Monitor will be notified and will monitor activities to ensure impacts do not occur. If construction activities are disturbing this species, the Biological Monitor will halt construction and development and avoidance plan with the resource agencies.

Reporting of Special-Status Species. All encounters with special-status species will be immediately reported to the Biological Monitor, who will record the following information: species name; location (narrative and maps) and dates of observations; general condition and health, including injuries and state of healing; diagnostic markings, including identification numbers or markers; and locations moved from and to (if applicable). All special-status species recordings will be submitted to the CNDDDB.

APM-BIO-27 Compensation for Sensitive Vegetation Communities, Habitat, and Plants. The Applicant will compensate for permanent removal of sensitive vegetation communities and habitat for special-status species. The Applicant will prepare a Habitat Compensation Plan detailing compensation for acreages and habitat types as defined herein. The Plan will be submitted for approval to the applicable resource agencies prior to the commencement of construction.

The Project Applicant will compensate for removal of sensitive communities or for permanently affected communities as determined by a qualified biologist. The acreages and ratios will be based upon final calculation of affected acreage for each resource and on ratios set forth in this measure, or in the USFWS Biological Opinion, the CDFW Streambed Alteration Agreement, the CDFW Incidental Take Permit, or the Consistency Determination, whichever presents a higher ratio. The Project Applicant will be responsible for acquisition and protection of mitigation lands. In addition, the Project Applicant will provide funding for initial improvement and long-term maintenance, enhancement, and management of the acquired lands for protection and enhancement of habitat values.

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Compensation will be provided for effects to the following resources, at the specified ratios (acres acquired and preserved to acres affected) and may be a combination of preservation, creation, reestablishment, or enhancement:

- Desert tortoise and/or Mohave ground squirrel occupied habitat: As determined by incidental take permits but no less than 1:1
- Habitat occupied by listed wildlife species (including coastal California gnatcatcher, San Bernardino kangaroo rat, Stephen's kangaroo rat, least Bell's vireo, southwestern willow flycatcher): as determined by incidental take permits but no less than 1:1
- Upland sensitive community (1:1)
- Riparian communities, including wetlands, vernal pools, and Riparian Conservation Areas (3:1)
- Active sand transport areas (1:1)
- Non-wetland waters of the United States (2:1)
- State-jurisdictional streambeds (2:1)
- Occupied habitat for special-status plants (1:1)
- Occupied or suitable desert tortoise habitat and habitat linkages (minimum 1:1).

Compensation lands for biological resources may be "nested." For example, compensation for effects to riparian birds could be entirely or partially fulfilled by the mitigation for riparian vegetation communities. Where affected habitats meet criteria at two or more compensation ratios, the highest ratio will apply.

Additionally, significant loss of special-status plants will be compensated through salvage and translocation as practicable and a salvage and translocation will be prepared. The Plan will include at minimum: (a) collection/salvage measures for plants or seed banks, to retain intact soil conditions and maximize success likelihood; (b) details regarding storage of plants or seed banks; (c) location of the proposed recipient site, and detailed site preparation and plant introduction techniques and details for top soil storage, as applicable; (d); time of year that the salvage and replanting or seeding will occur and the methodology of the replanting; (e) a description of the irrigation, if used; (f) success criteria; and (g) a detailed monitoring program, commensurate with the Plan's goals.

APM-BIO-28 Regulated Trees. The Applicant will compensate for/replace any regulated trees in accordance with applicable city and county tree protection ordinances.

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APM-BIO-29 Urban/Wildlands Interface Guidelines

For portions of the Proposed Project located within or adjacent to designated WRMSHCP Conservation Areas, the following will be implemented to minimize indirect effects to the Conservation Area:

Toxics

Land uses proposed in proximity to the Conservation Area that use chemicals or that are potentially toxic or may adversely affect wildlife species, habitat or water quality will incorporate measures to address the application of such chemicals in a manner that avoids discharge to the Conservation Area.

Lighting

Night lighting will be directed away from the Conservation Area to protect species within the Conservation Area from direct night lighting. Shielding will be incorporated in Proposed Project designs to ensure ambient lighting in the Conservation Area is not increased.

Noise

Proposed noise generating land uses affecting the Conservation Area will incorporate setbacks, berms or walls to minimize the effects of noise on Conservation Area resources pursuant to applicable rules, regulations and guidelines related to land use noise standards. For planning purposes, wildlife within the Conservation Area should not be subject to noise that would exceed residential noise standards.

Invasives

Any landscape or restoration planning efforts within or adjacent to the Conservation Area will avoid the use of invasive species list identified on WRMSHP Table 6-2. Considerations in reviewing the applicability of this list of invasive species will include proximity of planting areas to the Conservation Areas, species considered in the planting plans, resources being protected within the Conservation Area and their relative sensitivity to invasion, and barriers to plant and seed dispersal, such as walls, topography and other features.

APM-BIO-30 Consistency with Habitat Conservation Plans. The Applicant will prepare an analysis, either separate from or part of the biological technical report, which evaluates the Proposed Project's consistency with all goals and objectives of the CVMSHCP, WRMSHCP, and SKR HCP. This will include, but not be limited to, an analysis of the Proposed Project's impacts on existing and future conservation lands, impacts on the functions and values of

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existing and future covered Habitats, and impacts to covered Species. Measures will be proposed in the analysis as required to be consistent with the HCPs.

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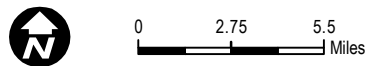
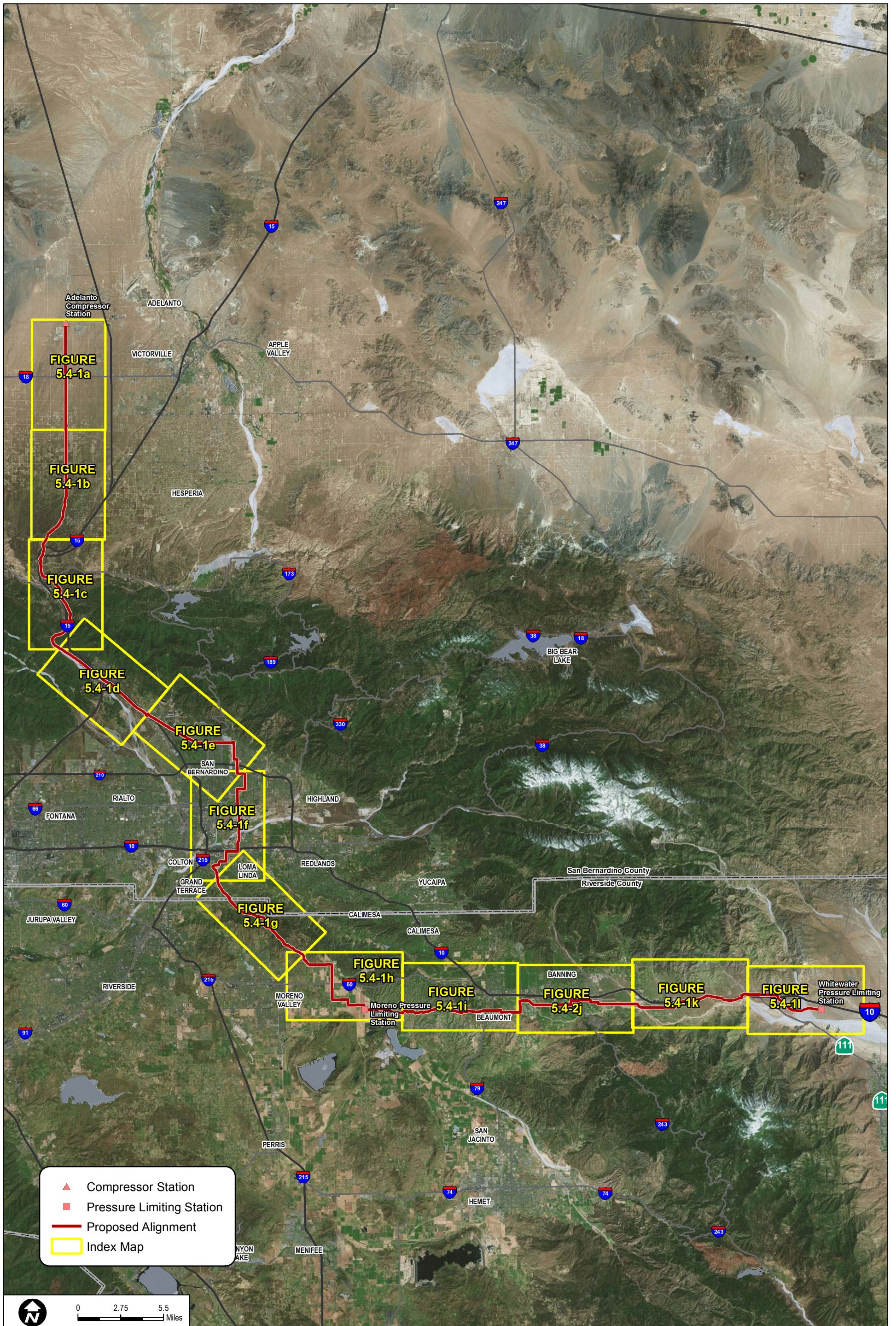
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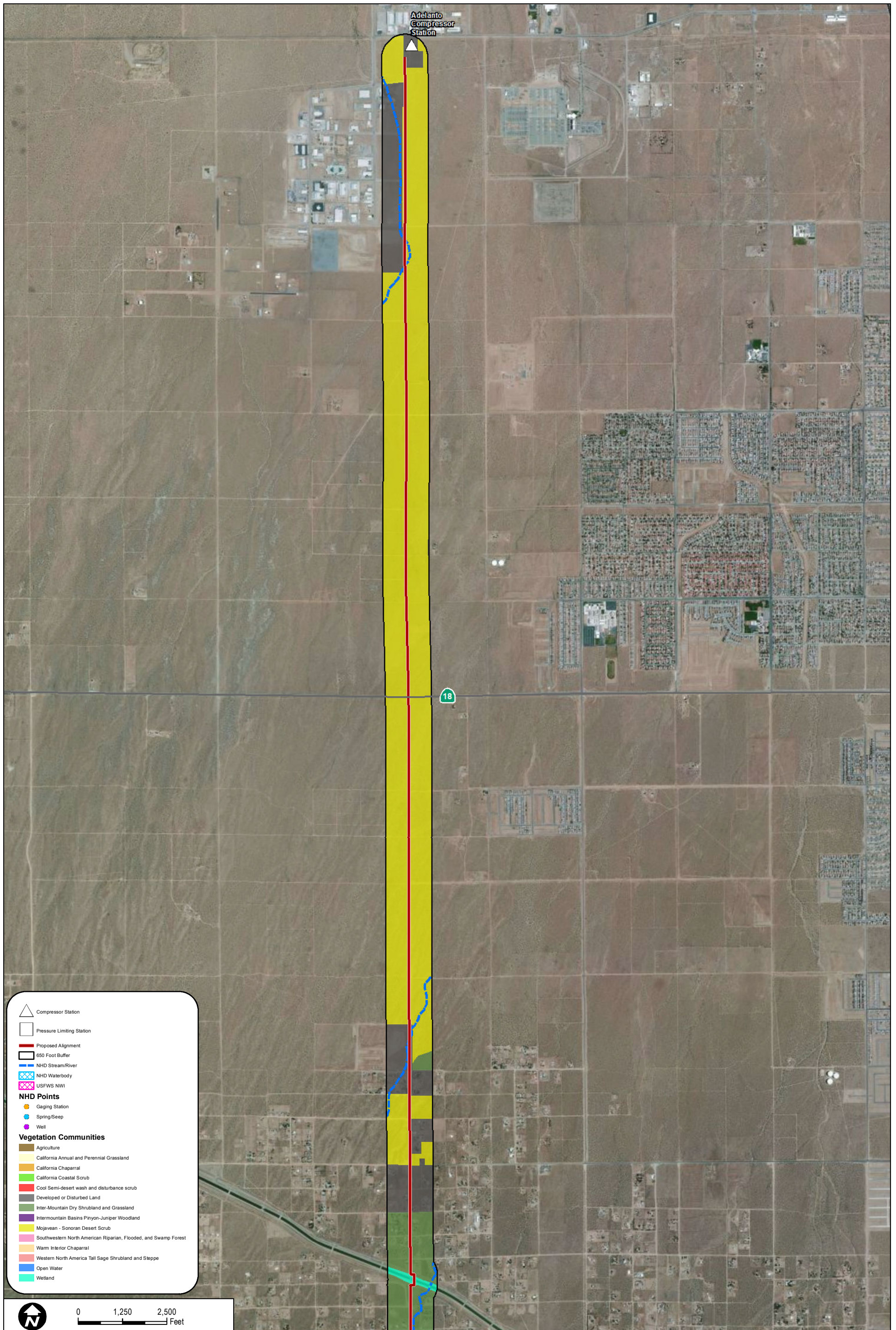


SOURCE: BING Maps 2014; Southern California Gas Company 2014

North South Project

FIGURE 5.4-1
Land Covers and Jurisdictional Waters - Index Map

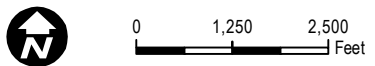
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Compressor Station
 Pressure Limiting Station
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 NHD Waterbody
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NHD Points
 Gaging Station
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Vegetation Communities
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 California Chaparral
 California Coastal Scrub
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 Mojavean - Sonoran Desert Scrub
 Southwestern North American Riparian, Flooded, and Swamp Forest
 Warm Interior Chaparral
 Western North America Tall Sage Shrubland and Steppe
 Open Water
 Wetland



SOURCE: BING Maps 2014; Southern California Gas Company 2014; CDFW 2013; County of Riverside 2006; GAP 08; USGS 2010; USFWS 2014

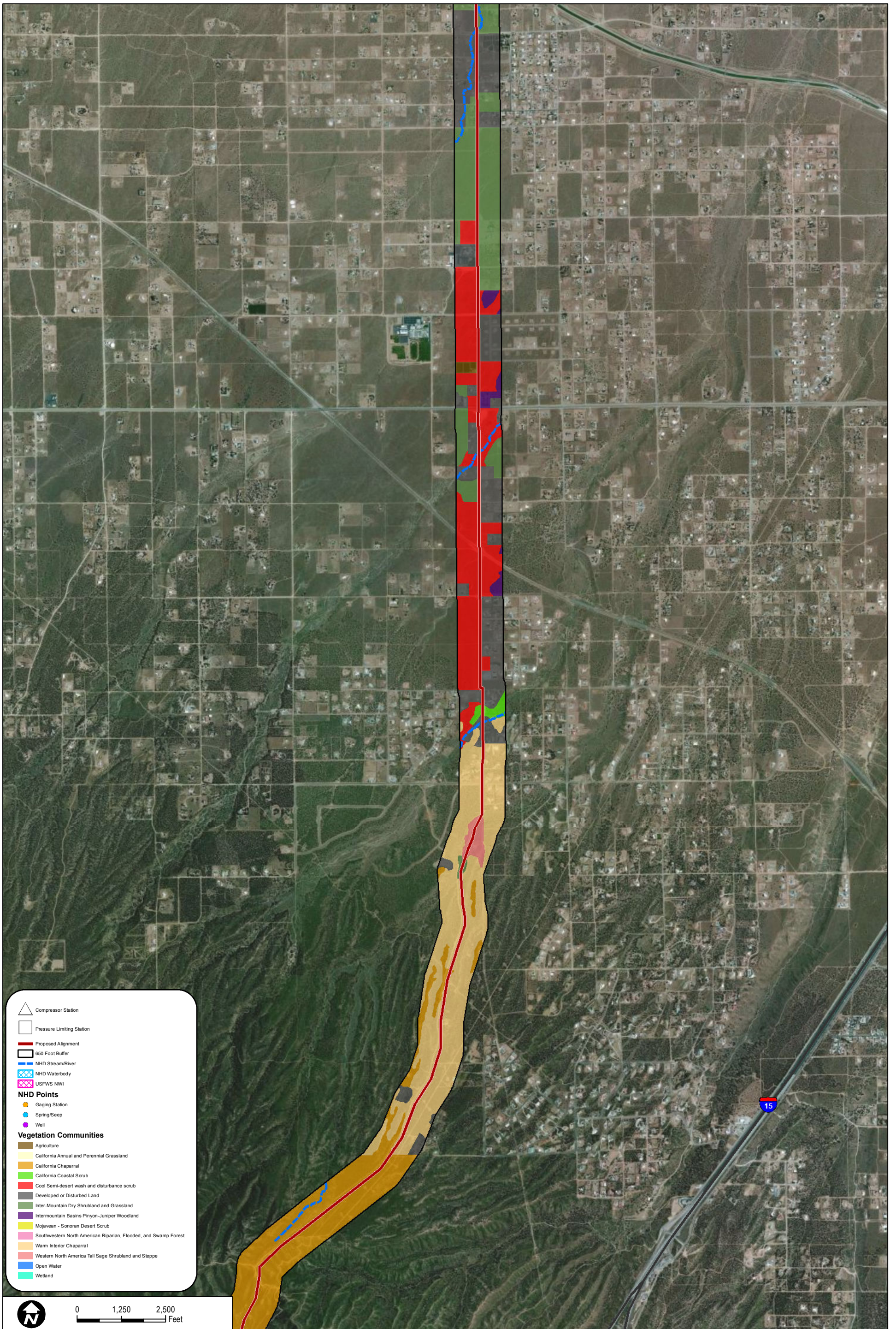
FIGURE 5.4-1a

Land Covers and Jurisdictional Waters

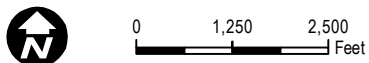


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 ■ California Chaparral
 ■ California Coastal Scrub
 ■ Cool Semi-desert wash and disturbance scrub
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 ■ Mojavean - Sonoran Desert Scrub
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 ■ Western North America Tall Sage Shrubland and Steppe
 ■ Open Water
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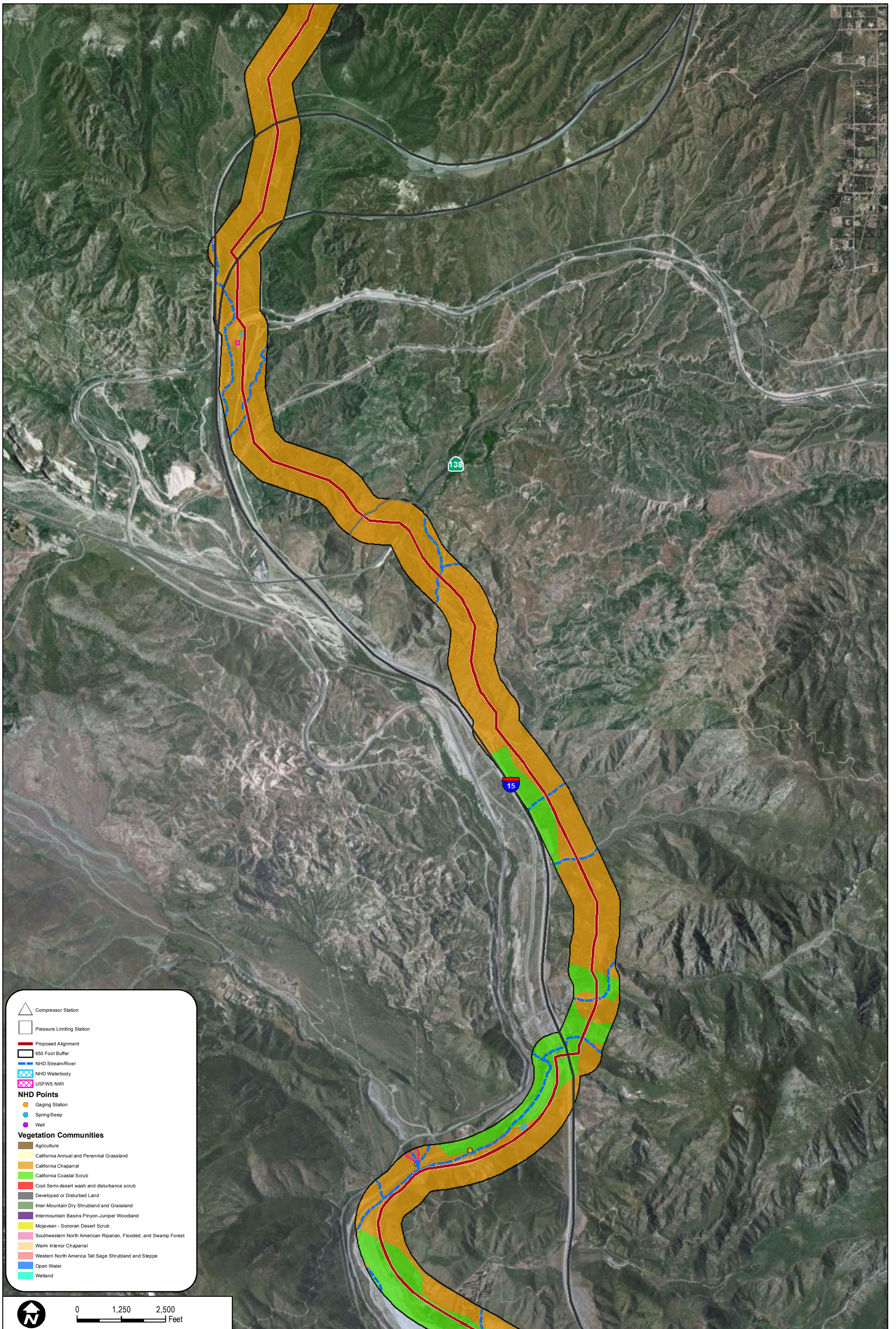
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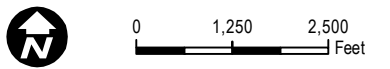
North South Project

FIGURE 5.4-1b
Land Covers and Jurisdictional Waters

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- Proposed Alignment
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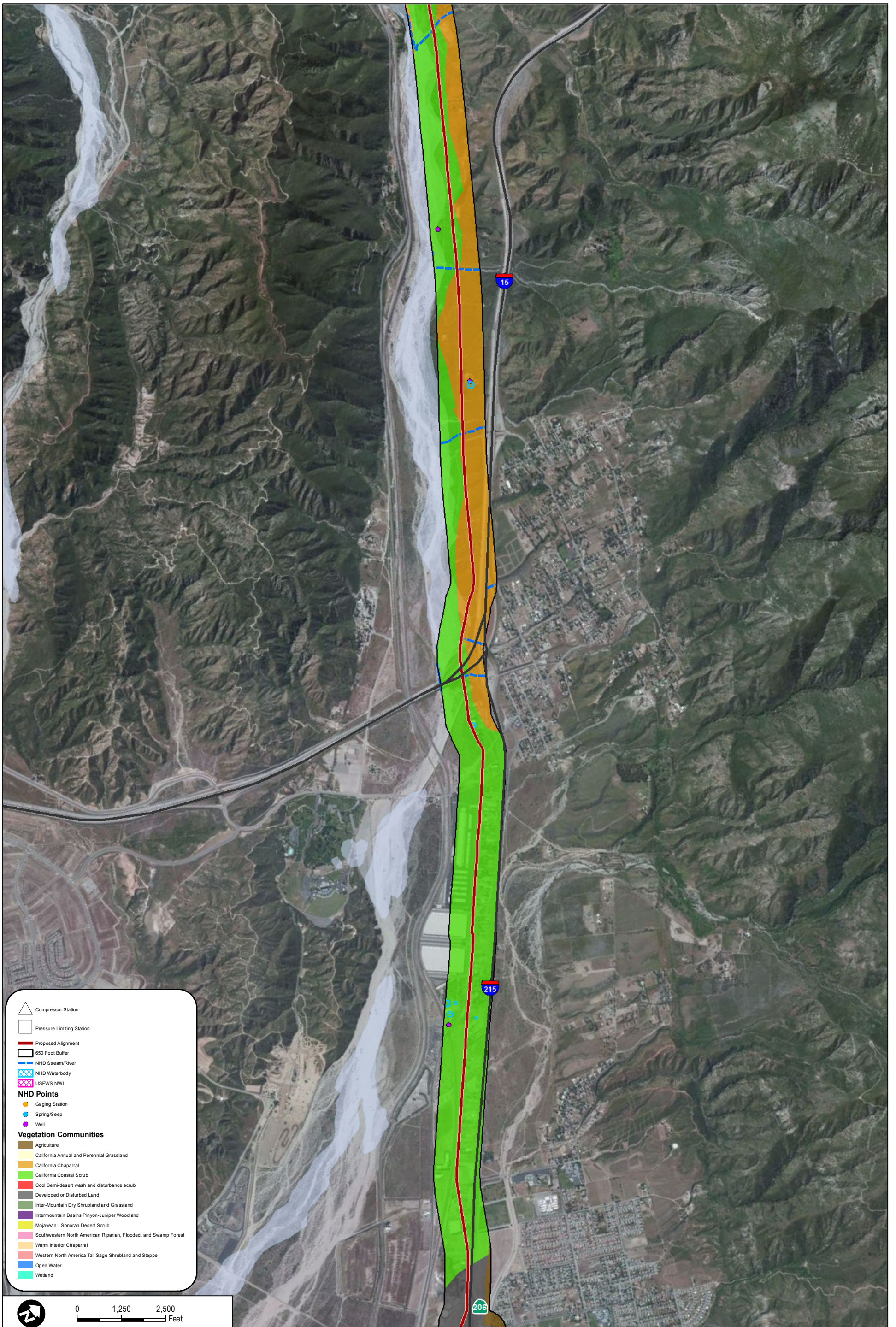
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FIGURE 5.4-1c
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SOURCE: BING Maps 2014; Southern California Gas Company 2014; CDFW 2013; County of Riverside 2006; GAP 08; USGS 2010; USFWS 2014

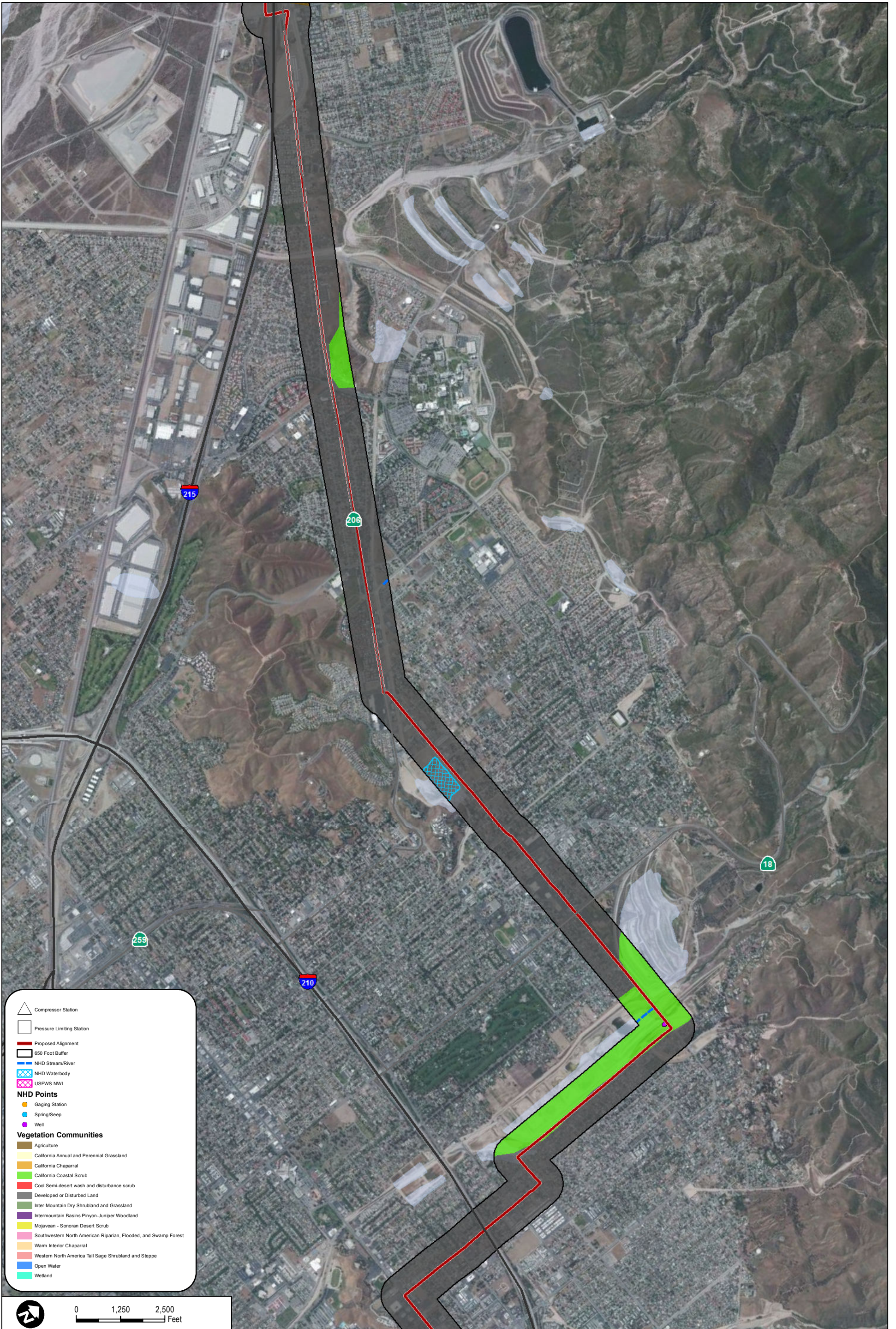
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Land Covers and Jurisdictional Waters



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 — USFWS NWI
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 ● Spring/Seep
 ● Well
Vegetation Communities
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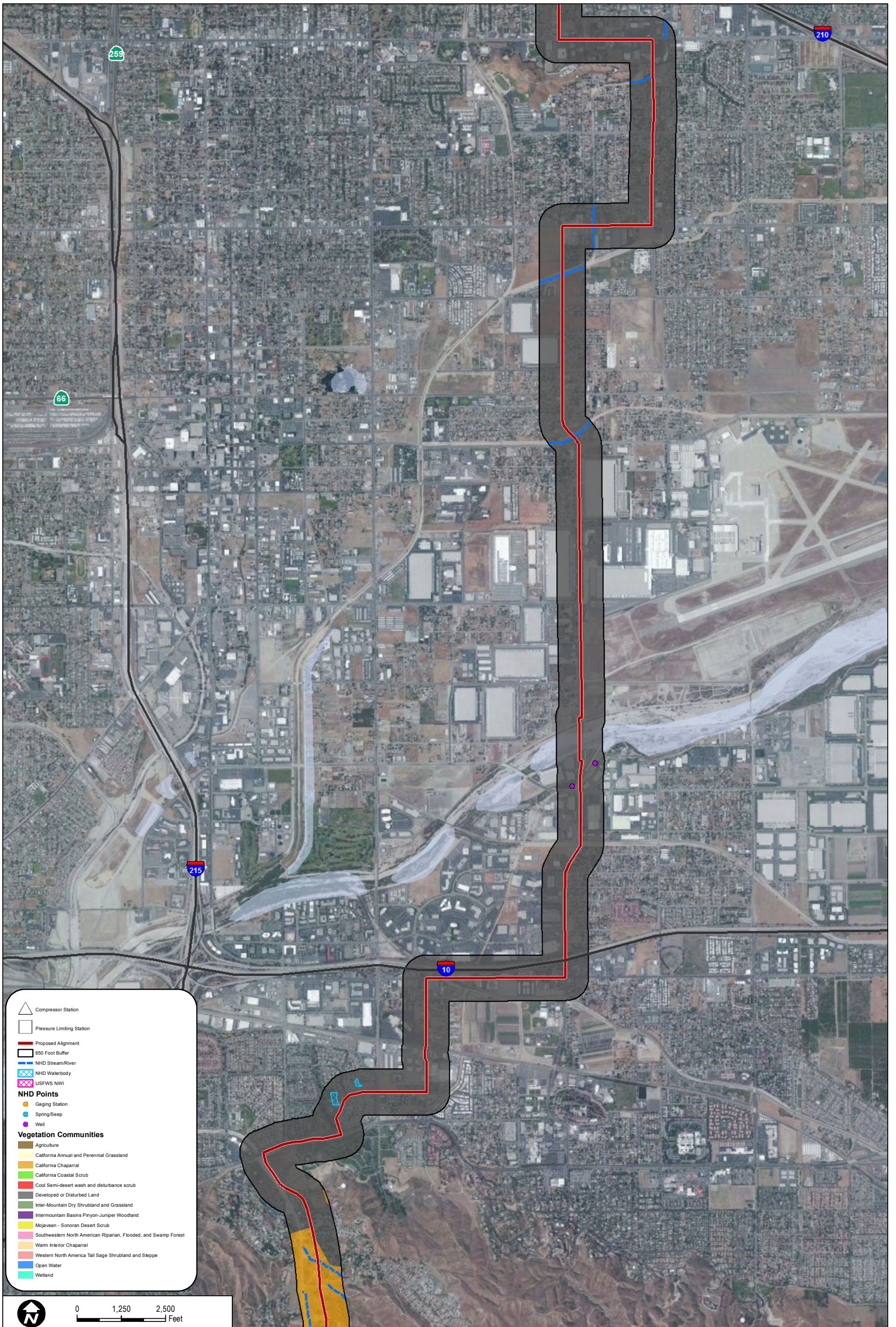
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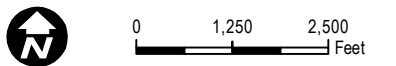
North South Project

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Land Covers and Jurisdictional Waters

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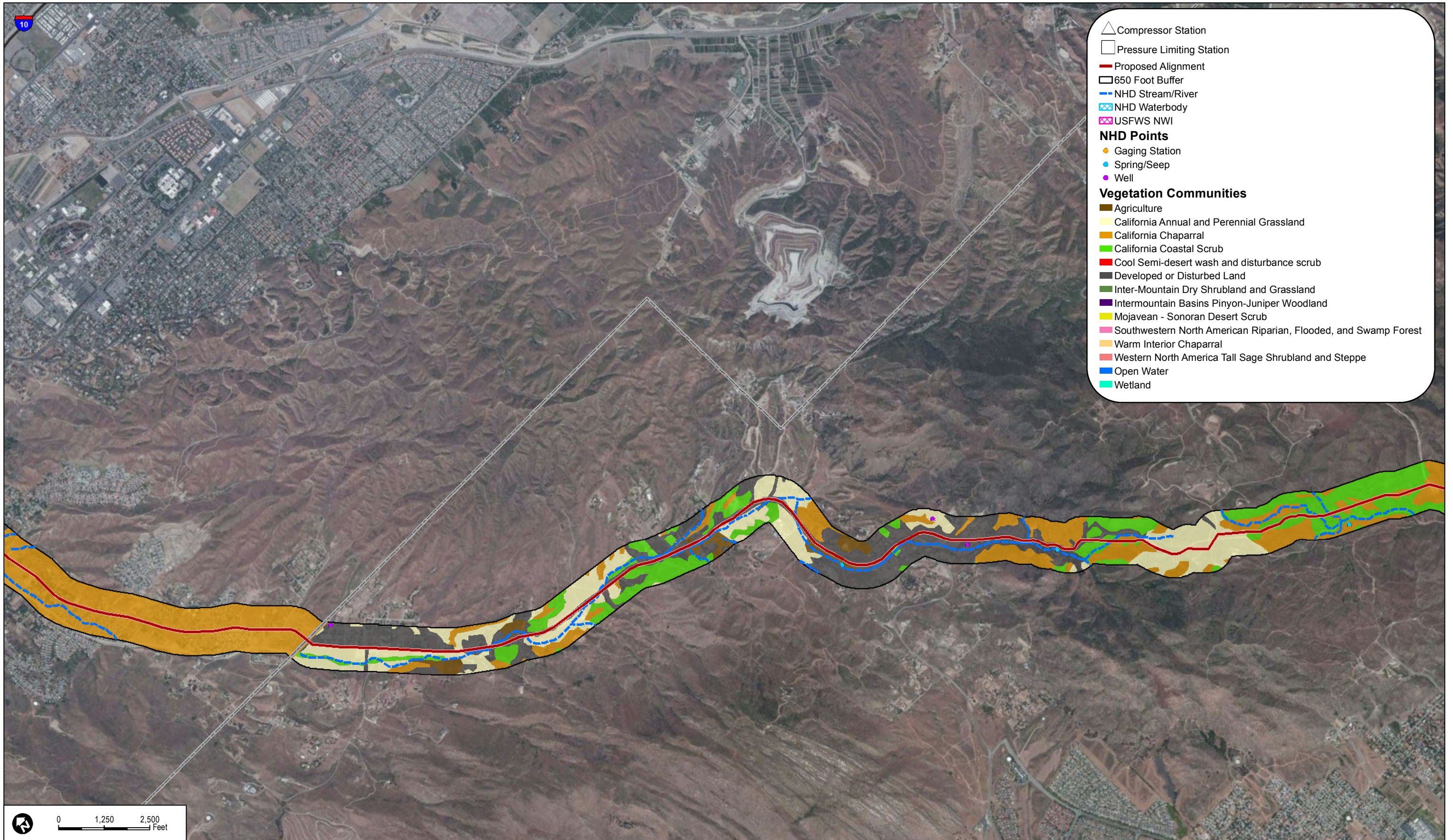
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CDFW 2013; County of Riverside 2006; GAP 08; USGS 2010; USFWS 2014

FIGURE 5.4-1f
Land Covers and Jurisdictional Waters

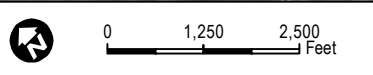


North South Project

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- △ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- ▭ 650 Foot Buffer
- NHD Stream/River
- ▨ NHD Waterbody
- ▨ USFWS NWI
- NHD Points**
- Gaging Station
- Spring/Seep
- Well
- Vegetation Communities**
- Agriculture
- California Annual and Perennial Grassland
- California Chaparral
- California Coastal Scrub
- Cool Semi-desert wash and disturbance scrub
- Developed or Disturbed Land
- Inter-Mountain Dry Shrubland and Grassland
- Intermountain Basins Pinyon-Juniper Woodland
- Mojavean - Sonoran Desert Scrub
- Southwestern North American Riparian, Flooded, and Swamp Forest
- Warm Interior Chaparral
- Western North America Tall Sage Shrubland and Steppe
- Open Water
- Wetland



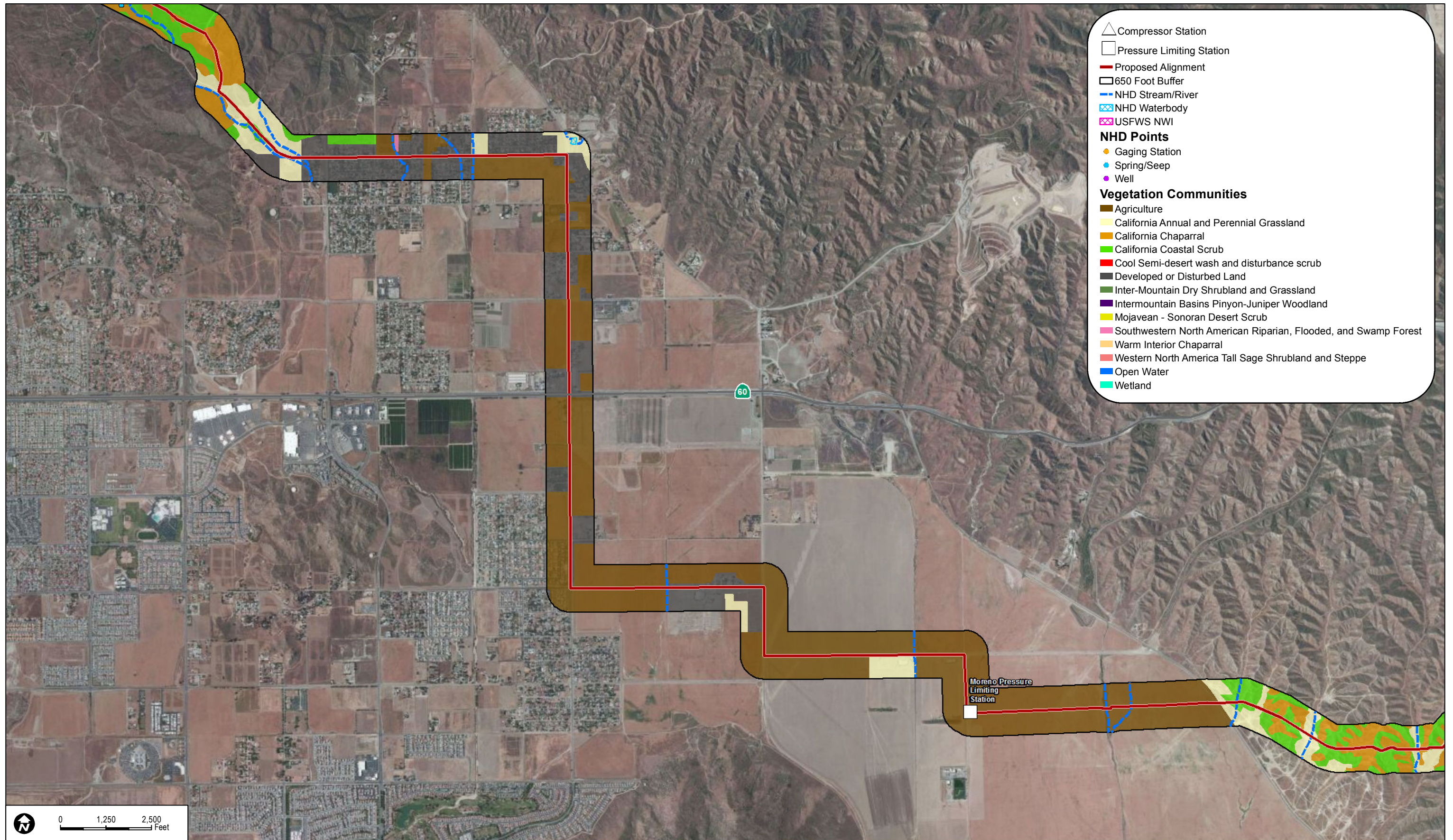
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CDFW 2013; County of Riverside 2006; GAP 08; USGS 2010; USFWS 2014



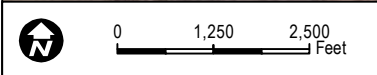
North South Project

FIGURE 5.4-1g
Land Covers and Jurisdictional Waters

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- △ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- ▭ 650 Foot Buffer
- NHD Stream/River
- ▨ NHD Waterbody
- ▩ USFWS NWI
- NHD Points**
- Gaging Station
- Spring/Seep
- Well
- Vegetation Communities**
- Agriculture
- California Annual and Perennial Grassland
- California Chaparral
- California Coastal Scrub
- Cool Semi-desert wash and disturbance scrub
- Developed or Disturbed Land
- Inter-Mountain Dry Shrubland and Grassland
- Intermountain Basins Pinyon-Juniper Woodland
- Mojavean - Sonoran Desert Scrub
- Southwestern North American Riparian, Flooded, and Swamp Forest
- Warm Interior Chaparral
- Western North America Tall Sage Shrubland and Steppe
- Open Water
- Wetland



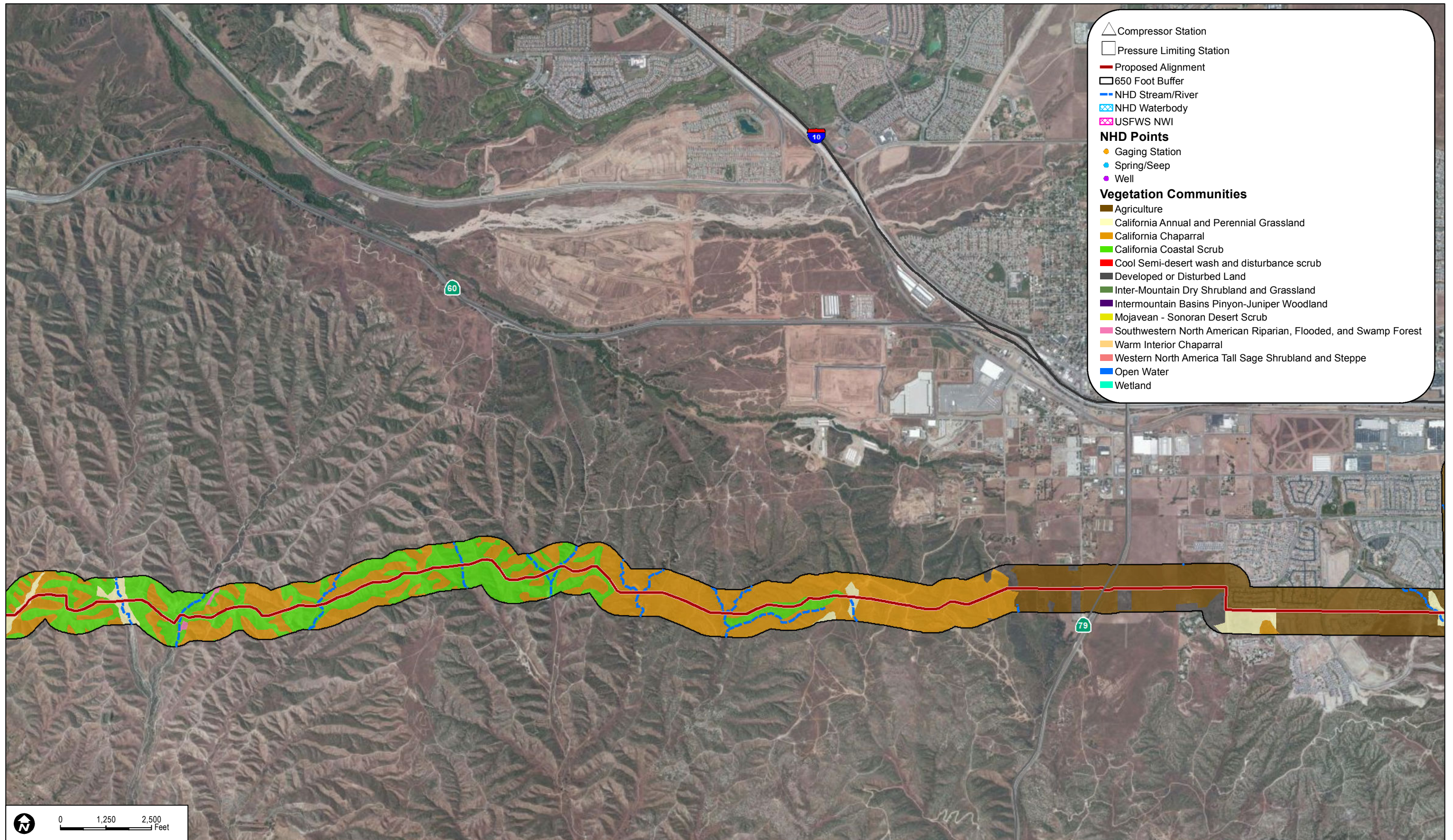
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CDFW 2013; County of Riverside 2006; GAP 08; USGS 2010; USFWS 2014



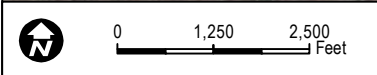
North South Project

FIGURE 5.4-1h
Land Covers and Jurisdictional Waters

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- △ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- ▭ 650 Foot Buffer
- NHD Stream/River
- ▭ NHD Waterbody
- ▭ USFWS NWI
- NHD Points**
- Gaging Station
- Spring/Seep
- Well
- Vegetation Communities**
- Agriculture
- California Annual and Perennial Grassland
- California Chaparral
- California Coastal Scrub
- Cool Semi-desert wash and disturbance scrub
- Developed or Disturbed Land
- Inter-Mountain Dry Shrubland and Grassland
- Intermountain Basins Pinyon-Juniper Woodland
- Mojavean - Sonoran Desert Scrub
- Southwestern North American Riparian, Flooded, and Swamp Forest
- Warm Interior Chaparral
- Western North America Tall Sage Shrubland and Steppe
- Open Water
- Wetland



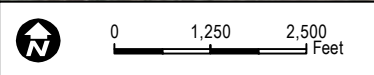
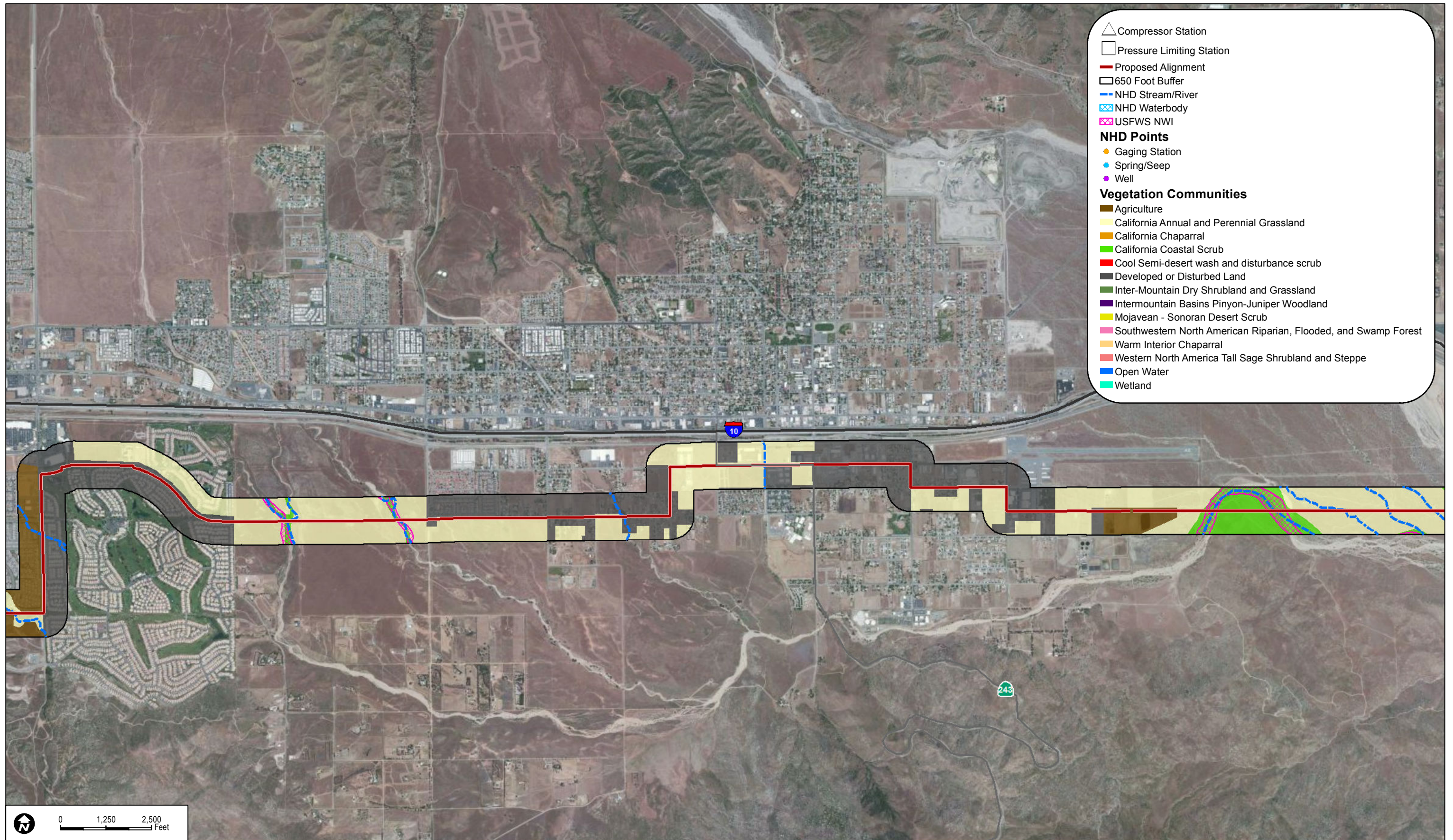
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CDFW 2013; County of Riverside 2006; GAP 08; USGS 2010; USFWS 2014



North South Project

FIGURE 5.4-1i
Land Covers and Jurisdictional Waters

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SOURCE: BING Maps 2014; Southern California Gas Company 2014; CDFW 2013; County of Riverside 2006; GAP 08; USGS 2010; USFWS 2014

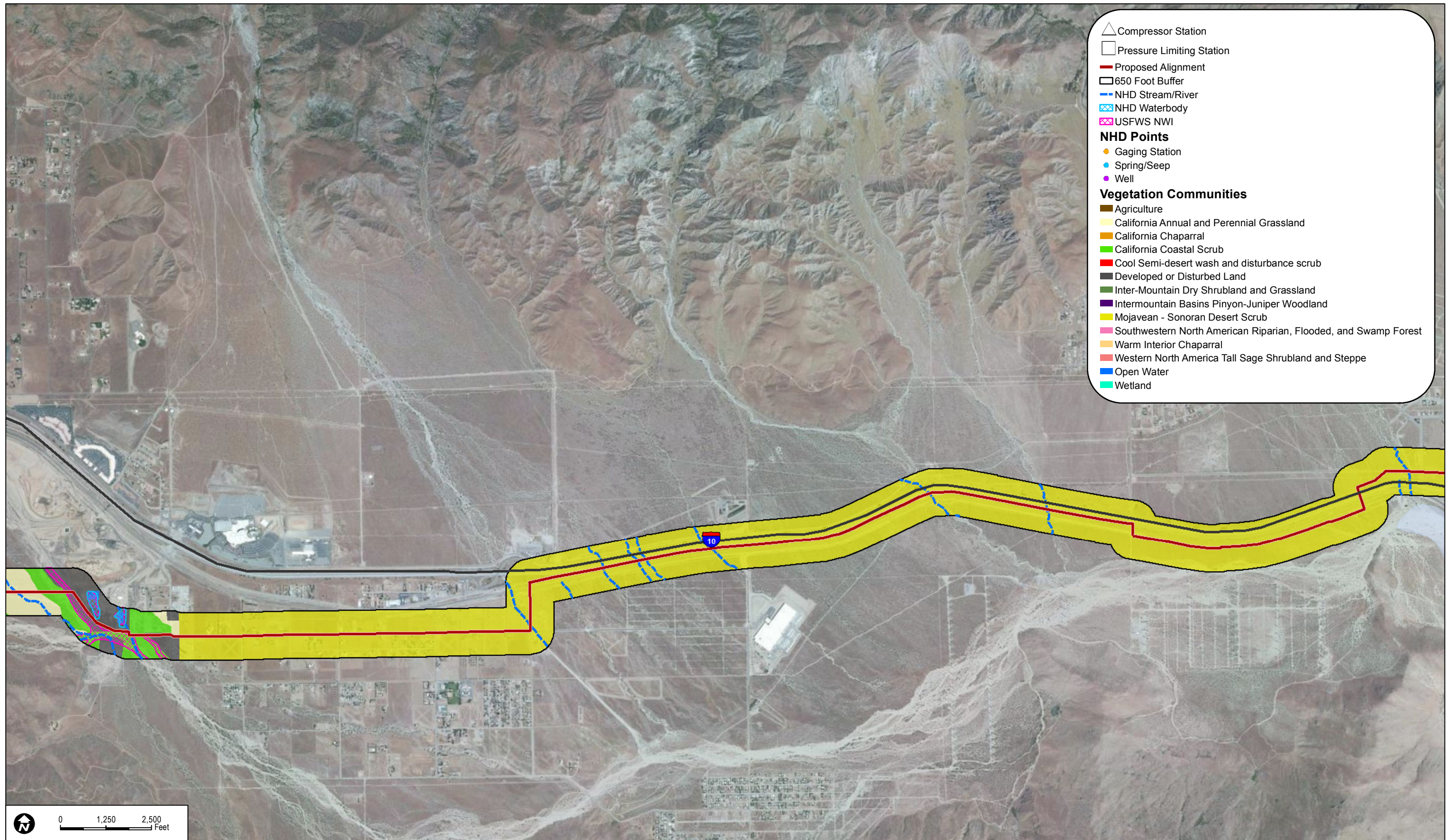


North South Project

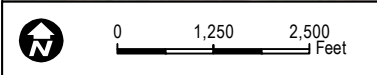
FIGURE 5.4-2j

Land Covers and Jurisdictional Waters

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- △ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- ▭ 650 Foot Buffer
- NHD Stream/River
- ▭ NHD Waterbody
- ▭ USFWS NWI
- NHD Points**
- Gaging Station
- Spring/Seep
- Well
- Vegetation Communities**
- Agriculture
- California Annual and Perennial Grassland
- California Chaparral
- California Coastal Scrub
- Cool Semi-desert wash and disturbance scrub
- Developed or Disturbed Land
- Inter-Mountain Dry Shrubland and Grassland
- Intermountain Basins Pinyon-Juniper Woodland
- Mojavean - Sonoran Desert Scrub
- Southwestern North American Riparian, Flooded, and Swamp Forest
- Warm Interior Chaparral
- Western North America Tall Sage Shrubland and Steppe
- Open Water
- Wetland



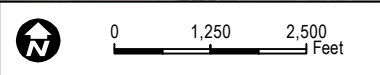
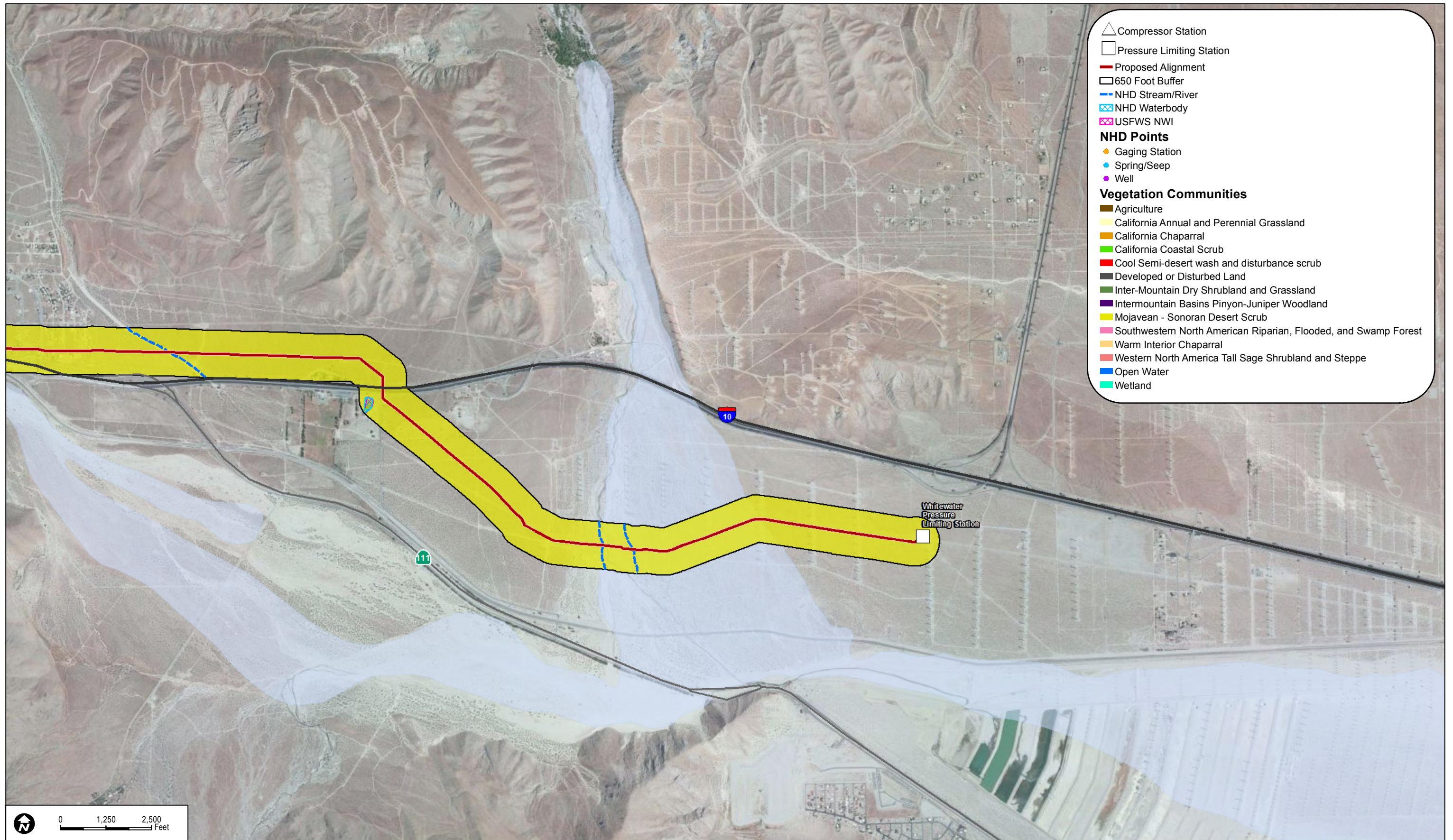
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CDFW 2013; County of Riverside 2006; GAP 08; USGS 2010; USFWS 2014



North South Project

FIGURE 5.4-1k
Land Covers and Jurisdictional Waters

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SOURCE: BING Maps 2014; Southern California Gas Company 2014; CDFW 2013; County of Riverside 2006; GAP 08; USGS 2010; USFWS 2014

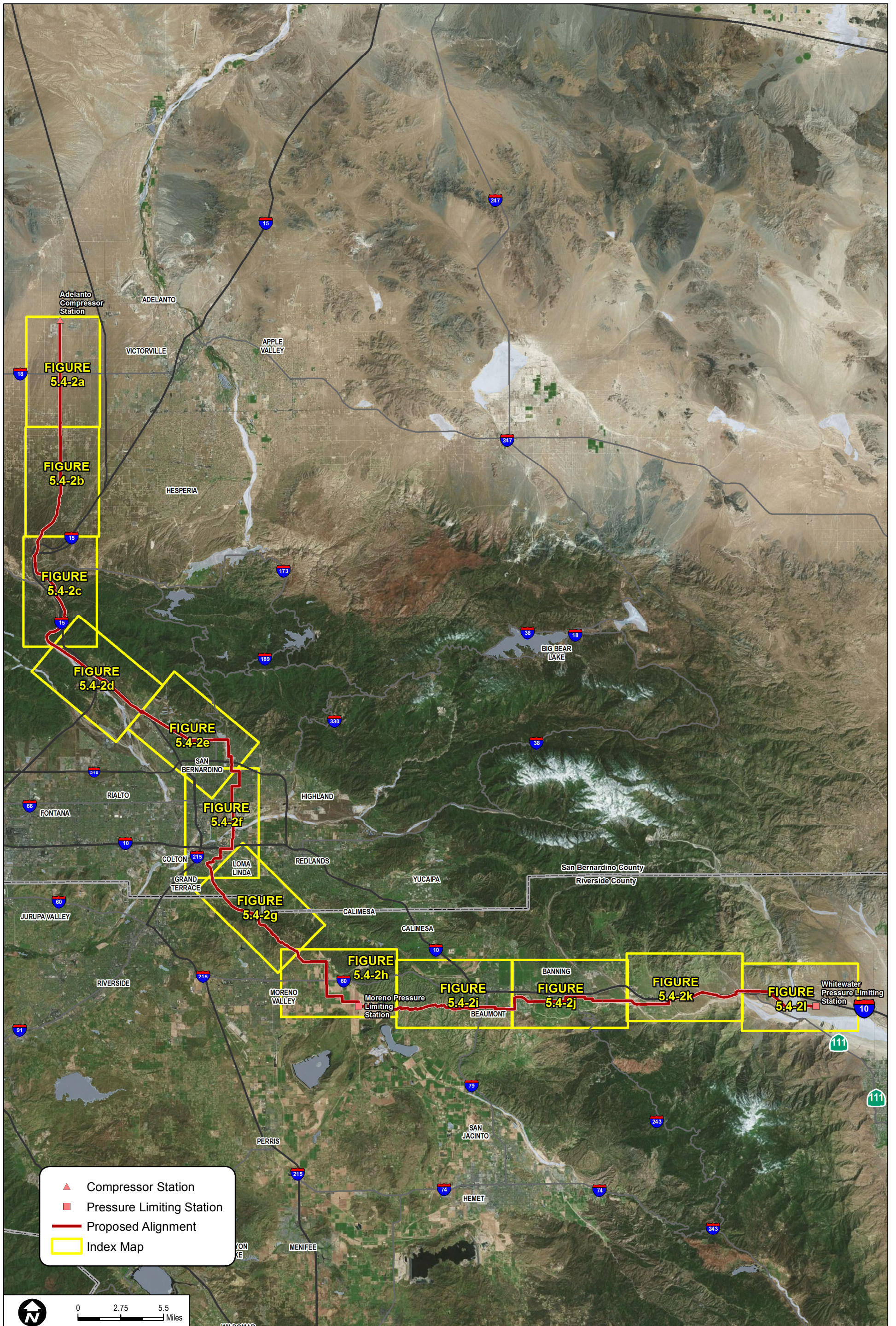


North South Project

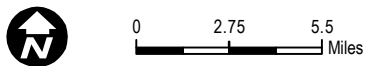
FIGURE 5.4-11

Land Covers and Jurisdictional Waters

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- ▲ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- Index Map



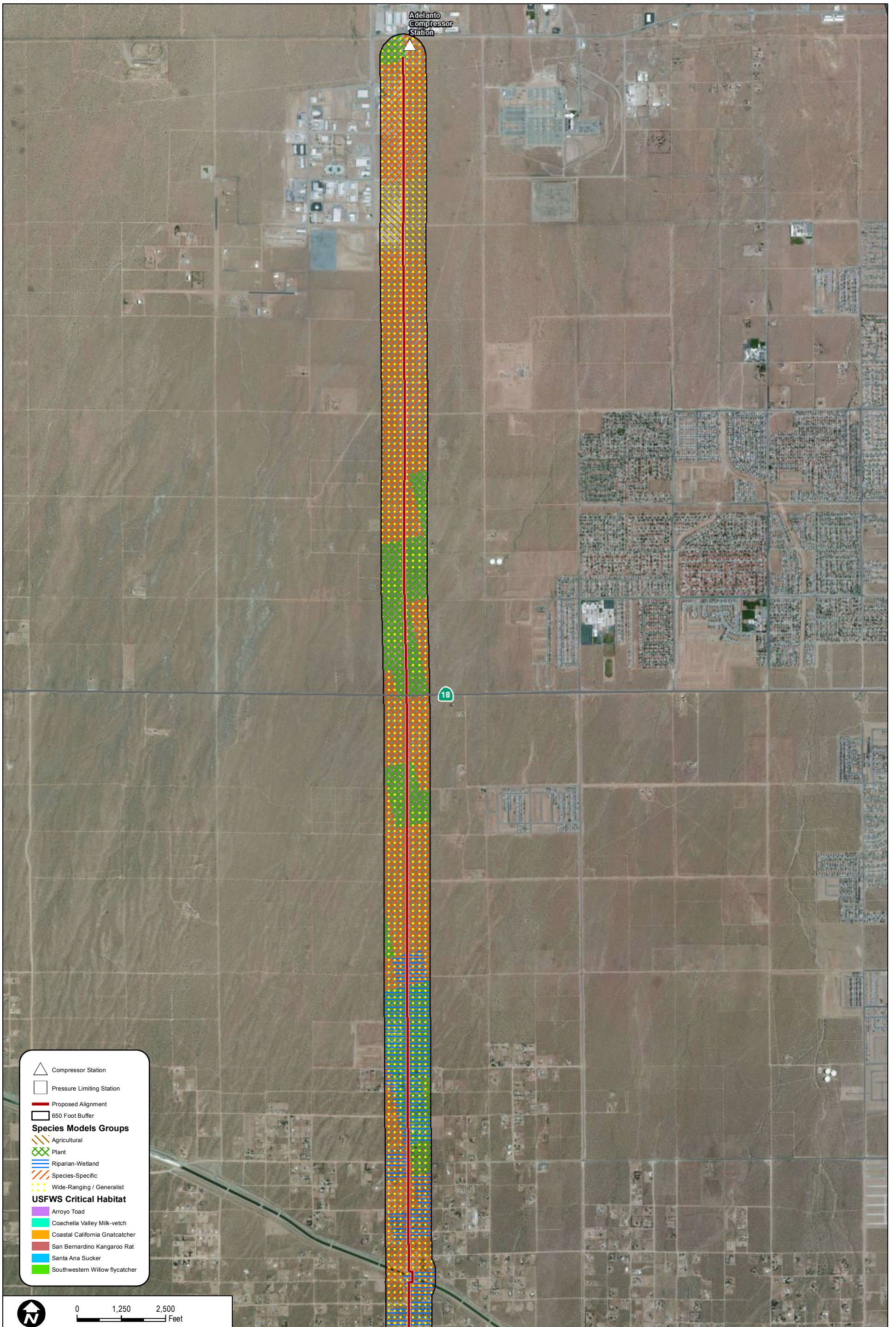
SOURCE: BING Maps 2014; Southern California Gas Company 2014



North South Project

FIGURE 5.4-2
Special-status Species Mapped Habitat - Index Map

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SOURCE: BING Maps 2014; Southern California Gas Company 2014; CBI 2013; UCSB 2013; USGS 2013; USFWS 2014

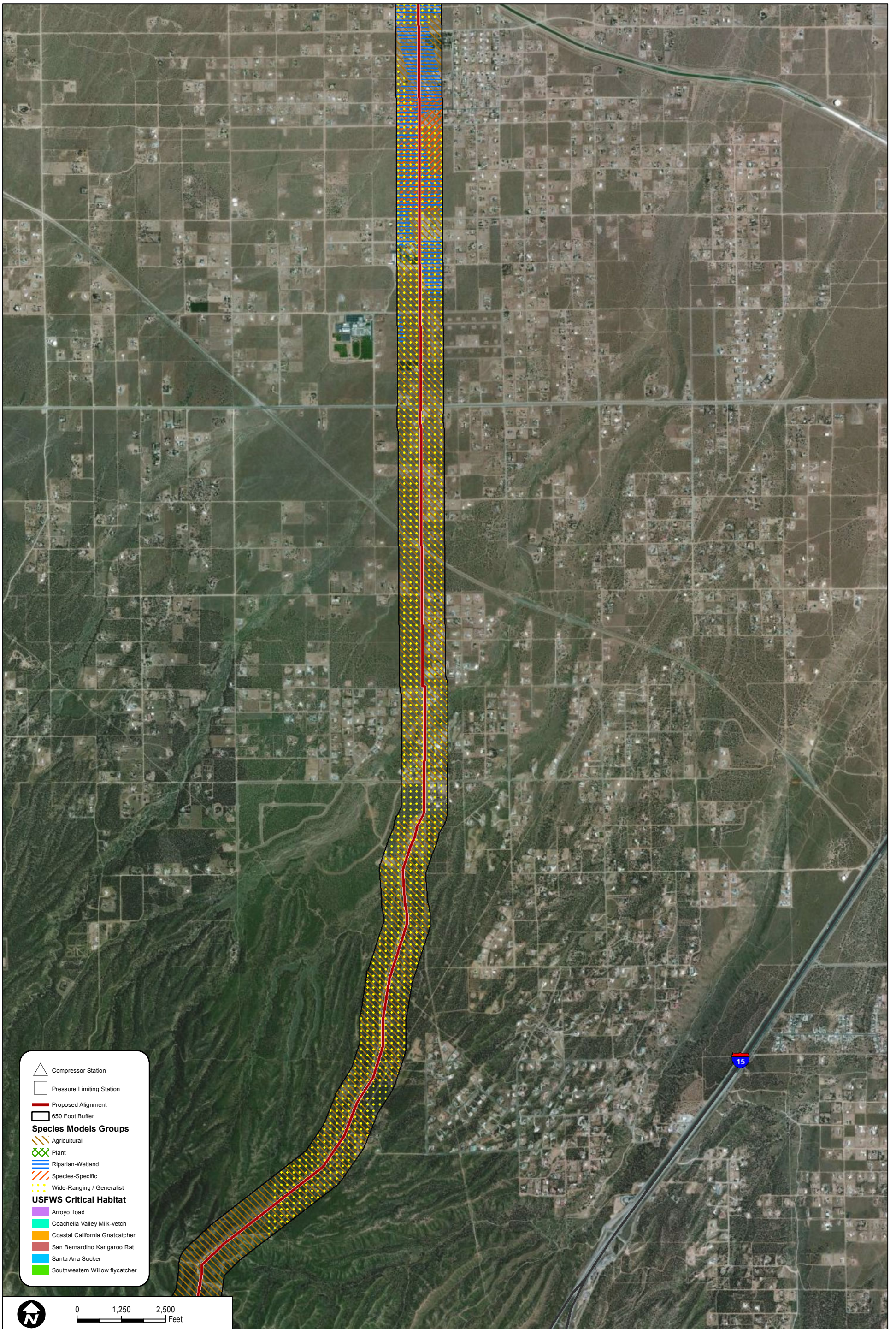
FIGURE 5.4-2a

Special-status Species Mapped Habitat



North South Project

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SOURCE: BING Maps 2014; Southern California Gas Company 2014; CBI 2013; UCSB 2013; USGS 2013; USFWS 2014

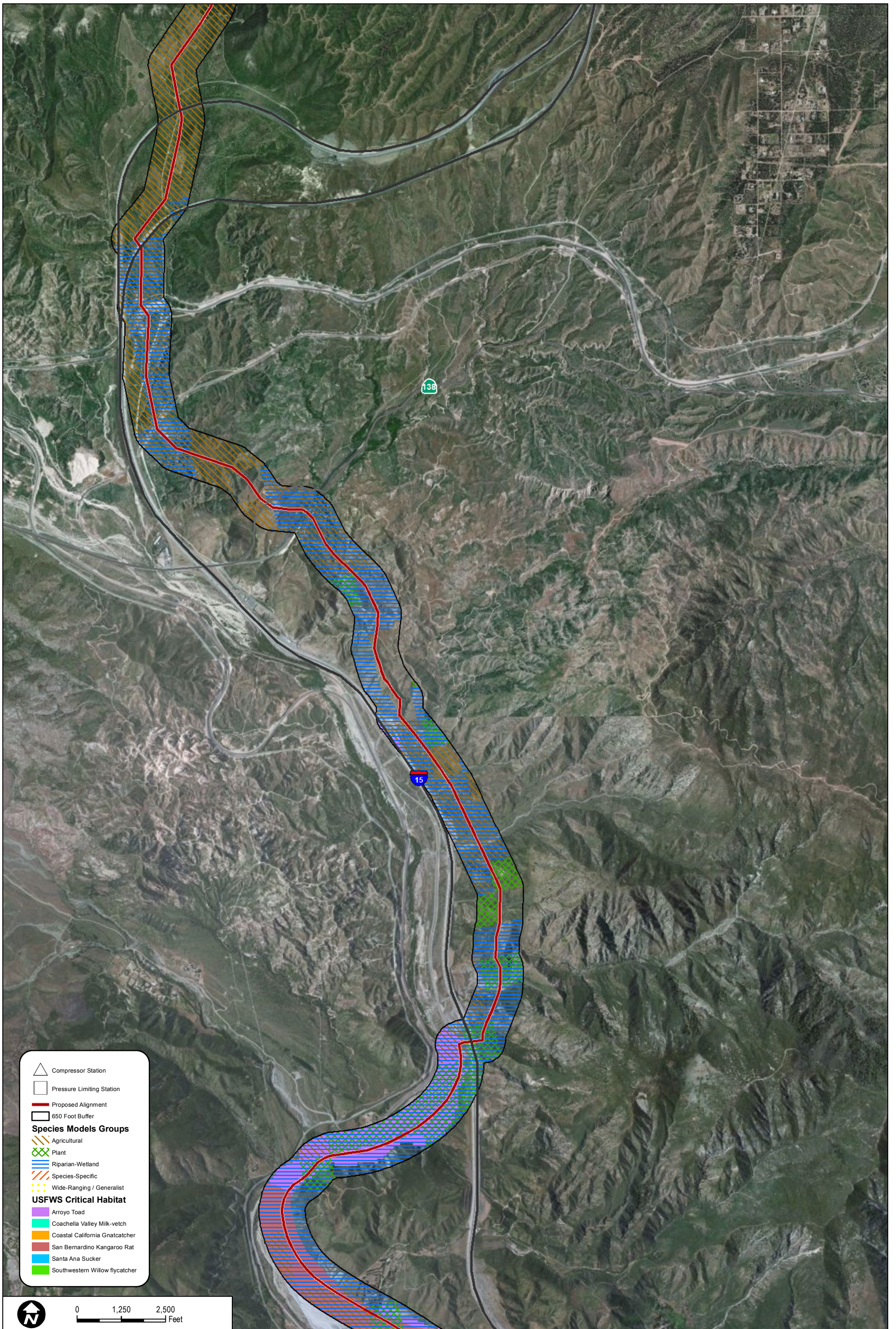
FIGURE 5.4-2b

Special-status Species Mapped Habitat

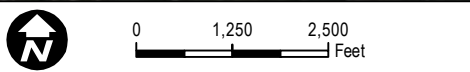


North South Project

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▲ Compressor Station
 □ Pressure Limiting Station
 — Proposed Alignment
 □ 650 Foot Buffer
Species Models Groups
 Agricultural
 Plant
 Riparian-Wetland
 Species-Specific
 Wide-Ranging / Generalist
USFWS Critical Habitat
 Arroyo Toad
 Coachella Valley Milk-vetch
 Coastal California Gnatcatcher
 San Bernardino Kangaroo Rat
 Santa Ana Sucker
 Southwestern Willow flycatcher



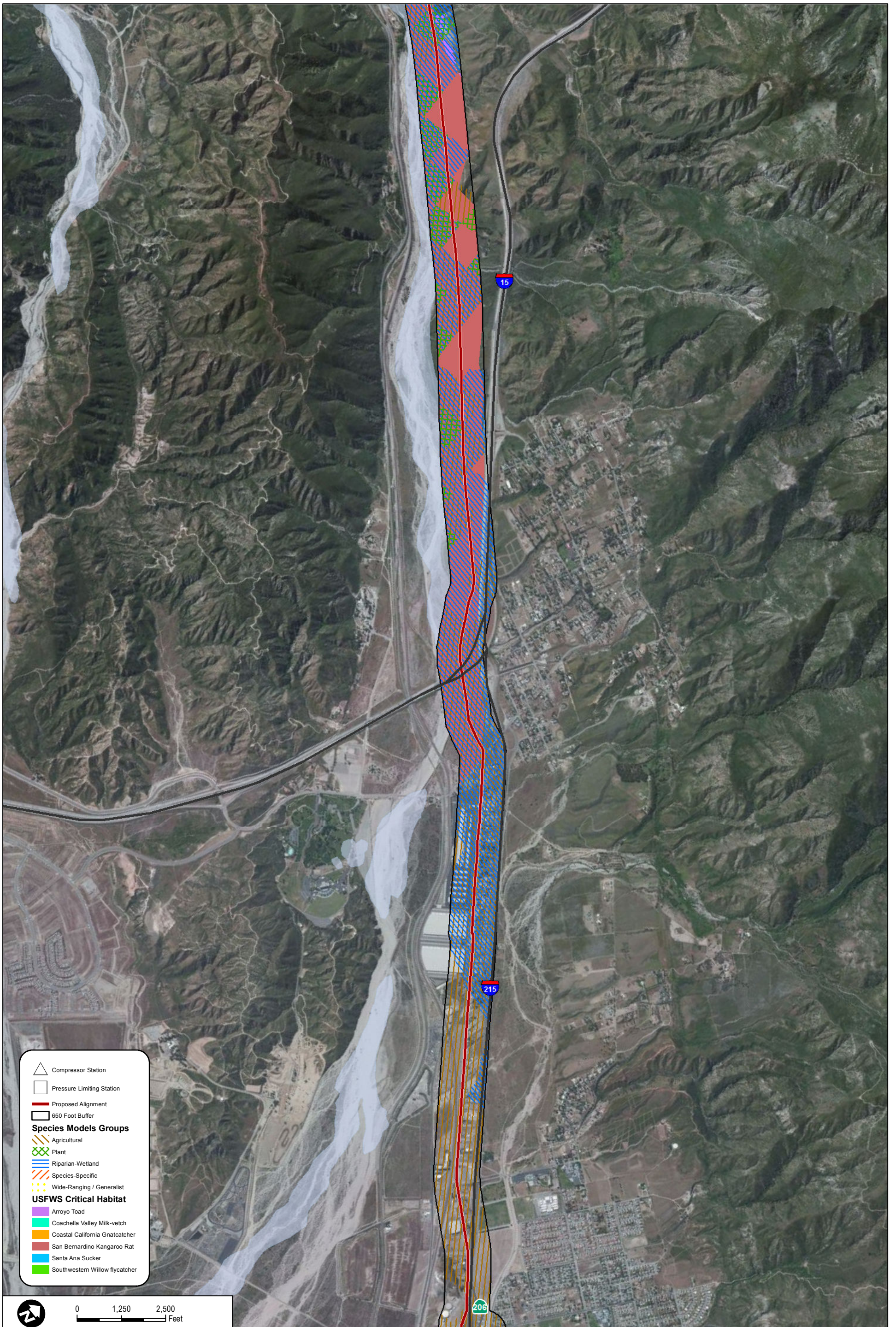
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CBI 2013; UCSB 2013; USGS 2013; USFWS 2014



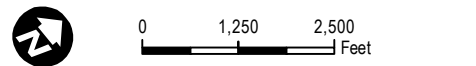
North South Project

FIGURE 5.4-2c
Special-status Species Mapped Habitat

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- Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- 650 Foot Buffer
- Species Models Groups**
- Agricultural
- Plant
- Riparian-Wetland
- Species-Specific
- Wide-Ranging / Generalist
- USFWS Critical Habitat**
- Arroyo Toad
- Coachella Valley Milk-vetch
- Coastal California Gnatcatcher
- San Bernardino Kangaroo Rat
- Santa Ana Sucker
- Southwestern Willow flycatcher



SOURCE: BING Maps 2014; Southern California Gas Company 2014; CBI 2013; UCSB 2013; USGS 2013; USFWS 2014


















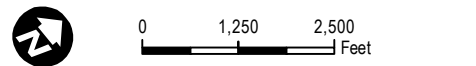
North South Project

FIGURE 5.4-2d
Special-status Species Mapped Habitat

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-  Compressor Station
-  Pressure Limiting Station
-  Proposed Alignment
-  650 Foot Buffer
- Species Models Groups**
-  Agricultural
-  Plant
-  Riparian-Wetland
-  Species-Specific
-  Wide-Ranging / Generalist
- USFWS Critical Habitat**
-  Arroyo Toad
-  Coachella Valley Milk-vetch
-  Coastal California Gnatcatcher
-  San Bernardino Kangaroo Rat
-  Santa Ana Sucker
-  Southwestern Willow flycatcher



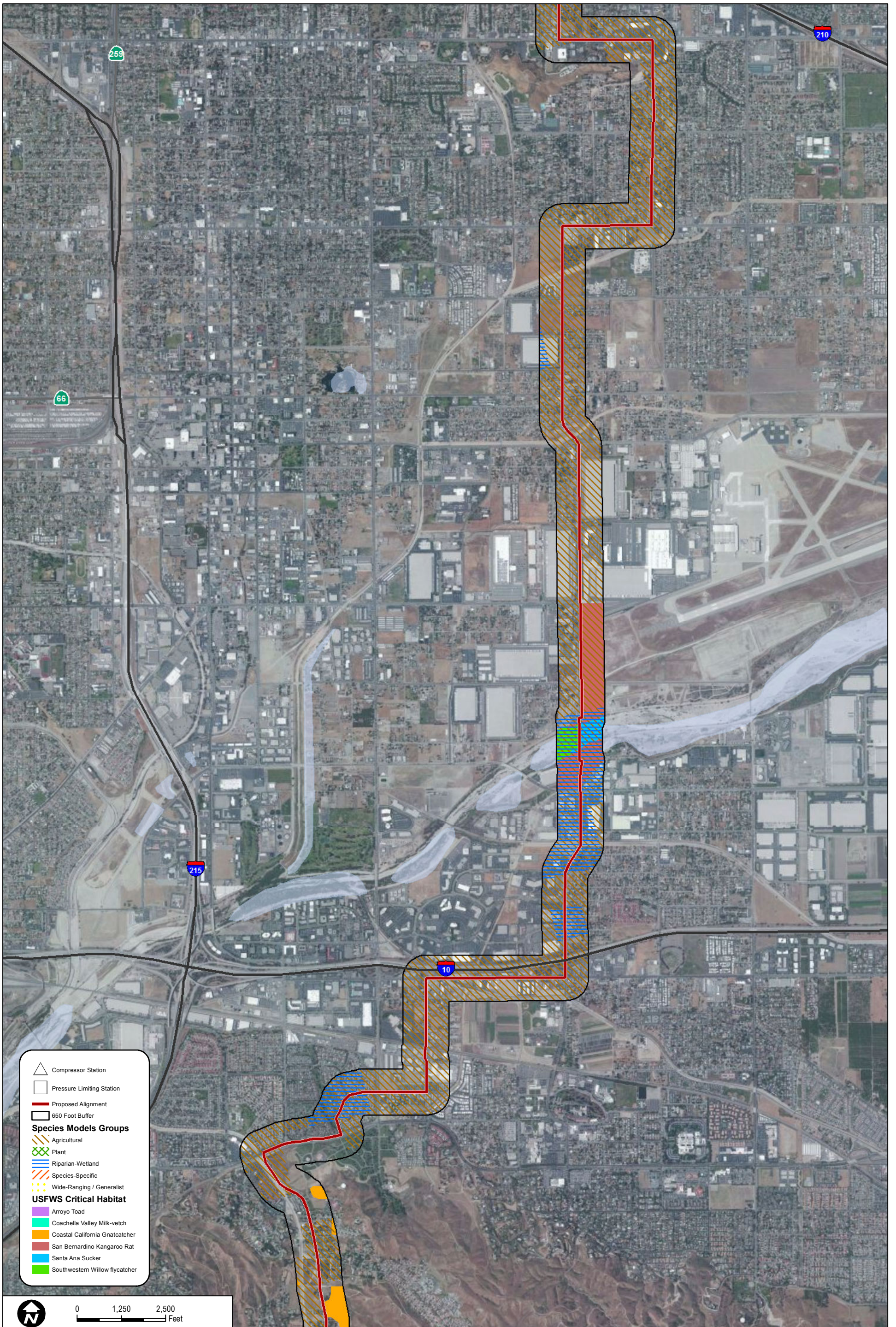
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CBI 2013; UCSB 2013; USGS 2013; USFWS 2014



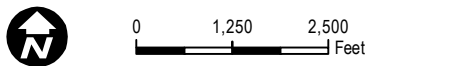
North South Project

FIGURE 5.4-2e
Special-status Species Mapped Habitat

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- Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- 650 Foot Buffer
- Species Models Groups**
- Agricultural
- Plant
- Riparian-Wetland
- Species-Specific
- Wide-Ranging / Generalist
- USFWS Critical Habitat**
- Arroyo Toad
- Coachella Valley Milk-vetch
- Coastal California Gnatcatcher
- San Bernardino Kangaroo Rat
- Santa Ana Sucker
- Southwestern Willow flycatcher



SOURCE: BING Maps 2014; Southern California Gas Company 2014; CBI 2013; UCSB 2013; USGS 2013; USFWS 2014



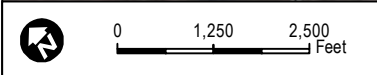
North South Project

FIGURE 5.4-2f
Special-status Species Mapped Habitat

INTENTIONALLY LEFT BLANK



- △ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- ▭ 650 Foot Buffer
- Species Models Groups**
- ▨ Agricultural
- ▨ Plant
- ▨ Riparian-Wetland
- ▨ Species-Specific
- ▨ Wide-Ranging / Generalist
- USFWS Critical Habitat**
- ▨ Arroyo Toad
- ▨ Coachella Valley Milk-vetch
- ▨ Coastal California Gnatcatcher
- ▨ San Bernardino Kangaroo Rat
- ▨ Santa Ana Sucker
- ▨ Southwestern Willow flycatcher



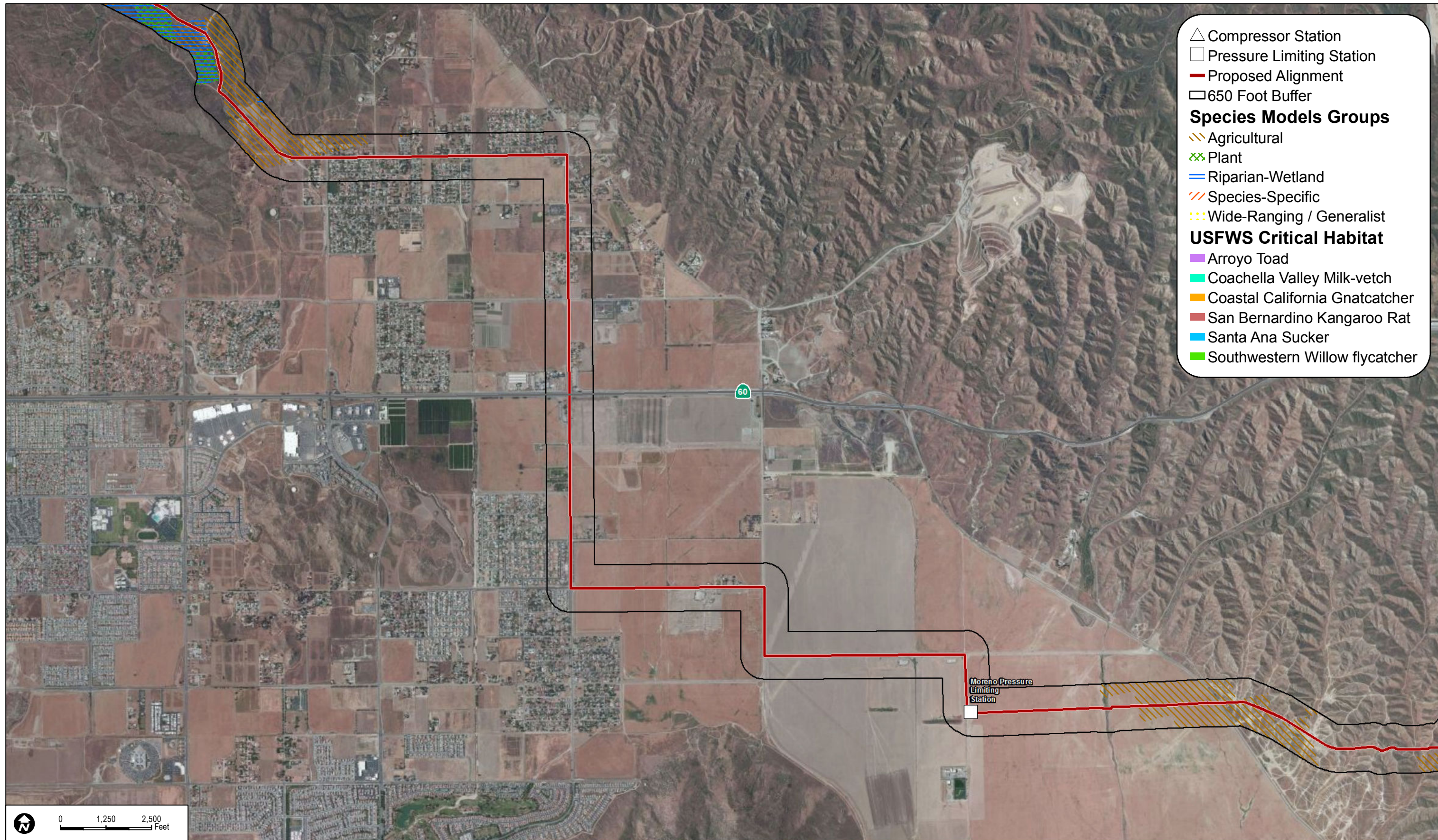
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CBI 2013; UCSB 2013; USGS 2013; USFWS 2014



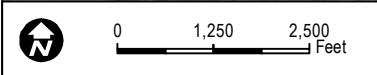
North South Project

FIGURE 5.4-1g
Special-status Species Mapped Habitat

INTENTIONALLY LEFT BLANK



- △ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- 650 Foot Buffer
- Species Models Groups**
- ▨ Agricultural
- ▨ Plant
- ▨ Riparian-Wetland
- ▨ Species-Specific
- ▨ Wide-Ranging / Generalist
- USFWS Critical Habitat**
- ▨ Arroyo Toad
- ▨ Coachella Valley Milk-vetch
- ▨ Coastal California Gnatcatcher
- ▨ San Bernardino Kangaroo Rat
- ▨ Santa Ana Sucker
- ▨ Southwestern Willow flycatcher



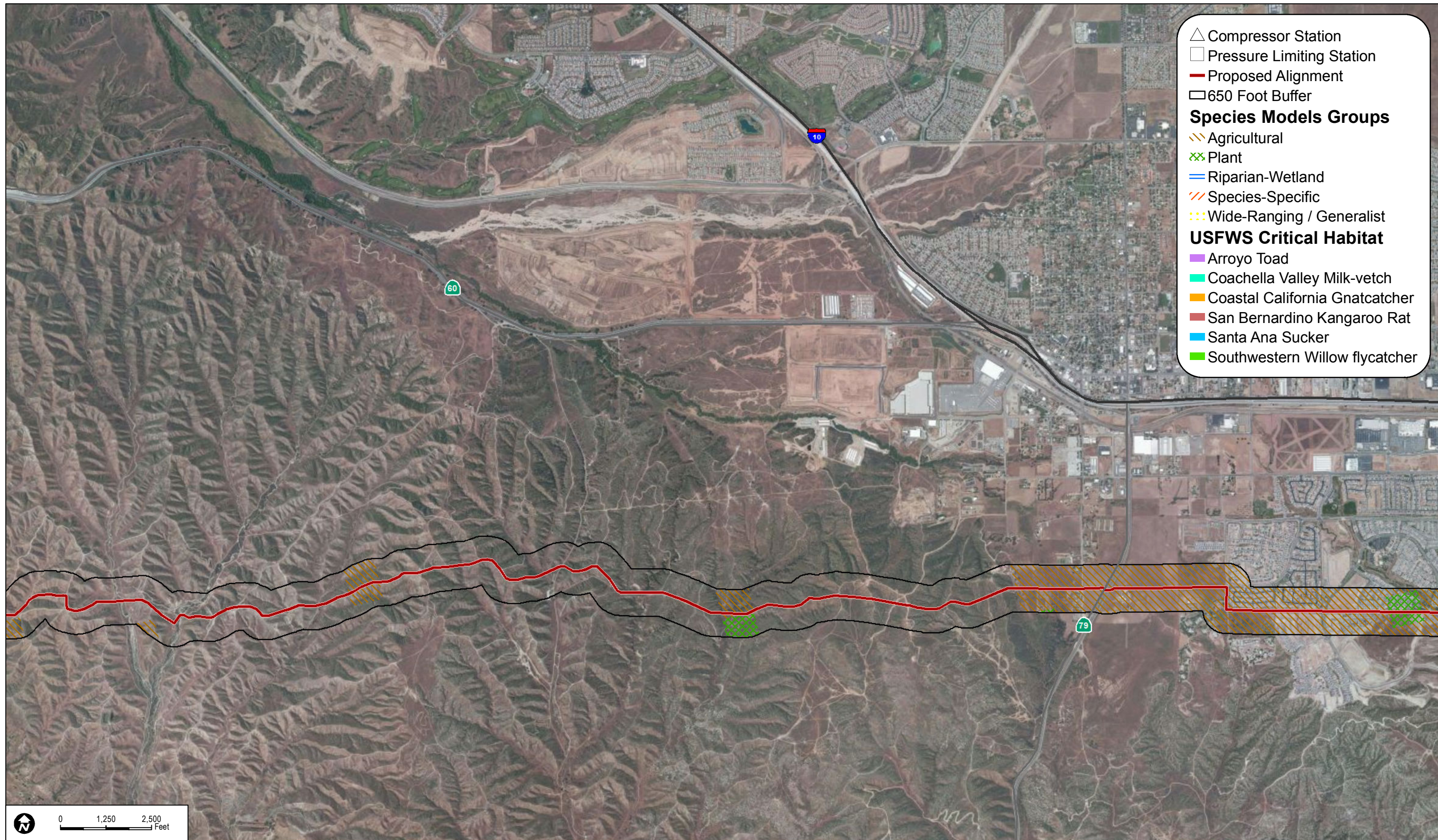
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CBI 2013; UCSB 2013; USGS 2013; USFWS 2014



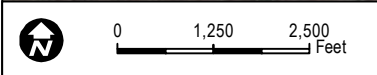
North South Project

FIGURE 5.4-1h
Special-status Species Mapped Habitat

INTENTIONALLY LEFT BLANK



- △ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- ▭ 650 Foot Buffer
- Species Models Groups**
- ▨ Agricultural
- ▨ Plant
- ▨ Riparian-Wetland
- ▨ Species-Specific
- ▨ Wide-Ranging / Generalist
- USFWS Critical Habitat**
- ▨ Arroyo Toad
- ▨ Coachella Valley Milk-vetch
- ▨ Coastal California Gnatcatcher
- ▨ San Bernardino Kangaroo Rat
- ▨ Santa Ana Sucker
- ▨ Southwestern Willow flycatcher



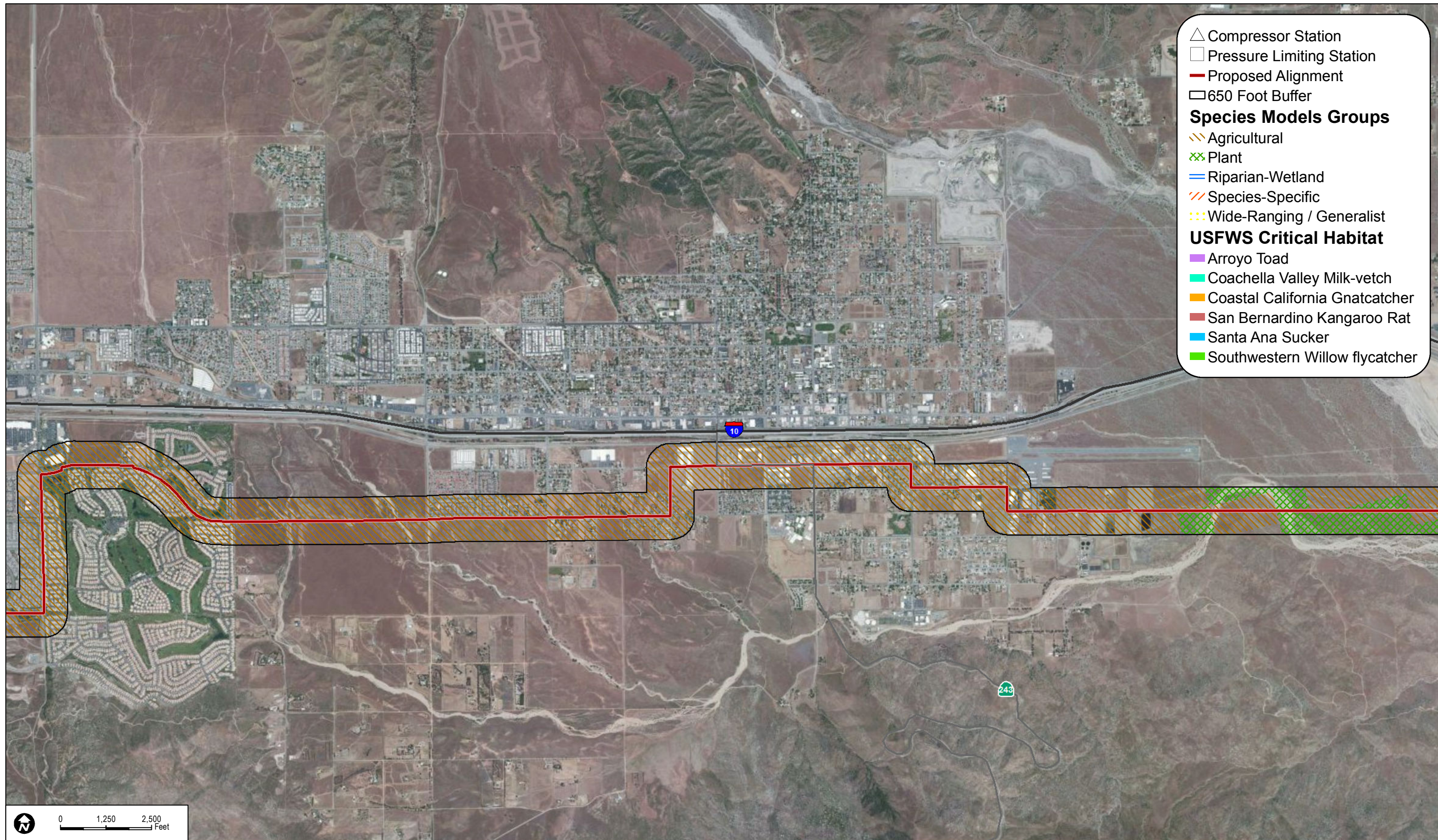
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CBI 2013; UCSB 2013; USGS 2013; USFWS 2014



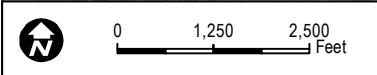
North South Project

FIGURE 5.4-1i
Special-status Species Mapped Habitat

INTENTIONALLY LEFT BLANK



- △ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- ▭ 650 Foot Buffer
- Species Models Groups**
- ▨ Agricultural
- ▨ Plant
- ▨ Riparian-Wetland
- ▨ Species-Specific
- ▨ Wide-Ranging / Generalist
- USFWS Critical Habitat**
- ▨ Arroyo Toad
- ▨ Coachella Valley Milk-vetch
- ▨ Coastal California Gnatcatcher
- ▨ San Bernardino Kangaroo Rat
- ▨ Santa Ana Sucker
- ▨ Southwestern Willow flycatcher



SOURCE: BING Maps 2014; Southern California Gas Company 2014; CBI 2013; UCSB 2013; USGS 2013; USFWS 2014

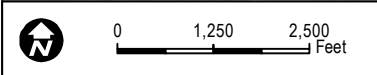
North South Project

FIGURE 5.4-2j
Special-status Species Mapped Habitat

INTENTIONALLY LEFT BLANK



- △ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- ▨ 650 Foot Buffer
- Species Models Groups**
- ▨ Agricultural
- ⊗ Plant
- ▨ Riparian-Wetland
- ▨ Species-Specific
- ⋯ Wide-Ranging / Generalist
- USFWS Critical Habitat**
- ▨ Arroyo Toad
- ▨ Coachella Valley Milk-vetch
- ▨ Coastal California Gnatcatcher
- ▨ San Bernardino Kangaroo Rat
- ▨ Santa Ana Sucker
- ▨ Southwestern Willow flycatcher



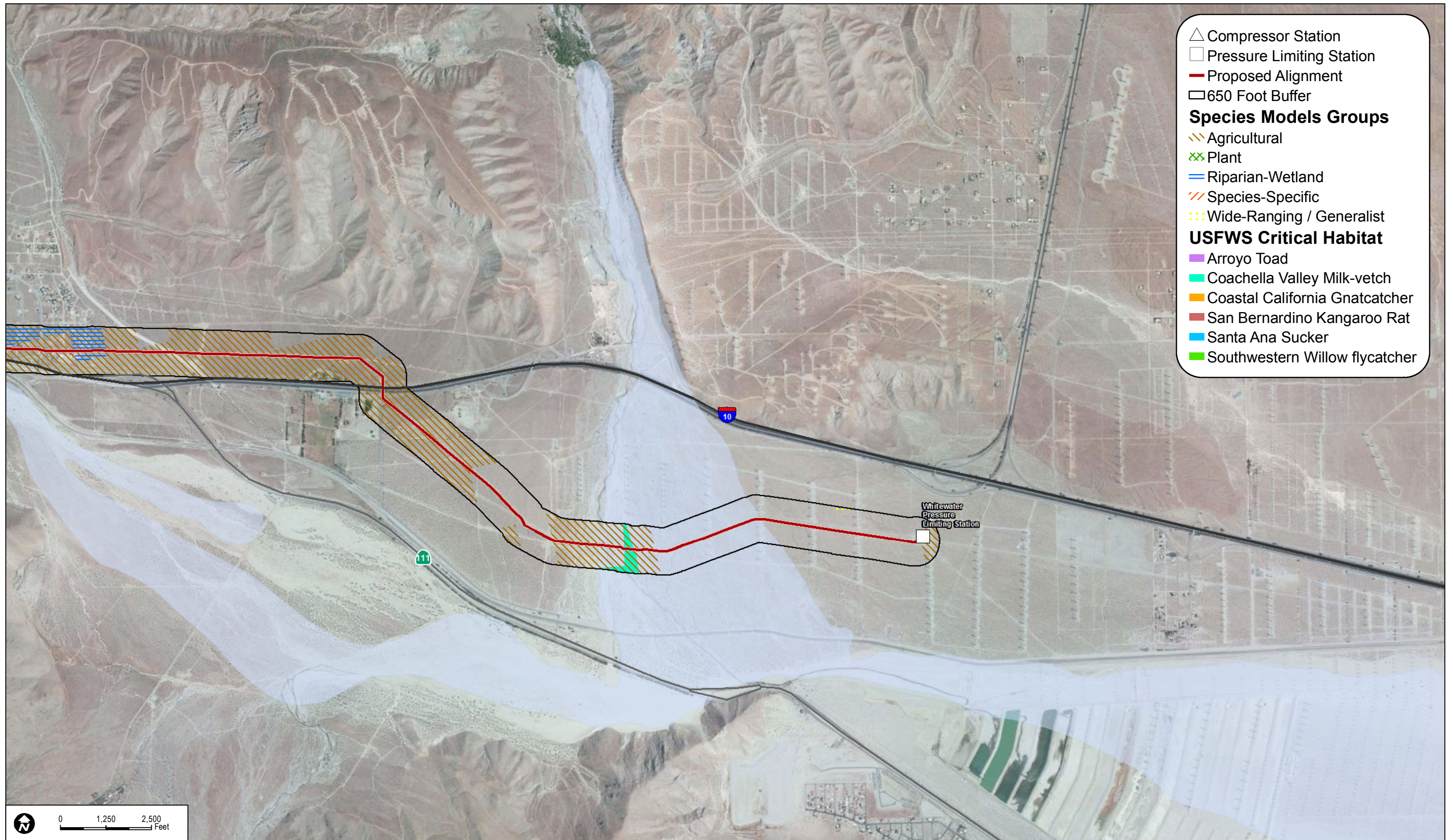
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CBI 2013; UCSB 2013; USGS 2013; USFWS 2014



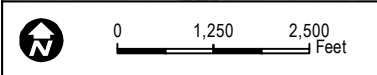
North South Project

FIGURE 5.4-1k
Special-status Species Mapped Habitat

INTENTIONALLY LEFT BLANK



- △ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- ▭ 650 Foot Buffer
- Species Models Groups**
- ▨ Agricultural
- ⊗ Plant
- ▬ Riparian-Wetland
- ▨ Species-Specific
- ⋯ Wide-Ranging / Generalist
- USFWS Critical Habitat**
- Arroyo Toad
- Coachella Valley Milk-vetch
- Coastal California Gnatcatcher
- San Bernardino Kangaroo Rat
- Santa Ana Sucker
- Southwestern Willow flycatcher

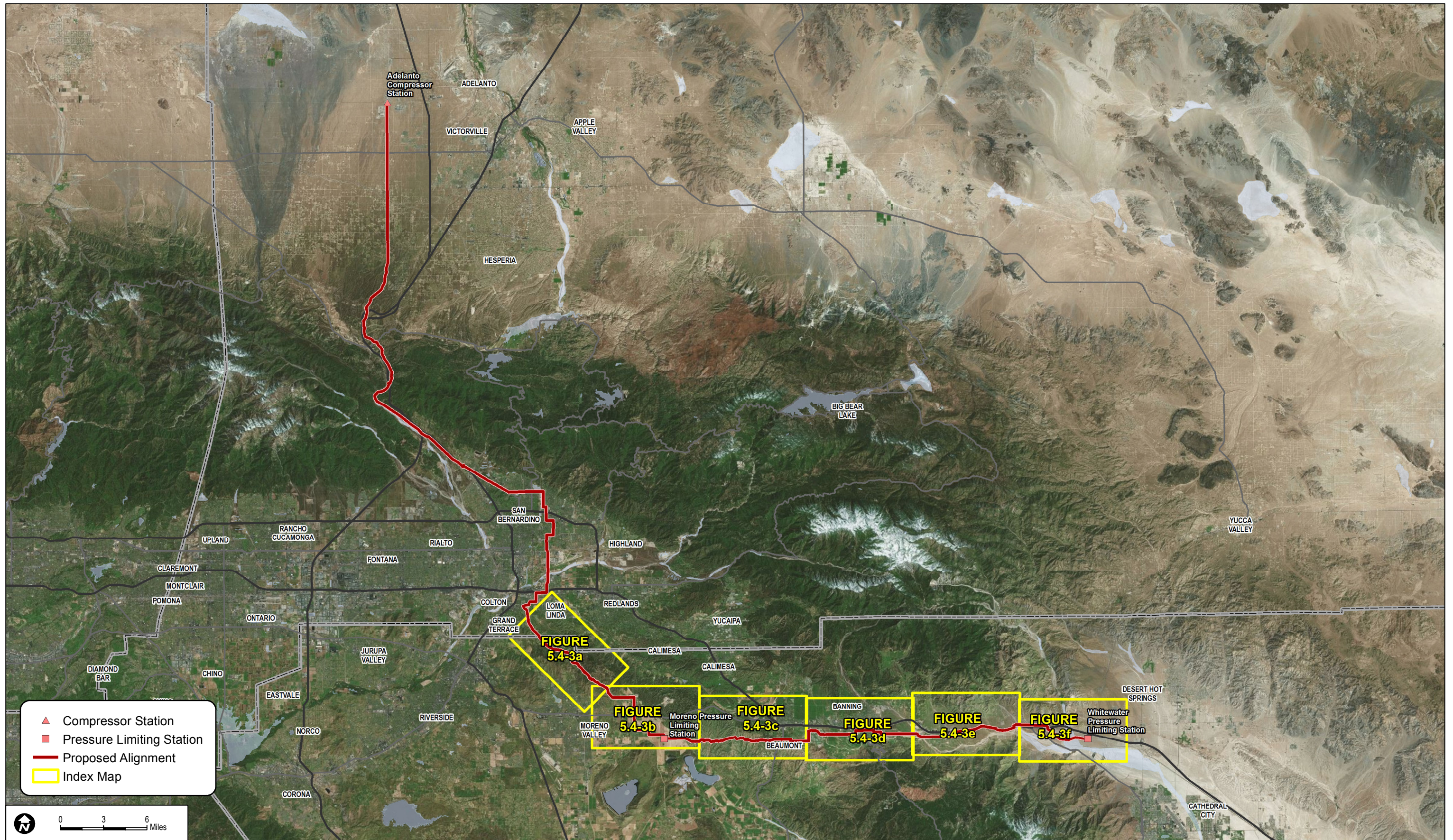


SOURCE: BING Maps 2014; Southern California Gas Company 2014; CBI 2013; UCSB 2013; USGS 2013; USFWS 2014

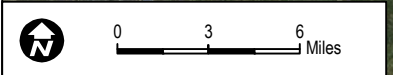
North South Project

FIGURE 5.4-11
Special-status Species Mapped Habitat

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- ▲ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- Index Map



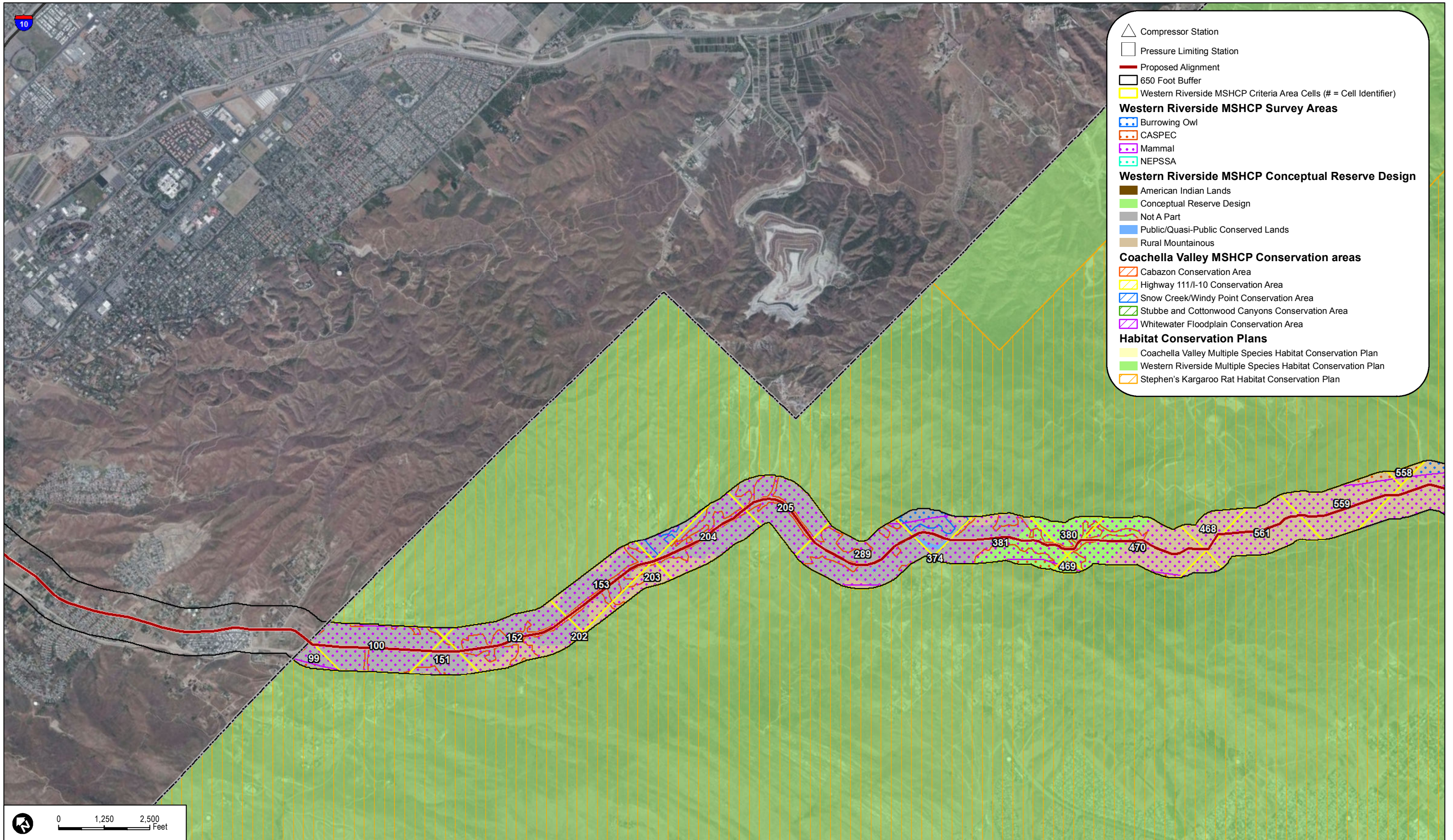
SOURCE: BING Maps 2014; Southern California Gas Company 2014



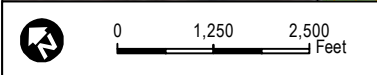
North South Project

FIGURE 5.4-3
Multiple Species Habitat Conservation Plans - Index Map

INTENTIONALLY LEFT BLANK



- △ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- 650 Foot Buffer
- Western Riverside MSHCP Criteria Area Cells (# = Cell Identifier)
- Western Riverside MSHCP Survey Areas**
- Burrowing Owl
- CASPEC
- Mammal
- NEPSSA
- Western Riverside MSHCP Conceptual Reserve Design**
- American Indian Lands
- Conceptual Reserve Design
- Not A Part
- Public/Quasi-Public Conserved Lands
- Rural Mountainous
- Coachella Valley MSHCP Conservation areas**
- Cabazon Conservation Area
- Highway 111/I-10 Conservation Area
- Snow Creek/Windy Point Conservation Area
- Stubbe and Cottonwood Canyons Conservation Area
- Whitewater Floodplain Conservation Area
- Habitat Conservation Plans**
- Coachella Valley Multiple Species Habitat Conservation Plan
- Western Riverside Multiple Species Habitat Conservation Plan
- Stephen's Kargaroo Rat Habitat Conservation Plan



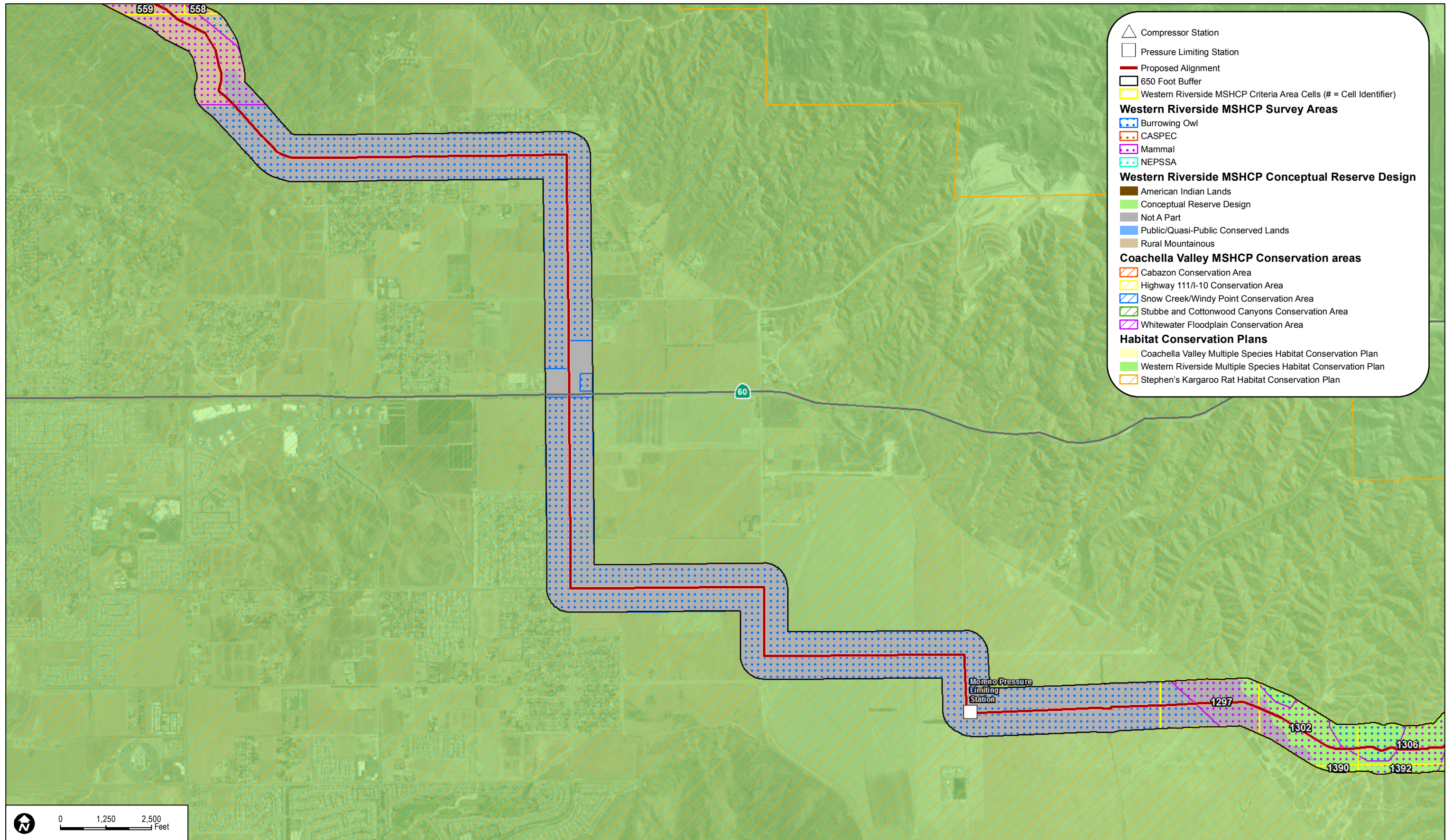
SOURCE: BING Maps 2014; Southern California Gas Company 2014; Riverside County 2003; CVMSHCP 2008



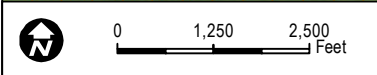
North South Project

FIGURE 5.4-3a
Multiple Species Habitat Conservation Plans

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- Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- 650 Foot Buffer
- Western Riverside MSHCP Criteria Area Cells (# = Cell Identifier)
- Western Riverside MSHCP Survey Areas**
- Burrowing Owl
- CASPEC
- Mammal
- NEPSSA
- Western Riverside MSHCP Conceptual Reserve Design**
- American Indian Lands
- Conceptual Reserve Design
- Not A Part
- Public/Quasi-Public Conserved Lands
- Rural Mountainous
- Coachella Valley MSHCP Conservation areas**
- Cabazon Conservation Area
- Highway 111/I-10 Conservation Area
- Snow Creek/Windy Point Conservation Area
- Stubbe and Cottonwood Canyons Conservation Area
- Whitewater Floodplain Conservation Area
- Habitat Conservation Plans**
- Coachella Valley Multiple Species Habitat Conservation Plan
- Western Riverside Multiple Species Habitat Conservation Plan
- Stephen's Kargaroo Rat Habitat Conservation Plan



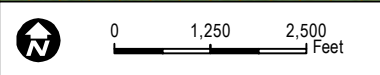
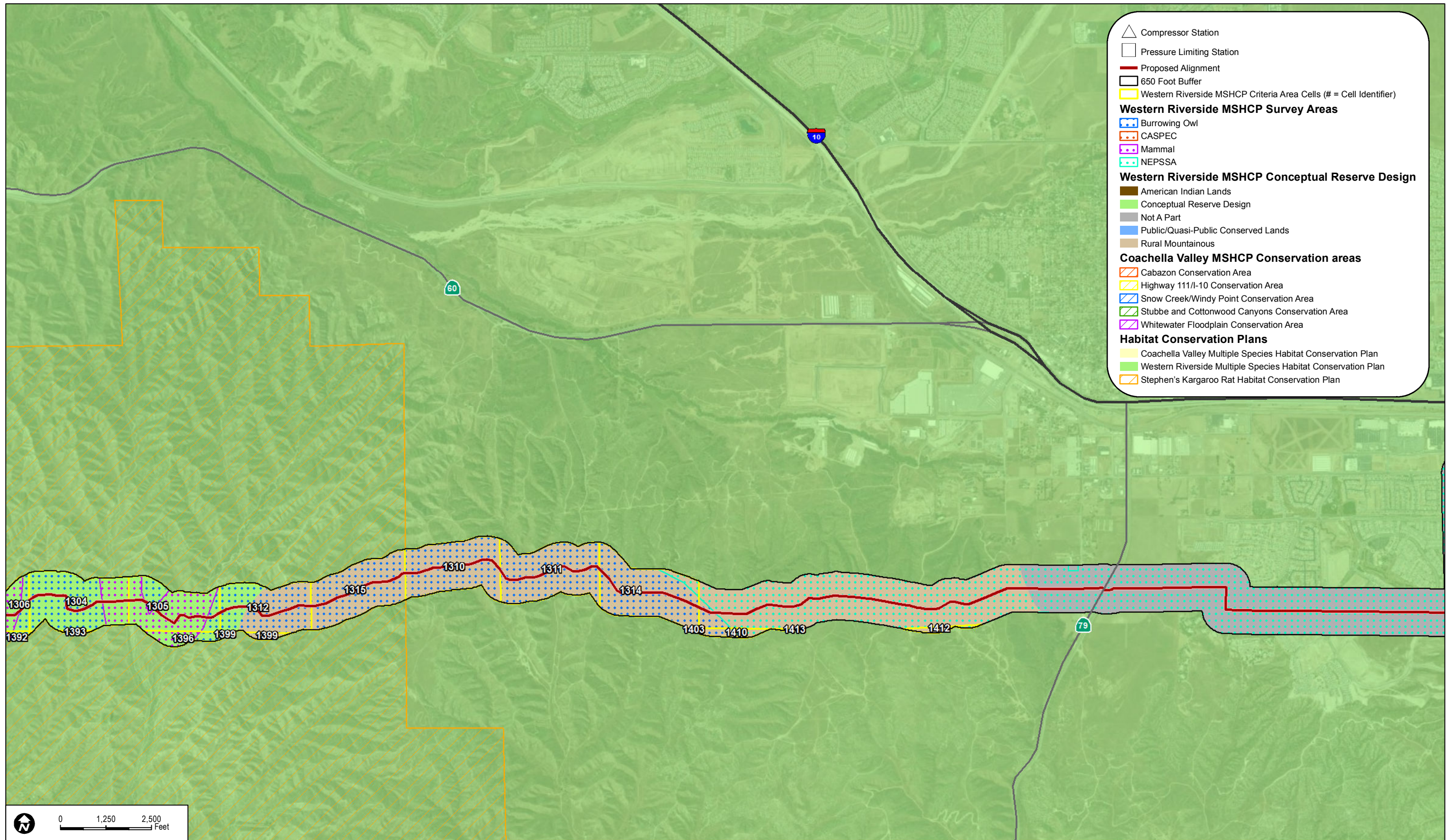
SOURCE: BING Maps 2014; Southern California Gas Company 2014; Riverside County 2003; CVMSHCP 2008



North South Project

FIGURE 5.4-3b
Multiple Species Habitat Conservation Plans

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SOURCE: BING Maps 2014; Southern California Gas Company 2014; Riverside County 2003; CVMSHCP 2008

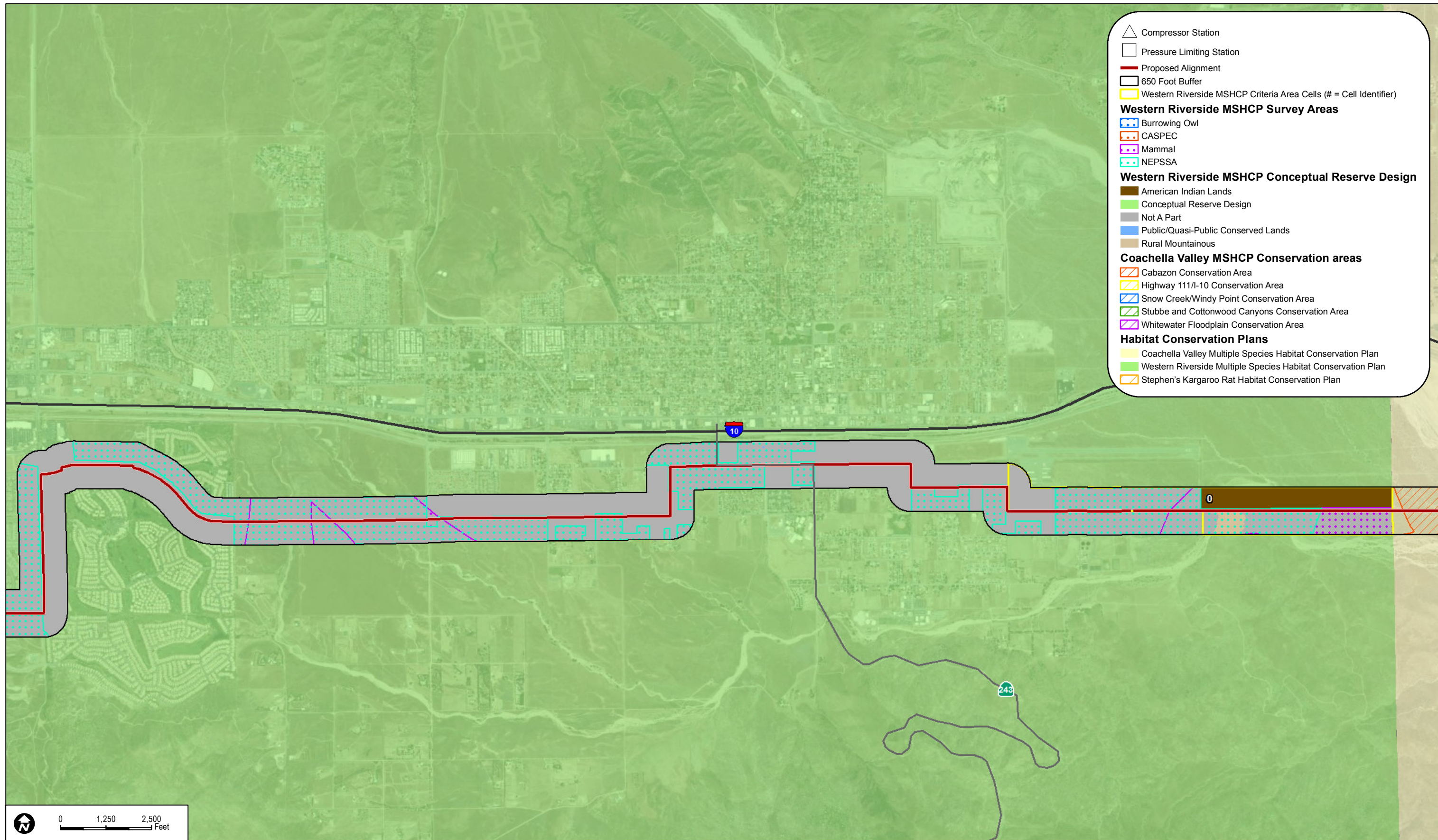


North South Project

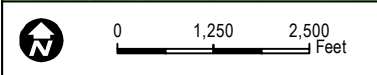
FIGURE 5.4-3c

Multiple Species Habitat Conservation Plans

INTENTIONALLY LEFT BLANK



- △ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- 650 Foot Buffer
- Western Riverside MSHCP Criteria Area Cells (# = Cell Identifier)
- Western Riverside MSHCP Survey Areas**
- Burrowing Owl
- CASPEC
- Mammal
- NEPSSA
- Western Riverside MSHCP Conceptual Reserve Design**
- American Indian Lands
- Conceptual Reserve Design
- Not A Part
- Public/Quasi-Public Conserved Lands
- Rural Mountainous
- Coachella Valley MSHCP Conservation areas**
- ▨ Cabazon Conservation Area
- ▨ Highway 111/I-10 Conservation Area
- ▨ Snow Creek/Windy Point Conservation Area
- ▨ Stubbe and Cottonwood Canyons Conservation Area
- ▨ Whitewater Floodplain Conservation Area
- Habitat Conservation Plans**
- Coachella Valley Multiple Species Habitat Conservation Plan
- Western Riverside Multiple Species Habitat Conservation Plan
- ▨ Stephen's Kargaroo Rat Habitat Conservation Plan



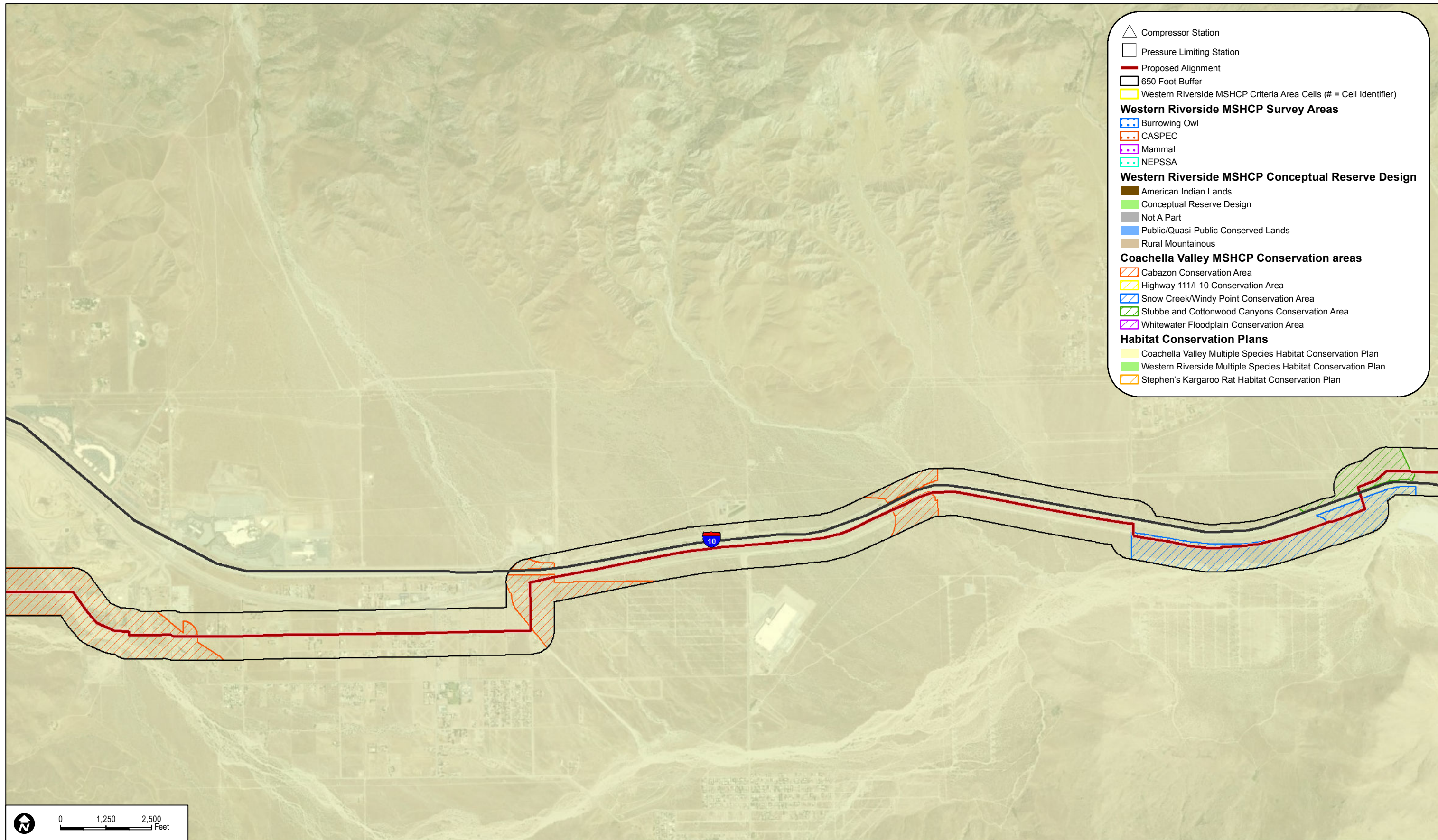
SOURCE: BING Maps 2014; Southern California Gas Company 2014; Riverside County 2003; CVMSHCP 2008



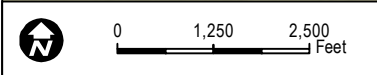
North South Project

FIGURE 5.4-3d
Multiple Species Habitat Conservation Plans

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- △ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- 650 Foot Buffer
- Western Riverside MSHCP Criteria Area Cells (# = Cell Identifier)
- Western Riverside MSHCP Survey Areas**
- Burrowing Owl
- CASPEC
- Mammal
- NEPSSA
- Western Riverside MSHCP Conceptual Reserve Design**
- American Indian Lands
- Conceptual Reserve Design
- Not A Part
- Public/Quasi-Public Conserved Lands
- Rural Mountainous
- Coachella Valley MSHCP Conservation areas**
- Cabazon Conservation Area
- Highway 111/I-10 Conservation Area
- Snow Creek/Windy Point Conservation Area
- Stubbe and Cottonwood Canyons Conservation Area
- Whitewater Floodplain Conservation Area
- Habitat Conservation Plans**
- Coachella Valley Multiple Species Habitat Conservation Plan
- Western Riverside Multiple Species Habitat Conservation Plan
- Stephen's Kargaroo Rat Habitat Conservation Plan



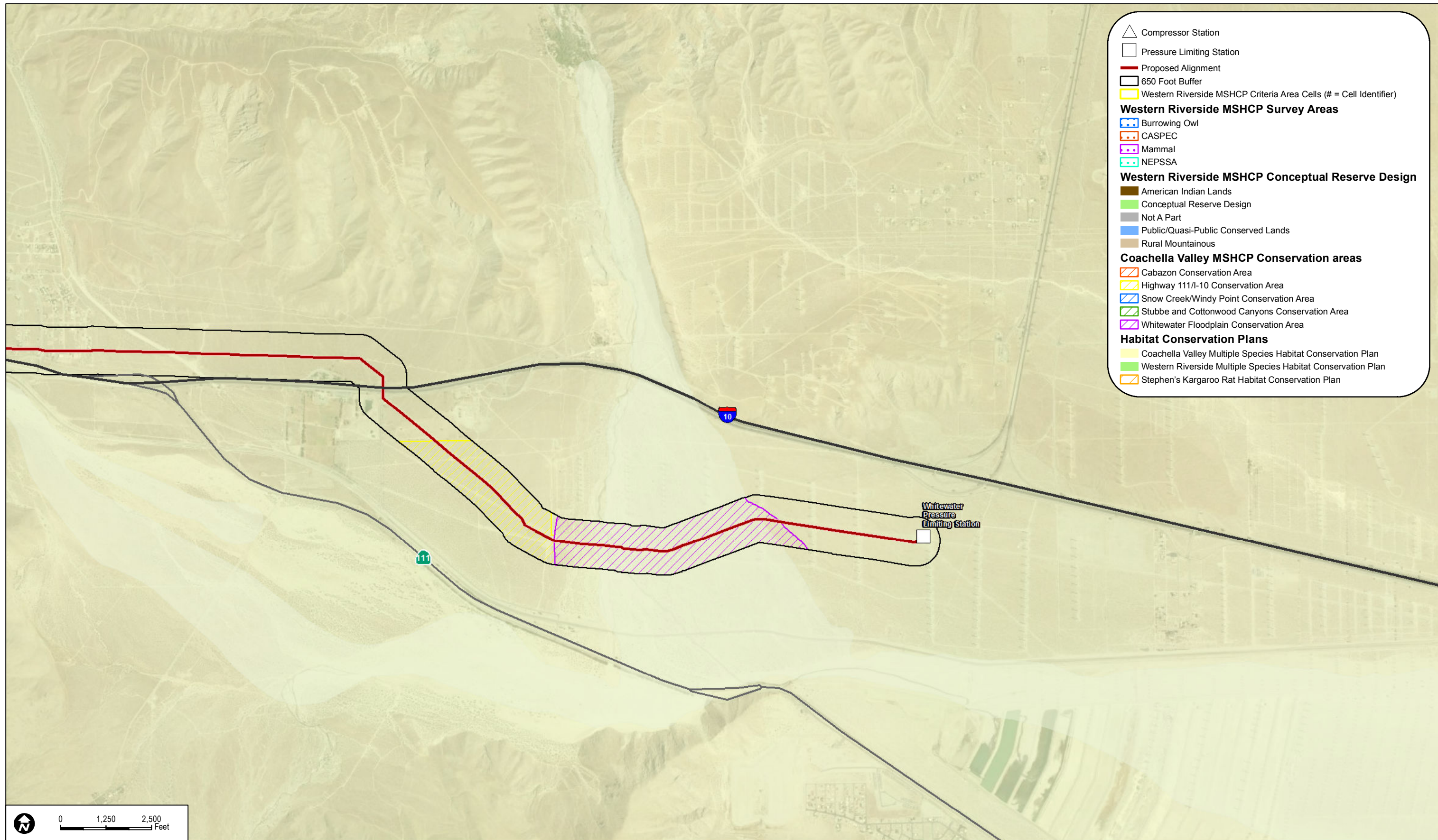
SOURCE: BING Maps 2014; Southern California Gas Company 2014; Riverside County 2003; CVMSHCP 2008



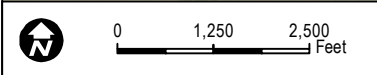
North South Project

FIGURE 5.4-3e
Multiple Species Habitat Conservation Plans

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- △ Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- 650 Foot Buffer
- Western Riverside MSHCP Criteria Area Cells (# = Cell Identifier)
- Western Riverside MSHCP Survey Areas**
- Burrowing Owl
- CASPEC
- Mammal
- NEPSSA
- Western Riverside MSHCP Conceptual Reserve Design**
- American Indian Lands
- Conceptual Reserve Design
- Not A Part
- Public/Quasi-Public Conserved Lands
- Rural Mountainous
- Coachella Valley MSHCP Conservation areas**
- Cabazon Conservation Area
- Highway 111/I-10 Conservation Area
- Snow Creek/Windy Point Conservation Area
- Stubbe and Cottonwood Canyons Conservation Area
- Whitewater Floodplain Conservation Area
- Habitat Conservation Plans**
- Coachella Valley Multiple Species Habitat Conservation Plan
- Western Riverside Multiple Species Habitat Conservation Plan
- Stephen's Kargaroo Rat Habitat Conservation Plan



SOURCE: BING Maps 2014; Southern California Gas Company 2014; Riverside County 2003; CVMSHCP 2008



North South Project

FIGURE 5.4-3f
Multiple Species Habitat Conservation Plans

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5.5 Cultural Resources

This section presents the results of the cultural resource study conducted for the Proposed Project, including a discussion of the Proposed Project setting, a records search of previously recorded cultural resources and a literature review of previous cultural resource studies conducted in the survey area, archival research, Native American outreach, a buried-site-sensitivity analysis, and an impact analysis and recommendations for additional work.

5.5.1 Environmental Setting

The proposed alignment crosses parts of San Bernardino and Riverside Counties, and the land it passes through includes a variety of different environmental and geologic settings. This section discusses the general environmental setting of the four major geographic regions the pipeline passes through: the Mojave Desert, the Transverse Ranges, the Peninsular Ranges and Inland Valleys, and the Colorado Desert (Figure 5.5-1). The Compressor Station and the northern part of the Adelanto to Moreno pipeline are located in the Mojave Desert. The Adelanto to Moreno pipeline continues south through the Transverse Ranges and into the interior valleys. The Moreno to Whitewater pipeline runs through the inland valleys into the Coachella Valley, which is situated in the northwestern Colorado Desert.

Geographic Regions

Mojave Desert

Climate and Geology

The Mojave Desert covers much of southeastern California, as well as portions of Nevada and Arizona. The compressor station and the northern end of the Adelanto to Moreno pipeline segment are located in the southwestern portion of the desert. The topography of the area consists of north- to south-trending ridges and terraces covered with desert pavement and separated by intermittent drainages. The Mojave Desert is arid; evaporation exceeds precipitation. Temperatures commonly exceed 100°F (38°C) during the summer and can dip below freezing in the winter. Precipitation of 4–6 inches (10–15 centimeters) annually generally falls as rain from November through March (Bailey 1966). The mountain ranges within the Mojave Desert exceed 4,900 feet (1,500 meters) above mean sea level (amsl) in several areas, but the desert also includes Death Valley, the lowest point in North America, at 282 feet (86 meters) below mean sea level.

A major focus of prehistoric settlement in the area was the Mojave River. The river originates in the San Bernardino Mountains and flows generally northward to Barstow and then eastward to its sink in the Soda and Silver Lake playas. During the late Pleistocene, a large lake, Lake Mojave, was present in that location.

Sources of lithic materials suitable for the manufacture of aboriginal flaked stone tools are abundant throughout the Mojave Desert and consist of a variety of material types, including igneous materials,

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such as basalt, rhyolite, and some obsidian, and cryptocrystalline rocks, such as chert and chalcedony. Scattered granitic outcrops and boulders are also present and could have provided suitable locations for aboriginal rock art and milling surfaces.

Flora

Vegetation in the Mojave Desert is dominated by a Creosote Bush Scrub plant community (Keeler-Wolf 2007; MacMahon 1985; Munz 1974; Rowlands et al. 1982; Vasek and Barbour 1977). The dominant plants in this community are the creosote bush (*Larrea tridentata*) and white bursage (*Ambrosia dumosa*). Other abundant plants can include saltbush (*Atriplex* spp.), rabbitbrush (*Chrysothamnus* spp.), greasewood (*Sarcobatus vermiculatus*), cholla (*Opuntia* sp.), Anderson lycium (*Lycium andersonii*), burrobush (*Hymenoclea salsola*), brittlebush (*Encelia farinosa*), and Mormon tea (*Ephedra nevadensis*). Many of these species were used by native peoples in the region, and comparative data may be found in Barrows (1900), Bean and Saubel (1972), Zigmond (1981), Ebeling (1986), and Sutton (1988).

Fauna

Faunal resources in the Mojave Desert exploited by native peoples included a variety of mammals (Jameson and Peeters 1988). Although uncommon, the large mammals that were exploited included bighorn sheep (*Ovis canadensis*), deer (*Odocoileus hemionus*), and pronghorn (*Antilocapra americana*). Smaller mammals, such as rabbits (*Sylvilagus audubonii*), hares (*Lepus californicus*), wood rats (*Neotoma lepida*), mice (*Peromyscus* spp.), Mohave ground squirrels (*Spermophilus mohavensis*), and kangaroo rats (*Dipodomys* spp.), formed the bulk of the animals used. Reptiles, such as desert tortoise (*Gopherus agassizii*) (Schneider and Everson 1989) and a variety of lizards and snakes, were also used. More than 200 species of birds also are found along the Mojave River, although ravens, quail, doves, and roadrunners are the most common in the area.

Transverse Ranges

Climate and Geology

Uplifted along the San Andreas Fault during the middle Pleistocene, the Transverse Ranges trend generally west–east along the southern flank of the Mojave Desert. The San Gabriel Mountains constitute much of the western portion of the Transverse Ranges, and the San Bernardino Mountains constitute the eastern portion. The two ranges are separated by Cajon Pass, through which the central part of the Adelanto to Moreno pipeline passes before turning east along the southern base of the San Bernardino Mountains. The southern faces of the San Bernardino Mountains rise steeply from the valley floor and drain through numerous rugged canyons into the Santa Ana River, and the northern slopes drain into the Mojave River. The San Andreas Fault runs along the southern edge of the San Bernardino Mountains and cuts north through Cajon Pass to Lone Pine Canyon, continuing along the northern edge of the San Gabriel Mountains to the west.

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The tallest peak in Southern California, Mount San Geronio, is located at the eastern end of the San Bernardino Mountains, at an elevation of 11,502 feet (3,506 meters) amsl. Granites from the Southern California batholith constitute the largest bedrock component in the San Bernardino Mountains (Schoenherr 1992). In places, Precambrian igneous and metamorphic rocks, including schists, gneiss, and migmatites, along with some outcrops of Mesozoic granitic rock, overlie the batholith (Bortugno and Spittler 1986).

Aboriginal inhabitants of the ranges visited granitic outcrops to procure materials for use in ground stone implements. Lithic materials suitable for the manufacture of flaked stone tools were limited to small quantities of fine-grained materials, such as cryptocrystalline silicates (e.g., chert or jasper), quartzite, and metavolcanic rocks. Rainfall in the ranges varies considerably; 13–14 inches (33–35 centimeters) falls in the foothills, and up to 35–40 inches (89–101 centimeters) falls at the highest peaks. Rainfall is the highest in the winter months; much of it falls as snow, but summer thunderstorms regularly bring additional rain in July and August. Temperatures at lower elevations are generally mild; highs reach 95°F (35°C) in the summer and 55°F (13°C) in the winter, and lows are in the 50s°F (10°C) during the summer and the 20s°F (–7°C) in the winter. Highs and lows at the higher elevations can reach 70°F/45°F (21°C/7°C) in the summer and 40°F/19°F (4°C/–7°C) in the winter (Bailey 1966).

Flora

Because of the great changes in elevation, the Transverse Ranges contain several different ecological zones. The lower elevations are dominated by drought-tolerant scrub vegetation known as chaparral. Although these scrub-covered slopes are well watered, evaporation on the steep slopes is exceptionally high, leaving very little moisture in the soil. The long, hot summers that typify Southern California's Mediterranean climate accentuate this "slope effect." In contrast, the upper elevations feature a mix of conifer-and-mixed-oak forests, smaller areas of pinyon/juniper woodland, Great Basin scrub, and oak woodland. Mountain grasslands and wetland areas are present in the upland valleys, and there are corridors of riparian growth along streams and springs.

Fauna

The mountains support a number of animals, including mule deer (*Odocoileus hemionus*), a species that would have been actively hunted by prehistoric groups. Other mammal species common in the region currently include coyote (*Canis latrans*), bobcat (*Lynx rufus*), raccoon (*Procyon lotor*), black-tailed jackrabbit (*Lepus californicus*), desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Spermophilus beecheyi*), desert woodrat (*Neotoma lepida*), kangaroo rat (*Dipodomys* spp.), Botta's pocket gopher (*Thomomys bottae*), and voles (*Microtus* spp.). Numerous birds and reptiles are present; the latter group includes several species of lizards and snakes (CDFG 2006).

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The Peninsular Ranges and Inland Valleys

Climate and Geology

Most of the pipeline, including the southern part of the Adelanto to Moreno pipeline and nearly the entire length of the Moreno to Whitewater pipeline, passes through several inland valleys south of the San Bernardino Mountains. These valleys are generally included as part of the Peninsular Ranges (Jahns 1954). From Cajon Pass, the route goes south through the San Bernardino Valley, across Box Springs Mountains (actually small hills) to the northern portion of the Moreno Valley, then east through the Badlands and eastward across the San Gorgonio Pass, to Whitewater.

This region enjoys a mild Mediterranean climate characterized by warm, dry summers and cool, moist winters. The average annual temperatures are between 59°F and 65°F (15°C and 18°C), and there are upwards of 300 frost-free days a year. Precipitation in the region is variable, depending largely on elevation and aspect. Annual precipitation varies from 12 to 20 inches (30 to 50 centimeters), and most, if not all, rain falls in the winter months (Bailey 1966).

Flora

Native vegetation in the inland valleys is best characterized as an Inland Sage Scrub community. As defined by Thorne (1976:10), the Inland Sage Scrub of the cismontane slopes is relatively less rich in species and contains a slightly different mix than the related Coastal Sage Scrub, largely because of the hotter and drier climate and generally higher elevation of the inland area.

Dominant species include sagebrush (*Artemisia californica*), bush monkeyflower (*Mimulus aurantiacus*), yerba santa (*Eriodictyon crassifolium*), California buckwheat (*Eriogonum fasciculatum*), golden yarrow (*Eriophyllum confertiflorum*), false broomweed (*Haplopappus* spp.), rushrose (*Helianthemum scoparium*), common deerweed (*Lotus scoparius*), lupins (*Lupinus* spp.), bushmallow (*Malacothamnus* spp.), laurel sumac (*Malosma laurina*), cholla (*Opuntia parryi* [*Cylindropuntia californica* var. *parkeri*]), sumac (*Rhus* spp.), buckthorn (*Rhamnus* spp.), sage (*Salvia* spp.), chaparral nightshade (*Solanum xanti*), and poison oak (*Toxicodendron diversilobum*) (Thorne 1976:10). Other native plant species include California brickellbush (*Brickellia californica*), tocalote (*Centaurea melitensis*), jimsonweed (*Datura wrightii*), wild cucumber (*Marah macrocarpa*), California chicory (*Rafinesquia californica*), coastal prickly pear (*Opuntia littoralis*), and chia (*Salvia columbariae*) (Hickman 1993; Munz 1974; Roberts et al. 1994; Tibor 2001). Many of these plants were, and are, important for Native American groups.

Fauna

Larger-sized mammals that once inhabited the region and contributed to the diet of the prehistoric and early-historical-period inhabitants include mule deer (*Odocoileus hemionus*) and pronghorn antelope (*Antilocapra americana*), the “deer of various kinds” noted by Anza in 1774 (Bolton 1930:203). Medium-sized and medium- to small-sized mammals currently inhabiting the area that may have been important to people in the past include coyote (*Canis latrans*), bobcat (*Lynx rufus*), and gray fox (*Urocyon*

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cinereoargenteus) (CDFG 2006). In addition, the small-sized-mammal community includes jackrabbits (*Lepus californicus*), desert cottontails (*Sylvilagus audubonii*), ground squirrels (*Spermophilus beecheyi*), and rodents, such as wood rats (*Neotoma lepida*), kangaroo rats (*Dipodomys* spp.), pocket gophers (*Thomomys bottae*), and mice (*Peromyscus* spp.) (O'Connell et al. 1974:15). Reptiles, such as the western fence lizard (*Sceloporus occidentalis*), granite spiny lizard (*Sceloporus orcutti*), side-blotched lizard (*Uta stansburiana*), southern alligator lizard (*Elgaria multicaerinata*), gopher snake (*Pituophis melanoleucus*), and red diamond rattlesnake (*Crotalus ruber*), also occupy the area (CDFG 2006; Collins 1997; Stebbins 1985). The granite spiny lizards, which inhabit the many granitic outcrops in the region, are apparently the black lizards known as *Yángva'am* to the Cahuilla (Saubel and Elliott 2004a, 2004b).

Several bird populations also frequented the area in the past. Marshlands and streams would have supported waterfowl, including ducks (Anatidae) and geese (Anserinae). Terrestrial-dwelling birds that were hunted include California quail (*Callipepla californica*) and mountain quail (*Oreortyx pictus*) (Bean 1972:56–67; CDFG 2006; O'Connell et al. 1974:15; Sparkman 1908:197–200). Today, the great egret (*Ardea alba*), great blue heron (*Ardea herodias*), red-tailed hawk (*Buteo jamaicensis*), prairie falcon (*Falco mexicanus*), and American kestrel (*Falco sparverius*) are occasionally sighted in the region (CDFG 2006).

Colorado Desert

Climate and Geology

The far eastern end of the Moreno to Whitewater pipeline is located in the far northwestern end of the Coachella Valley, which is part of the Colorado Desert. The Coachella Valley is located in southeastern California and is the northern portion of the Salton Trough, a northwest- to southeast-trending depression that reaches from the San Geronio Pass to the Gulf of California, 174 miles (280 kilometers) to the south. The trough has been heavily shaped by tectonic forces involving the interaction of the Pacific Plate and the North American Plate along the San Andreas Fault system (Harden 2004). The Coachella Valley is a fault-bound depression, and the San Andreas Fault runs along its northern margin. The Banning Fault, a subordinate fault to the San Andreas Fault, runs east–west through the valley between the San Andreas Fault and the San Jacinto Fault to the west. Folding in the earth's crust caused by the faults has blocked the flow of underground aquifers and has resulted in numerous springs and pools. These water sources were crucial resources for prehistoric groups (Wilke 1978).

One of the most important sources of water for prehistoric groups was ancient Lake Cahuilla, also referred to as Blake's Sea or Lake LaConte (Laylander 1997, 2006; Rogers 1945; Schaefer 1994:67; Schaefer and Laylander 2007; Sutton 1993, 1998, 2011; Waters 1983; Weide 1976; Wilke 1978), which once filled much of the Salton Trough. The Coachella Valley has been repeatedly inundated in the past, the result of flooding brought on by changes in the course of the Colorado River. On numerous occasions, the river left its banks and flooded the Salton Trough, resulting in the creation of ancient Lake Cahuilla. At its maximum, the lake was 114 miles (184 kilometers) long, 34 miles (54 kilometers) wide,

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and 315 feet (96 meters) in depth, and it inundated much of the Coachella Valley (Schaefer 1994:67). Once full, Lake Cahuilla overflowed into the Gulf of California along the Hardy River. When the Colorado River regained its original course, the lake evaporated and disappeared. Schaefer and Laylander (2007:250) estimated that it would take about 20 years for the lake to fill and about 60 years for it to evaporate (see also Wilke 1978:109).

Between 800 and 300 BP, there were at least three documented cycles of flooding and desiccation, but it is not clear whether the lake during those times was primarily full with only minor drying episodes, mostly empty and only occasionally inundated, or somewhere in between (Schaefer and Laylander 2007). The most-recent stand of Lake Cahuilla may have been brief, between about 400 and 300 BP (Laylander 1997:68). Much of the prehistoric occupation of the Coachella Valley appears to have been correlated with the presence of Lake Cahuilla. The earliest known sites in the valley date to the Late Archaic period, roughly between 4000 and 1500 BP (Love and Dahdul 2002). Most of those sites are located at or near the ancient lakeshore, as are several sites dating to the late prehistoric period (Sutton and Wilke 1988; Wilke 1978).

The Peninsular Ranges form the western boundary of the Colorado Desert, and the Colorado River is generally considered its eastern border. The Peninsular Ranges top 10,000 feet (3,050 meters) amsl at several peaks, but most of the mountain ranges with the Colorado Desert top out at 3,000 feet (900 meters) amsl. The region is quite arid, averaging just 3.6 inches (9 centimeters) of rain a year.

Flora

The Colorado Desert is part of the Sonoran Life Zone and is characterized by the Creosote Bush Scrub plant community (Keeler-Wolf 2007; MacMahon 1985; Munz 1974; Schoenherr 1992 Vasek and Barbour 1977). This life zone is characterized by the presence of creosote bush (*Larrea tridentata*), mesquite (*Prosopis glandulosa*), brittlebush (*Encelia farinosa*), cholla (*Cylindropuntia fulgida*), prickly pear (*Opuntia* spp.), chuparosa (*Beloperone californica*), desert lavender (*Hyptis emoryi*), sages (*Salvia* spp.), and various grasses. California fan palm (*Washingtonia filifera*), the only species of palm native to California, provide habitat for a number of other species, including screwbean mesquite (*Prosopis pubescens*) and Fremont cottonwood (*Populus fremontii*). Many of the plants known to the historical-period Cahuilla, the cultural group that occupied the Coachella Valley at the time of European contact, were medicinal or therapeutic in nature (for a detailed discussion, see Bean and Saubel 1972).

Fauna

A number of desert animals inhabit the greater Colorado Desert, including such mammals as coyotes (*Canis latrans*), gray foxes (*Urocyon cinereoargenteus*), various mouse species (*Peromyscus* spp. and *Perognathus* spp.), squirrels (*Citellus* spp.), and lagomorphs (*Lepus californicus* and *Sylvilagus audubonii*). Reptiles, including rattlesnakes (*Crotalus* spp.) and a variety of lizards (*Crotaphytus* spp., *Dipsosaurus* spp., *Sceloporus* spp., *Streptosaurus* spp., and *Urosaurus* spp.), and birds, such as turkey vultures (*Cathartes aura*), red-tailed hawks (*Buteo jamaicensis*), mourning doves (*Zenaida macroura*), and ravens

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(*Corvus corax*), are also present. During prehistoric times, and up to the early twentieth century, pronghorn (*Antilocapra americana*) were present in parts of the desert, such as the Coachella Valley, but they have since been pushed out by modern development (Jaeger 1965).

Prehistoric Background

The cultural resource study area is situated within the Mojave Desert, inland Southern California, and the far northwestern Colorado Desert. An archaeological background for each region is presented below.

The Mojave Desert

As a result of the large number of archaeological investigations in the Mojave Desert, a cultural chronology for the region has been fairly well established, although some of the details differ among researchers. General summaries of the prehistory of the region have been presented by Warren (1984), Warren and Crabtree (1986), Sutton (1988, 1996), and Sutton et al. (2007). The following is summarized by Sutton et al. (2007), who made a distinction between periods and complexes: periods represent a span of time that may contain multiple cultural adaptations, and complexes represent specific cultural entities within each period (Table 5.5-1).

**Table 5.5-1
Temporal Periods and Cultural Complexes in the Mojave Desert, by Temporal Period**

Cultural Complex	General Dating (BP)	Marker Traits
<i>Late Holocene</i>		
Late Prehistoric	ca. 900–contact	Cottonwood Triangular and Desert Side-notched points; pottery; several different cultural entities, including the Patayan (Yuman) Tradition
Rose Spring	ca. 1800–900	Rose Spring and Eastgate series points (bow and arrow), extensive use of obsidian, considerable milling equipment, major increase in site numbers, large settlements at springs
Gypsum	ca. 4000–1800	Gypsum and Elko series points, preference for cryptocrystalline toolstone, increase in number of sites but smaller and in a greater variety of locations, evidence of ritual activities
<i>Middle Holocene</i>		
Deadman Lake	ca. 8000–5000	Deadman Lake: contracting stem and leaf-shaped points, some milling equipment, preference for fine-grained igneous toolstone and some obsidian, occupation away from lacustrine ecozones
Pinto	ca. 8000–5000	Pinto: Pinto series points, decrease in toolstone variability but preference for fine-grained igneous material and obsidian—if close—sources, increased use of milling equipment, large camps and a variety of special-purpose sites

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Table 5.5-1
Temporal Periods and Cultural Complexes in the Mojave Desert, by Temporal Period

Cultural Complex	General Dating (BP)	Marker Traits
<i>Early Holocene</i>		
Lake Mojave	ca. 10,000–8000	stemmed points (e.g., Lake Mojave and Silver Lake), preference for fine-grained igneous toolstone, some use of milling equipment, substantial camps, and small-special purpose sites
<i>Late Pleistocene</i>		
Paleoindian	ca. 12,000–10,000	fluted points (e.g., Clovis), small settlements in lacustrine ecozones, ephemeral use of other areas
Pre-Clovis (hypothetical)	to ca. 12,000	unknown

Source: Sutton et al. 2007, Table 15.4.

The Pleistocene

The only cultural complex dating to the Pleistocene in the Mojave Desert for which there is sufficient evidence is Clovis (ca. 12,000–10,000 BP). Although some scholars argue for a pre-Clovis occupation in this desert region, many remain unconvinced. Nevertheless, with the growing body of evidence for a pre-Clovis occupation of the Americas (e.g., Adovasio et al. 1978; Dillehay 1989, 1997), the possibility of a pre-Clovis presence in the Mojave Desert cannot be dismissed. The characteristic artifact of the Clovis era is the fluted projectile point of the same name. Fluted points typically occur as isolated artifacts, and only one presumed occupation site, at Lake China (Davis and Panlaqui 1978), has been identified.

The sparse evidence (e.g., Basgall 1993; Basgall and Overly 2004; Davis and Panlaqui 1978; Dillon 2002; Rosenthal et al. 2001; Warren and Phagan 1988) suggests that Clovis populations were probably small and highly mobile, living in temporary campsites near water sources. Sutton et al. (2007:234) noted, however, that it is unclear whether all “Clovis” points that have been found in the Mojave Desert actually represent Clovis occupations or occupations of a later complex that may have had a similar technology. They also pointed out that the dating of fluted point forms in the Mojave Desert has not been firmly established because of a lack of reliable radiocarbon dates on intact deposits. Additional information regarding possible Clovis adaptations has recently been reported by Fitzgerald et al. (2005), who proposed that radiocarbon dates on Olivella-shell beads indicated long-distance trade between people on the coast and those in the southwestern Great Basin by about 11,000 years ago.

The Early Holocene

The first well-documented (e.g., Amsden 1937; Campbell et al. 1937) early Holocene archaeological pattern in the Mojave Desert is the Lake Mojave Complex (called “San Dieguito” in Southern California), dating between about 10,000 and 8000 BP. The marker artifacts of this complex are Lake Mojave and Silver Lake projectile points of the Great Basin stemmed series and abundant bifaces, as well as steep-edged unifaces and crescents. Numerous Lake Mojave Complex artifacts have been identified, most

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often as surface finds, although several sites of that age have been documented. Materials of this complex have been reported at Lake Mojave, Fort Irwin (Basgall 1993; Hall 1993; Jenkins 1987; Warren 1991), Twentynine Palms (Basgall 2004a; Basgall and Giambastiani 2000), Rosamond Lake (Basgall and Overly 2004), and China Lake (Basgall 2007; Gilreath and Hildebrandt 1997; Rosenthal et al. 2001). Most of the radiocarbon dates have come from Fort Irwin and range between 7910 and 10,085 RCYBP (Basgall and Hall 1994; Hall 1993; Jenkins 1985).

Flaked stone artifacts in Lake Mojave assemblages show evidence of long-term curation and transport. Nonlocal tool stone and marine-shell beads are relatively common components of such sites, suggesting long-distance direct access and/or trade. Less common are ground stone implements with wear patterns that are inconsistent with heavy hard-seed milling, suggesting little emphasis on plant resources. The settlement organization at Lake Mojave sites consists of large residential accumulations (see, for example, Basgall [1993, 2004b], Davis and Panlaqui [1978], and Hall [1993]), workshops (Basgall 2004a), and small camps (Basgall 2007; Basgall and Overly 2004; Rosenthal et al. 2001). Overall, the Lake Mojave settlement pattern “appears to reflect a forager-like strategy organized around relatively small social units” (Sutton et al. 2007:237).

The Middle Holocene

Chronologies for the middle Holocene (ca. 8000–5000 BP) are fairly complex, and recent research has suggested the prospect that multiple distinct populations inhabited the Mojave Desert during this time. Although it was once thought that the Pinto Complex was the sole manifestation during the middle Holocene, a possible new complex (Deadman Lake) was introduced by Sutton et al. (2007).

The Pinto Complex

The Pinto Complex has traditionally been assumed to have followed immediately after the Lake Mojave Complex of the early Holocene and to have lasted until about 5000 BP. Data accumulated over the last 2 decades, however, indicate that the Pinto Complex commenced during the early Holocene and overlapped with the Lake Mojave Complex. Although there has been some debate regarding the context of some of the samples, radiocarbon assays from Pinto Basin and the Stahl (Little Lake) site ranged between 9330 and 7060 RCYBP (Schroth 1994). Moreover, numerous recent assays from other Pinto components at Fort Irwin, Garlock Fault, and Twentynine Palms ranged between ca. 9500 and 5500 RCYBP (Basgall and Giambastiani 2000; Basgall and Pierce 2004; Gardner et al. 2002). These dates support the argument that the inception of the Pinto Complex dates to the early Holocene.

The signature artifacts for the Pinto Complex are the Pinto-series projectile points, which typically exhibit blade reworking and served as tips for spears. Milling tools are relatively abundant in most known Pinto deposits (Basgall and Giambastiani 2000; Basgall and Hall 1994; Basgall et al. 2003; Schroth 1994), occurring in great frequencies in some places. They are generally heavily worn tools that were probably used for hard-seed processing.

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Pinto Complex sites were located in diverse environmental areas, including lake basins, stream and spring locations, and upland contexts. Site sizes ranged from extensive residential locales to small, perhaps specialized camps. The larger sites were most likely occupied for extended periods by moderate to large numbers of people and probably contained multiple families, “inferring a collector-like settlement strategy with centralized site complexes in favorable locations in order to stage logistical forays into surrounding resource patches” (Sutton et al. 2007:238).

The Deadman Lake Complex

The Deadman Lake Complex was first proposed by Sutton et al. (2007) as an apparently separate cultural complex within the middle Holocene. The data at this point in time indicate that its geographic spread was limited to Twentynine Palms in the southeastern Mojave Desert (Basgall and Giambastiani 2000; Basgall and Pierce 2004). Archaeological assemblages of the Deadman Lake Complex are characterized by small- to medium-sized contracting-stem or lozenge-shaped points, large concentrations of battered cobbles and core tools, abundant bifaces, simple flake tools, and milling implements. Spire-topped *Olivella*-shell beads have also been recovered from Deadman Lake deposits, with specimens originating from both the Pacific coast (*O. biplicata*) and the Sea of Cortez (*O. dama*). Five radiocarbon dates from such deposits ranged between 7970 and 6410 RCYBP.

The small number of known Deadman Lake Complex sites and assemblages precludes an adequate understanding of the broader cultural system. Although two such components have been identified at Deadman and Emerson Lakes, most sites of this complex are located on old alluvial piedmonts above these lake basins. The flaked stone assemblages are generally similar to those of the Pinto Complex, although there was greater use of local materials, core tools, and simple flake implements. There are moderate numbers of ground stone tools in Deadman Lake assemblages, but the most common processing tools are flaked and battered cobbles. Little other information is available about the Deadman Lake Complex at this time, although it may be that differences in the composition of Pinto and Deadman Lake components reflect different subsistence tactics. On the other hand, rather than a separate cultural entity, it is also possible that the Deadman Lake Complex merely reflects an addition to the tactical inventory of the Pinto Complex.

The Late Holocene

The chronological sequence for the late Holocene (ca. 4000 BP–historical-period contact) has been relatively well documented in the Mojave Desert. Recent work has resulted in a significant increase in the number of sites dated to the various complexes of the late Holocene. In some cases, additional radiocarbon dates have assisted in fine-tuning the time range of these complexes, as well.

The Gypsum Complex

The earliest late Holocene archaeological manifestation is known as the Gypsum Complex, which is characterized by a variety of projectile point forms, including corner-notched (cf. Elko series), concave-base (Humboldt series), and contracting-stem (Gypsum series) points. The Gypsum Complex dates to

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between ca. 4000 and 1800 BP, a temporal span that has been confirmed by a number of radiocarbon dates since the late 1980s (e.g., Allen 2004; Basgall et al. 1988; Gilreath and Hildebrandt 1997; Sutton et al. 1993). Despite intensive survey and excavation projects, however, relatively few large or deep deposits of this age have been encountered in the southern and eastern portions of the desert (Basgall 2003). This virtual absence of Gypsum-age components most likely relates to the ephemeral nature of such occupations, making them difficult to identify.

The Gypsum Complex commenced during a time when environmental conditions were somewhat wetter and cooler than in the middle Holocene. During the early part of this complex, settlement and subsistence were probably focused near streams, and it appears that there were increases in trade and social complexity. Along with the characteristic projectile point types, artifact assemblages have contained quartz crystals, paint, and rock art, all of which are considered to be evidence of ritual activities (e.g., Davis and Smith 1981; Warren and Crabtree 1986). Other artifacts found at such sites have included numerous bifaces and grinding implements.

The Rose Spring Complex

Commencing between ca. 2000 and 1800 BP and continuing until approximately 900 BP, cultures appear to have changed dramatically across the Mojave Desert, particularly at the western end of this region. In the western Mojave Desert, there appears to have been a change in the environment after about AD 1, with an increase in precipitation (Gardner 2007; Sutton 1990). During that time, the bow and arrow diffused into the area, and the marker projectile points (Eastgate and Rose Spring series) were presumably used as arrow points. Other evidence for that change includes population increase, dramatic changes in artifact assemblages, and well-developed middens, at least in the western Mojave Desert (e.g., Gardner 2002, 2007; Sutton 1988, 1996). The time frame of the Rose Spring Complex (ca. 2000–900 BP) has been established by numerous radiocarbon assays (e.g., Gardner 2002; McGuire et al. 1982; Sutton 1990; Sutton and Jackson 1993; Yohe 1992).

Other than the projectile points, common artifacts of the Rose Spring Complex have consisted of stone knives and drills, stone pipes, bone awls, various milling implements, marine-shell ornaments, and a large quantity of obsidian (Sutton 1996; Warren and Crabtree 1986). Rose Spring Complex sites have been found near springs and washes and along lakeshores. The presence of wickiups, pit houses, and other types of structures at some sites suggests intensive occupations. From the sheer number of Rose Spring Complex sites that have been identified, populations seem to have reached their peak during this time. The frequency of obsidian from many Rose Spring components indicates that the procurement and processing of obsidian were essential aspects of the settlement and subsistence practices of the inhabitants of the Mojave Desert.

Late Prehistoric Complexes

After ca. 900 BP, new technologies were introduced, and it appears that populations declined. This time is thought to reflect the late prehistory of ethnographic groups that inhabited the desert, such as the

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Kawaiisu, Kitanemuk, and Serrano. It was also a time of increasingly arid conditions that probably began during the late Rose Spring Complex, with an apparent shift in subsistence and settlement focus to streams, springs, and wells (Sutton 1990). Although settlement during the late-prehistoric complexes remains unclear, there is evidence of large camps or villages indicating sustained occupations (e.g., Altschul et al. 1989; Rector et al. 1983; Schneider 1989), as well as smaller, seasonal or special-purpose sites (e.g., Sutton 1991a, 1991b, 1993). Artifact assemblages of late-prehistoric complexes have contained Desert Side-notched and Cottonwood Triangular points, buff and brown ware ceramics, shell and steatite beads, slate pendants, incised stones, and a variety of milling stones (e.g., Goldberg and Arnold 1988; Sutton 1990; Warren and Crabtree 1986).

Inland Southern California

Many researchers divide the prehistory of Southern California into broad temporal periods that generally include the late Pleistocene and the early, middle, and late Holocene (e.g., Arnold 1992; Byrd and Raab 2007; King 1990; Koerper and Drover 1983). Although these periods are associated with environmental changes that influenced prehistoric cultural adaptations and population movements, this analysis assumes a new approach that reflects cultural, rather than environmental, developments. Thus, the prehistory of inland Southern California can be divided into four segments: Paleoindian, San Dieguito Complex, Encinitas Tradition, and Palomar Tradition (Table 5.5-2).

**Table 5.5-2
Temporal Periods and Cultural Entities in Inland Southern California, by Temporal Period**

General Dates (BP)	Cultural Patterns and Phases by Region		
	<i>Interior Valleys</i>	<i>Peninsular Ranges</i>	<i>Northern Coachella Valley</i>
<i>Late Holocene</i>			
500–150	San Luis Rey II	Peninsular III	
1250–500	San Luis Rey I	Peninsular II	
	Greven Knoll III	Peninsular I	
		Patayan II	
		Patayan I	
3000–1250		Late Archaic	
<i>Middle Holocene</i>			
4000–3000	Greven Knoll II	Middle Archaic	
9000–4000	Greven Knoll I	Early Archaic	
<i>Early Holocene</i>			
10,000–8500	San Dieguito		

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**Table 5.5-2
Temporal Periods and Cultural Entities in Inland Southern California, by Temporal Period**

General Dates (BP)	Cultural Patterns and Phases by Region			
	<i>Interior Valleys</i>	<i>Peninsular Ranges</i>	<i>Northern Coachella Valley</i>	
<i>Late Pleistocene</i>				
to 10,000	Paleoindian			
Key:	Palomar Tradition	Yuman Tradition	Encinitas Tradition	Unknown Tradition(s)

Source: Sutton 2011, Figure 2.

Paleoindian

It appears that the first people in Southern California arrived along the coast as early as 12,000 BP (e.g., Erlandson et al. 2007). These Paleoindian people were maritime adapted and have been documented along the coast of central California and on the northern Channel Islands (see Erlandson et al. 2007). The only Paleoindian cultural complex known in inland Southern California is the Clovis Complex (ca. 12,000–10,000 BP). The characteristic Clovis fluted projectile points typically occur as isolated artifacts, but there is little to no evidence of a Clovis presence in interior Southern California.

Presently, only one site in the Los Angeles Basin might date to Paleoindian times. This is the La Brea skeleton (CA-LAN-159), dated to ca. 10,300 BP (Erlandson et al. 2007: Table 4.1). Another candidate is the Haverty site (CA-LAN-171), discovered in 1924 near Los Angeles (see Brooks et al. 1990), but there is no agreement as to its age (see Erlandson et al. 2007).

The San Dieguito Complex

If there was a Paleoindian presence in the interior Southern California, it has a very weak archaeological signature. A stronger, albeit still weak, signature is that of the San Dieguito Complex (ca. 10,000–9400). There is no real evidence to suggest that San Dieguito evolved in situ from an antecedent Paleoindian (e.g., Clovis) Complex, and it seems possible that San Dieguito groups were the first actual settlers of inland Southern California.

San Dieguito was a hunting culture with a flaked stone industry that included large flake-and-core scrapers, choppers, hammerstones, drills, and graters (Warren 1967), as well as enigmatic objects known as crescents (Tadlock 1966). Ground stone implements were thought to be absent from the assemblage, as was first described by Warren more than 4 decades ago, although there is now little doubt that these cultures used plant resources when available (Basgall 1993; Grenda 1997).

Most researchers believe that the San Dieguito Complex originated ca. 10,000 BP in the deserts to the east (e.g., Lake Mojave in the Mojave Desert) and moved to the coast as conditions deteriorated (Kowta 1969:68; Warren and Pavesic 1963:420; Warren et al. 1961:28; also see Osborne 1958:48). The earliest dated evidence of San Dieguito on the coast is in San Diego County (e.g., the Harris and Agua Hedionda

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sites). However, a San Dieguito component was identified at the Lake Elsinore site (CA-RIV-2798) (Grenda 1997), located east of the Santa Ana Mountains. The early Holocene component at Elsinore is on a terrace above the lakeshore and was dated to 8500 BP. It contains crescents, a few points, and some milling stones. The component was interpreted as a seasonal camp of a mobile population with related seasonal camps on the coast.

Two other possible San Dieguito sites have been identified near Lake Perris. The first, CA-RIV-6069 (also known as Locus D of CA-RIV-8712) (Horne and McDougall 2007) was dated to ca. 9100 cal. BP and contained milling stones, dart points, pestles, bowls, cores, faunal remains, and a *Haliotis* pendant, an artifact indicating very early contact with the coast. The second, CA-RIV-5086/H (McDougall 2001), was dated to ca. 9000 RCYBP; contained a Lake Mojave/Silver Lake point, some Coso obsidian, milling stones, core tools, and hammerstones; and was interpreted as a temporary camp.

Little is known about San Dieguito social or political organizations, settlement patterns, or ritual. There is little evidence of a San Dieguito presence in the Colorado Desert; there were probably, just a few “small, mobile bands exploiting small and large game and collecting seasonally available wild plants” (Schaefer 1994:63; see also Schaefer and Laylander 2007). The reasons for this are unclear, but the lack of an early occupation may indicate that Lake Cahuilla was not inundated during this time.

The Encinitas Tradition

Prehistoric human subsistence patterns began to show marked changes starting ca. 8,500 years ago. These changes were likely in response to warming climatic conditions, the resulting changes in flora and fauna, and the drying of large, inland pluvial lakes. The changes visible in the archaeological record include a reduced number of projectile points, scrapers, and choppers and an increased number of ground stone artifacts. Although hunting and fishing were not entirely replaced by plant processing, the relative importance of animals in the prehistoric diet seems to have decreased during this time (but see Sutton 1993). The archaeological entity associated with these changes was originally called the “Millingstone Horizon” (Kowta 1969; Moratto 1984; True 1958, 1980; Wallace 1955, 1978) but was reclassified as the Encinitas Tradition (Sutton and Gardner 2010; Warren 1968).

In inland Southern California, the Encinitas Tradition was represented by the Greven Knoll pattern, divided into three phases (Sutton and Gardner 2010). Greven Knoll is similar to the coastal Encinitas patterns (Topanga and La Jolla) but lacks shellfish. Sutton and Gardner (2010) proposed that the Encinitas Tradition was a Hokan linguistic entity that eventually became proto-Yuman.

Greven Knoll I (ca. 9400–4000 BP) was characterized by Pinto points, abundant manos and metates but no mortars or pestles, charmstones, cogged stones, rare discoidals, and a general absence of shell artifacts. Hunting was apparently important, and mortuary practices were primarily flexed inhumations with rare cremations. Little is known of Greven Knoll I settlement patterns.

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The Greven Knoll II phase (ca. 4000–3000 BP) was marked by the presence of Elko points, abundant manos and metates, core tools, “late” discoidals, and a general absence of shell artifacts. Of interest is the appearance of a few mortars and pestles. Hunting remained important, and mortuary practices were primarily flexed inhumations with rare cremations. Little is known of Greven Knoll II settlement patterns.

Greven Knoll III (ca 3000–1000 BP) is characterized by Elko points, abundant manos and metates, scraper planes, choppers, hammerstones, “late” discoidals, some mortars and pestles, and a general absence of shell artifacts. Hunting remained important, but yucca and seeds became staples. Mortuary practices were primarily flexed inhumations with rare cremations. Little is known of Greven Knoll I settlement patterns. The Sayles Complex (Kowta 1969) was subsumed into Greven Knoll III (Sutton and Gardner 2010). The Sayles site, a series of sites located in Crowder Canyon in Cajon Pass, is located just within the survey area. Another important Greven Knoll III site, Blue Cut (Sutton et al. 2010), is also located in Cajon Pass.

The Palomar Tradition

The Palomar Tradition (see Table 5.5-2) appeared in inland Southern California ca. 1250 BP and may represent the movement of Californian traits and Takic languages from coastal Southern California east into interior Southern California (Sutton 2011). These Californian traits include bow-and-arrow technology, new rock-art styles, new settlement and subsistence systems, and Takic languages. It was proposed (Sutton 2011) that these traits first diffused south along the Orange County coast into northern San Diego County; then inland, up the San Luis Rey River into the Palomar Mountain area; and then northward, into the interior portion of Southern California. The adoption of these traits by existing Encinitas Tradition (e.g., Greven Knoll III) groups in those areas transformed them into San Luis Rey groups. Later, after ca. 900 BP, migrating Peninsular I groups carried these traits eastward, into the northern Peninsular Ranges (e.g., San Jacinto and Santa Rosa mountains) and the northern Coachella Valley.

The San Luis Rey Pattern

The initial pattern of the Palomar Tradition is San Luis Rey, marked by a number of changes from the earlier Encinitas Tradition, including the appearance of Cottonwood projectile points at ca. 1250 BP. San Luis Rey extended from the southern coast of Orange County to the northern coast of San Diego County and into the interior regions, from northern San Diego County as far north as Corona.

San Luis Rey I began in southern Orange County sometime ca. 1250 BP and moved south and east over the next several-hundred years. Thus, San Luis Rey I began perhaps 1000–800 BP in northern interior Southern California. Little is actually known of San Luis Rey I settlement and subsistence, but settlements appear to have been small and dispersed, and acorns were not very important. It seems possible that San Luis Rey I groups along the coast were organized differently than those inland, because sites nearer the coast generally contain fewer artifacts overall, particularly milling tools and projectile points. In addition, coastal sites have fewer remains of terrestrial animals and more of shellfish than sites in the interior. It is not clear whether this difference reflects two different groups of San Luis Rey

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people (e.g., coastal and inland) or simply the seasonal variation of a single mobile group (e.g., living on the coast for part of the year and living in the interior the other part).

San Luis Rey II reflects a number of important changes, including the addition of pottery, more-consolidated settlement systems, the addition of acorns to the economy, the growing importance of cremation, changes in rock art (and perhaps religion), and milling technology. It seems that as acorns became the focus of the economy, settlements were consolidated, and group (e.g., lineage) territories emerged. It appears that the changes in the archaeological record denote that San Luis Rey II began ca. 500 BP. It was proposed that the San Luis Rey pattern represented the archaeological expression of the ethnographic Luiseño (Sutton 2011).

The Peninsular Pattern

As Palomar Tradition traits first diffused eastward from the California coast, they were adopted by Encinitas Tradition groups, who then transformed into San Luis Rey Pattern groups. The filling of Lake Cahuilla ca. 1070 BP created a new and highly productive ecosystem that attracted people from a number of areas. Sutton (2011) suggested that some San Luis Rey I people in the inland valleys split away and migrated east to the northern Peninsular Ranges and the northern Coachella Valley to exploit Lake Cahuilla and, in so doing, became Peninsular I. Arriving Peninsular I groups would have encountered Patayan II (Yuman) groups occupying the northwestern Colorado Desert and either absorbed or replaced them. The Peninsular Pattern then developed through the Peninsular I, II, and III phases. The Peninsular III phase represents the ethnographic Cahuilla.

The Peninsular I phase (ca. 900–750 BP) was marked by a number of important changes in artifacts. New artifact types included Cottonwood points, shaft straighteners, shell ornaments, bedrock metates (but few mortars and pestles), and the addition of lacustrine subsistence technology. Existing Patayan II Lower Colorado Buff (LCB) pottery was retained, there were few stone ornaments or stone pipes, the Rancho Bernardo style of rock art was adopted, and primary pit cremation was the principal mortuary practice. People moved into the northern Coachella Valley from the interior valleys as Lake Cahuilla filled and major villages were established along the Lake Cahuilla shoreline.

Peninsular II (ca. 750–400 BP) was marked by the addition of Tizon Brown pottery, ceramic pipes, and ceramic figurines (rare). Salton Buff (LCB) pottery remained important along the shore of Lake Cahuilla, and stone fish traps were built as lake levels fluctuated and declined. The Rancho Bernardo style of rock art was replaced by the San Luis Rey style. The Palomar Funerary Complex appeared, secondary cremations were placed in “containers,” and there were associated mourning ceremonies.

The Peninsular III phase (ca. 400 to contact) was marked by the loss of lacustrine subsistence technology (as Lake Cahuilla desiccated) and a shift to a greater emphasis on terrestrial resources. Cottonwood Triangular and Desert Side-notched points and Tizon Brown pottery continued to be used, and Colorado Buff pottery was added. New figurine types appeared, and some cultigens were added, along with some

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Euroamerican material culture (e.g., glass beads and metal tools). Villages were moved near to springs, and some people moved westward into the northern Peninsular Ranges. Primary pit cremation again became the principal mortuary practice, but mourning ceremonies were retained.

The Colorado Desert

There is little evidence of a San Dieguito presence in the Colorado Desert; there were probably just a few “small, mobile bands exploiting small and large game and collecting seasonally available wild plants” (Schaefer 1994:63; see also Schaefer and Laylander 2007). The reasons for this are unclear, but the lack of an early occupation may indicate that Lake Cahuilla was not inundated during this time. During the middle Holocene, the climate of the Colorado Desert became hotter and drier, and it appears that much of the area was basically abandoned during that time (Schaefer 1994:64). At best, the record suggests only minor occupation by relatively few people. It appears that the Colorado Desert was reoccupied when the climate began to cool, after about 4,000 years ago, during the Late Archaic period (Love and Dahdul 2002; Schaefer 1994:64), and several archaeological sites in the northern Coachella Valley are dated to this time.

The late prehistory of the Colorado Desert (after ca. 1200 BP) has generally been represented by the Yuman Tradition Patayan sequence, essentially prehistoric agricultural groups from the lower Colorado River (Schaefer 1994:65; Schaefer and Laylander 2007). Three Patayan phases (Patayan I, II, and III) have been defined. Patayan I (ca. 1300–1000 BP) is marked by the introduction of both pottery and agriculture, but hunting and gathering remained important. By Patayan II (ca. 1000–500 BP), farming had become central, although hunting, gathering, and fishing remained important. Patayan III (ca. 500–100 BP) is generally the time after contact but is not present in the northwestern Colorado Desert, having been replaced by Peninsular I groups. The prevailing conventional thinking is that during the cycle/stand of Lake Cahuilla that began ca. 1070 BP, groups of early Patayan I people may have moved west from the Colorado River to occupy the area (Schaefer and Laylander 2007:252).

Ethnographic Background

The tribes that occupied the cultural resource study area all spoke languages within the Takic language group. These tribes, the Cahuilla, the Gabrielino/Tongva, and the Serrano/Vanyume, were situated in the inland valleys, the Transverse Ranges, and adjacent portions of the Mojave and Colorado Deserts (Figure 5.5-2). Each of these ethnographic groups is discussed below.

Cahuilla

Territory, Language, and Population

The Cahuilla occupied the San Geronio Pass, the San Jacinto Mountains and adjacent lowlands, and the Colorado Desert (Bean 1972). The Cahuilla language belongs to the Cupan sub-branch of the Takic

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language branch (Bean 1978:575; Bright 1975; Hill 2007) and consists of one language: Cahuilla. Three closely related dialects are pass, mountain, and desert (Kroeber 1925:694). The pre-contact population size of the Cahuilla was approximately 6,000–10,000 individuals, based on an estimated 80 lineages (Bean 1972, 1978:583).

Subsistence and Settlement

Acorns provided a staple of the Cahuilla diet for people living in the mountains, and mesquite beans served as a staple for those living in the desert (Bean 1972, 1978:578; Benedict 1924; Drucker 1937; Kroeber 1925:695–696, 698; Strong 1929). Both foods were stored in granaries within villages (Bean 1978:578; Kroeber 1925:699). Pinyon nuts supplemented the diet for people living in the foothills, and cacti, yucca, and agave were used in the desert (Bean 1972, 1978:578; Kroeber 1925:695–696). Desert groups also journeyed to the mountains to collect nuts and exchange food with foothill groups (Benedict 1924; Drucker 1937; Kroeber 1925; Strong 1929). Seeds, greens, roots, bulbs, fruits, berries, flowers, and fungi supplemented the plant-food diet (Bean 1972, 1978:578; Benedict 1924; Drucker 1937; Kroeber 1925:695–696; Strong 1929). It appears that some Cahuilla groups at least occasionally grew corn, beans, squash, and melon (Bean 1978:578; Lawton and Bean 1968).

Deer, pronghorn, rabbit, small rodents, and birds were available throughout much of Cahuilla territory (Bean 1978: Table 1; Benedict 1924:391–392; Drucker 1937). Large game was typically hunted with the bow and arrow, sometimes with the aid of blinds or deer-head decoys (Bean 1972:64, 1978:578; Benedict 1924:391–392; Drucker 1937; Kroeber 1908). Small game was shot with the bow and arrow, stunned or killed by throwing sticks, or captured with a snare, trap, or deadfall. Fishing was carried out with a hook and line, nets, basketry traps, spears, the bow and arrow, or vegetal poisons. Hunting could be an individual or group pursuit, and large groups of people occasionally came together to participate in communal deer, pronghorn, or rabbit drives.

The Cahuilla generally lived in permanent villages (Bean 1978:575), but their locations and sizes varied. Availability of water was the most important determinant of settlement among the Cahuilla, and their villages were usually located next to streams in the foothills or near permanent water sources in the desert (Bean 1978:575; Benedict 1924:368). The Cahuilla left their villages for several weeks during the fall to gather acorns (Bean 1978:577).

Each village controlled certain hunting, gathering, fishing, and raw-material areas (Bean 1978:575). Families or individuals sometimes owned tracts of land or particular oak groves and cactus patches. Most Cahuilla territory was open to all Cahuilla people (Bean 1978:575).

Social and Political Organization

The patrilineage was the basis of Cahuilla social organization. Each lineage was an autonomous unit with its own village (Bean 1978:582; Strong 1929). Lineages were grouped together to form clans or lineage

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sets that cooperated in defense, large subsistence undertakings, and ritual activities (Bean 1972:85–86, 1978:580; Strong 1929).

The hereditary village chief was the leader of the village's most dominant (or only) lineage (Bean 1978:580; Strong 1929). The chief acted as both religious and political leader and was responsible for conducting ceremonial affairs, determining where and when to hunt and gather, collecting goods for communal use, arbitrating disputes, and leading war parties. The chief had an assistant in ceremonial matters who organized rituals and made sure proper protocol was maintained (Bean 1978:580–581; Strong 1929).

Cahuilla society had no other hereditary positions, although individuals could become diviners, healers, or shamans if they demonstrated skill in those arenas (Bean 1978:581). In contrast, Cahuilla society was greatly stratified into three distinct social classes.

Material Culture and Technology

Houses were typically dome-shaped structures set over shallow depressions (Barrows 1900; Bean 1972:70–75, 1978:577; Benedict 1924; Drucker 1937; James 1960; Strong 1929). Houses were thatched with reeds and brush in desert areas and with cedar bark in the mountains and were usually covered with earth. Houses ranged in diameter from 15 to 60 feet, depending on the number of people living inside. They were primarily used for sleeping and storage, and most daily activities took place outdoors, in the shade of ramadas.

Each village contained a sweathouse, which served as a gathering place for men (Kroeber 1925:704; Strong 1929). Sweathouses were constructed in the same manner as houses, but were typically smaller and oval shaped. Each Cahuilla village also contained a large ceremonial house where rituals, curing, and recreation took place (Barrows 1900; Bean 1972:70–75, 1978:577; James 1960; Kroeber 1925; Strong 1929). Villages also contained several granaries for storing acorns or mesquite beans (Barrows 1900; Bean 1972:70–75, 1978:577; James 1960; Kroeber 1925:699; Strong 1929).

Large game was hunted primarily with the bow and arrow, and small game was taken with curved or flat rabbit sticks, snares, traps, and deadfalls. Fishing was done using hooks, nets, basketry traps, spears, or the bow and arrow (Bean 1972:64, 1978:578; Benedict 1924:391–392; Drucker 1937; Kroeber 1908, 1925:704). Cahuilla arrow-shaft straighteners were made from soapstone and were incised with linear designs that had magical connotations and indicated ownership (Bean 1978:579; Kroeber 1908).

The Cahuilla used portable stone mortars and pestles for grinding acorns and deep wooden mortars and long, slender stone pestles to pound mesquite beans (Bean 1978:578; Kroeber 1925:696–697). Seed beaters were used to collect seeds, and milling slabs and hand stones were used to grind them (Bean 1978:578; Kroeber 1925:695–697, 701). Pinyon nuts were also ground on milling slabs, whereas fruits

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were pounded in stone or wooden mortars (Bean 1978:578). Desert groups baked agave, yucca, and bulbs in stone-lined, earth-covered ovens (Bean 1978:578; Kroeber 1925:695–696).

Cahuilla basketry varied in size and shape, depending on its purpose. Small, handheld baskets were used for gathering berries and bird eggs; large, round-bottomed baskets were used for carrying bulkier items; shallow trays were used for winnowing or parching seeds; large baskets were used for storage; and globular, flat-bottomed baskets were used for keeping utensils and trinkets (Bean 1972, 1978:579).

The Cahuilla made pottery. It was an unslipped ware that was occasionally decorated with linear red or black designs (Kroeber 1908, 1925:702). Vessel forms included cooking pots, small-mouthed jars, bowls, dishes, and pipes (Bean 1978:579; Kroeber 1908).

The Cahuilla used bird-bone and cane whistles; wood rasps; cane flutes; split-stick clappers; rattles of turtle shell, gourds, or deer hooves; and bull-roarers for ritual purposes (Bean 1972, 1978:579; Bean and Saubel 1972; Drucker 1937). The Cahuilla also used charmstones (Bean 1972, 1978:579; Bean and Saubel 1972).

External Relations

The Cahuilla were avid traders and exchanged food, utilitarian items, and ceremonial items among themselves and with their neighbors. Generally, obsidian, furs, hides, nuts, and seeds moved west, and shell beads, tourmaline, steatite, asphaltum, sea-otter pelts, and dried fish moved east. The Cocopa-Maricopa Trail connected Southern California with the Southwest, bringing turquoise, Southwestern pottery, grooved axes, and agricultural products to the region through Cahuilla territory. Some Cahuilla specialized as traders and traveled as far as Santa Catalina in the west and the Gila River in the east (Bean 1978:582). *Olivella*-shell beads were used as a general medium of exchange throughout the region, but barter was also common (Bean 1978:582).

Armed conflict was less frequent among the Cahuilla than it was among the Gabrielino. Although disputes arose among the Cahuilla, they rarely escalated to the point of violence (Bean 1972, 1978:582).

Religion and Ritual

The Cahuilla held ceremonies for birth, naming, puberty, marriage, and death, as well as installations of new officeholders. There were also rituals for rainmaking, increasing food crops or animals, and peacemaking between individuals and groups (Bean 1972, 1978:583; Hooper 1920; Kroeber 1925:707; Strong 1929). The Cahuilla did not make sand paintings or publicly ingest datura.

The Cahuilla practiced cremation, including destruction of the deceased's possessions, after several days of ritual wailing and dancing (Strong 1929). The most significant ceremony was the annual mourning ceremony held in the fall, after the acorn harvest (Bean 1972, 1978:583; Hooper 1920; Strong 1929). The Cahuilla ceremony was similar to that of their Takic neighbors but lasted 7 days rather than 8 (Strong 1929).

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Cahuilla shamans were both revered and feared for their ability to cure illness, divine, control natural phenomena, create food, and bewitch others. They acted as guardians during ceremonies and, together with chiefs, exercised political authority over the community at large. Shamans gained their power directly from the supernatural, often with the aid of datura-induced visions (Bean 1978:581; Strong 1929).

Gabrielino/Tongva

Territory, Language, and Population

The Gabrielino/Tongva lived in the San Bernardino Valley and portions of the San Gabriel Mountains and extended westward to the Pacific Coast (Kroeber 1925:620–621; McCawley 1996). The Gabrielino were so named by the Spanish because of their residence in the vicinity of Mission San Gabriel, which was founded within their traditional territory in 1769. In more-recent times, many people and groups of Gabrielino descent have adopted the term “Tongva” (Forbes 1966, 1969, 1982) as a more appropriate native name for the language and people.

The Gabrielino language belongs to the Cupan sub-branch of the Takic language branch (Bean and Smith 1978a:538; Bright 1975; Hill 2007) and consists of one language: Gabrielino. Unfortunately, very few linguistic data are available for Gabrielino. Gabrielino and Fernandiño are essentially the same language (but were given different names because of the locations of the missions), called Gabrielino (Kroeber 1925:620). Gabrielino was also spoken on Santa Catalina Island and probably on San Clemente Island, as well (Kroeber 1925:620).

The Gabrielino had at least 50 to 100 villages (with an average population of 50 to 100 per village) at the time of Spanish contact, for an estimated population of 5,000 people (Bean and Smith 1978a:540; Kroeber 1925).

Subsistence and Settlement

Acorns provided a staple of the diet for the Gabrielino. Seeds, greens, roots, bulbs, fruits, berries, flowers, and fungi supplemented the plant-food diet for all groups (Bean and Smith 1978a). Deer, pronghorn, rabbit, small rodents, and birds were available throughout much of Gabrielino territory (Bean and Smith 1978a: 538–539). Waterfowl were taken by the Gabrielino in marshes near the coast. Fish, sharks, rays, sea mammals, and shellfish were available on the coast, and tuna and swordfish could be accessed offshore by boat.

Large game was typically hunted with the bow and arrow, sometimes with the aid of blinds or deer-head decoys (Bean and Smith 1978a:546). Small game was shot with the bow and arrow, stunned or killed by throwing sticks, or captured with a snare, trap, or deadfall. Fishing was carried out with a hook and line, nets, basketry traps, spears, the bow and arrow, or vegetal poisons. Hunting could be an individual or

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group pursuit, and large groups of people occasionally came together to participate in communal deer, pronghorn, or rabbit drives.

The Gabrielino generally lived in permanent villages (Bean and Smith 1978a:538–539), but the locations and sizes of villages varied across environmental zones. Inland Gabrielino groups situated their villages near adequate water sources (Bean and Smith 1978a:538–539). Most inland Gabrielino groups established temporary settlements on the coast to exploit marine resources, whereas coastal Gabrielino groups established inland campsites in areas of seasonal plant-food abundance. The villages and houses were smaller for groups in the interior than for those on the coast. Coastal Gabrielino villages often contained more than 200 residents, and their houses could hold as many as 50 people (Bean and Smith 1978a:542; Costansó 1911; Johnston 1962; White 1963:104).

Each village controlled certain hunting, gathering, fishing, and raw-material areas. Families or individuals sometimes owned tracts of land or particular oak groves. It appears that land was in shorter supply along the coast than in the interior.

Social and Political Organization

Gabrielino villages were composed of several lineages, each with its own leader (Bean and Smith 1978a:543–544). One or more villages were grouped together to form autonomous tribelets. Each village had a hereditary chief who was the leader of the village's most dominant (or only) lineage (Bean and Smith 1978a:544; Boscana 1978:43). The chief acted as both religious and political leader and was responsible for conducting ceremonial affairs, determining where and when to hunt and gather, collecting goods for communal use, arbitrating disputes, and leading war parties. The chief had an assistant in ceremonial matters who organized rituals and made sure proper protocol was maintained (Bean and Smith 1978a:544). Gabrielino chiefs were assisted by a treasurer, an announcer, a general assistant, and several messengers (Bean and Smith 1978a:544).

Material Culture and Technology

Houses were typically dome-shaped structures set over shallow depressions (Bean and Smith 1978a:542; Costansó 1911; Johnston 1962). They were thatched with reeds and brush and were usually covered with earth. They ranged in diameter from 15 to 60 feet, depending on the number of people living inside and were primarily used for sleeping and storage. Most daily activities took place outdoors, in the shade of ramadas.

Each village contained a sweathouse that served as a gathering place for men (Bean and Smith 1978a:542). Sweathouses were constructed in the same manner as houses but were typically smaller and oval shaped. The Gabrielino used an open-air, fenced enclosure for ceremonial activities (Bean and Smith 1978a:542).

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Large game was hunted primarily with the bow and arrow, and small game was taken with curved or flat rabbit sticks, snares, traps, and deadfalls. Fishing used hooks, nets, basketry traps, spears, and the bow and arrow (Bean and Smith 1978a:546). The Gabrielino used bedrock mortars to pound acorns, in places with suitable bedrock outcroppings (Bean and Smith 1978a:542; Kroeber 1925:631–632). Where bedrock was not available, portable stone mortars and pestles were used. Hoppers were only used on new, shallow mortars until they became deep enough (Kroeber 1925:653, 696–697). Seed beaters were used to collect seeds, and milling slabs and hand stones were used to grind them.

Basketry varied in size and shape, depending on its purpose. Small, handheld baskets were used for gathering berries and bird eggs; large, round-bottomed baskets were used for carrying bulkier items; shallow trays were used for winnowing or parching seeds; large baskets were used for storage; and globular, flat-bottomed baskets were used for keeping utensils and trinkets (Bean and Smith 1978a:542). The Gabrielino also made water jugs coated with asphaltum and urn-shaped ceremonial baskets for grave offerings (Bean and Smith 1978a:542; Blackburn 1963; Kroeber 1925:629; Merriam 1955:84).

The Gabrielino did not use pottery until recently (Kroeber 1925:628) but had access to steatite from Santa Catalina Island that they used to create cooking and serving vessels (Kroeber 1925:629). In addition to utilitarian items, the Gabrielino carved pipes, ornaments, animal figurines, and ceremonial bowls out of steatite (Bean and Smith 1978a:542; Blackburn 1963; Kroeber 1925:629). In addition to the implements described above, the Gabrielino made needles, awls, scrapers, and flakers from bone or shell; drills from flint; knives from flint or cane; and saws from deer scapulae (Bean and Smith 1978a:542).

External Relations

The Gabrielino were avid traders and exchanged food, utilitarian items, and ceremonial items among themselves and their neighbors. Generally, obsidian, furs, hides, nuts, and seeds moved west, and shell beads, tourmaline, steatite, asphaltum, sea-otter pelts, and dried fish moved east. The Cocopa-Maricopa Trail connected Southern California with the Southwest, bringing turquoise, Southwestern pottery, grooved axes, and agricultural products to the region. In turn, Gabrielino shells and steatite traveled as far east as central Arizona (Bean 1978:575, 582; Bean and Smith 1978a:547). The Gabrielino conducted trade with their coastal neighbors by boat but otherwise did not travel into the territories of others to trade (Bean and Smith 1978a:545, 547; Kroeber 1925:629). *Olivella*-shell beads were used as a general medium of exchange throughout the region, but barter was also common (Bean and Smith 1978a:547; Kroeber 1925:630). Clamshell disk beads replaced *Olivella*-shell beads as the standard currency for the Gabrielino during the historical period (Kroeber 1925:630).

Armed intervillage conflict was frequent among the Gabrielino, particularly between coastal and prairie/mountain groups. Powerful coastal groups often prevented inland groups from accessing marine resources and trade networks, leading to armed conflict (Bean and Smith 1978a:546; Engelhardt 1927a:20). Disputes also arose over the failure of chiefs to reciprocate gifts during ceremonies, abduction of women, trespassing, and sorcery. In the event of potential conflict, a war council was called

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to determine whether to go to war. When war occurred, the village chief led the party, followed by warriors and old men, then by women and children, who carried food and supplies (Bean and Smith 1978a:546–547; Heizer 1968). Villages allied through marriage ties usually supported one another in such conflicts. Gifts were often sent to neutral villages to enlist their support or entice them to remain neutral (Bean and Smith 1978a:546). Bows, clubs, thrusting sticks, lances, and slings were used by the Gabrielino in war (Kroeber 1925:704).

Religion and Ritual

The Chingichngish cult pervaded the ritual life of the Gabrielino. Its mythology, ritual actions, and songs were worked out by the Gabrielino and spread to the Juaneño, Luiseño, and other Southern California groups. Ceremonies were held for birth, naming, puberty, marriage, and death, as well as installations of new officeholders. There were also rituals for rainmaking, increasing food crops or animals, and peacemaking between individuals and groups. Sand painting was a significant component of most ceremonies and was performed by both men and women. Each painting represented various aspects of the universe and was destroyed after the ritual was finished. Datura was also ingested during most ceremonies. The Gabrielino conducted their rituals in a ceremonial, outdoor enclosure (Bean and Smith 1978a:547–548; Boscana 1978; Kroeber 1925:628).

The Gabrielino practiced occasional cremation, including destruction of the deceased's possessions, after several days of ritual wailing and dancing (Bean and Smith 1978a:545). The most significant ceremony, however, was the annual mourning ceremony held in the fall, after the acorn harvest (Bean and Smith 1978a:545; Kroeber 1925:626). The ceremony lasted for eight days. The ceremonial enclosure was consecrated on the first day, followed by feasting. From the second until the seventh day, men and boys danced in the enclosure while women sat in a circle and sang. On the fourth day, all of the children born during the previous year were given names by the chief. Effigies of the dead were made on the fifth day and were decorated with bows and arrows or baskets, depending on the gender. On the evening of the fifth day or on the sixth day, an eagle was killed, and special dances and songs were performed. In the predawn of the eighth day, the effigies were burned in the ceremonial enclosure, along with personal items belonging to the dead (Bean and Smith 1978a:545; Kroeber 1925:626).

Gabrielino shamans were both revered and feared for their ability to cure illness, divine, control natural phenomena, create food, and bewitch others. They held great power, sometimes greater than that of chiefs, because they could be punished only by other shamans. Shamans gained their power directly from the supernatural, often with the aid of datura-induced visions (Bean and Smith 1978a:544).

The Serrano

At the time of historical-period contact, the southwestern Mojave Desert, the San Bernardino Mountains, and portions of the San Gabriel Mountains, including the Cajon Pass area, was within the territory of the Serrano (Spanish for "mountaineer"). The Spanish initially classified the Indians living in

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the highlands or mountains as “Serrano,” but as time passed, the term began to refer to only that tribe whose territory extended from approximately Mount San Antonio in the San Gabriel Mountains to Cottonwood Springs in the Little San Bernardino Mountains (Johnston 1962). Many of these people may have called themselves the Takhtam, or “the people.” Significant data on Serrano cultural traits were compiled by Benedict (1924, 1926), Drucker (1937), Gifford (1918), Kroeber (1925), and Strong (1929). Other ethnohistoric data were provided by Altschul et al. (1984), Bean and Smith (1978b), Bean et al. (1981), Earle (1990, 2004), Earle and O’Neil (1994), and Earle et al. (1995). Additionally, considerable ethnographic data on the Serrano are available in the notes of J. P. Harrington (1986).

Territory, Language, and Population

Kroeber (1925) assigned the upper Mojave River and the San Bernardino Mountains, including Cajon Pass, to the Serrano. They also occupied part of the San Gabriel Mountains, as well as the northern part of the San Bernardino Valley (Kroeber 1925:615–616; also see Bean and Smith 1978b). Although most of the Serrano territorial boundaries fell outside the western Mojave Desert, the extreme western boundary may have extended into this region (see Bean and Smith 1978b: Figure 1). The larger Cajon Pass area westward along the northern flank of the San Gabriel Mountains to Big Rock Creek was within the territory of a localized Serrano group called the Amutskajam. This clan territory appears to have had its primary settlement at the village of Muscupiabit. Another Amutskajam village, known as Amutskupeat, was located at Big Rock Creek in the northern San Gabriel Mountains. The two villages were reported to have been connected by a major trail that ran up Lone Pine Canyon (Earle et al. 1995:2.6). Muscupiabit had been abandoned for a number of years when Cajon Canyon was visited in 1853 by U.S. Army surveyors (Earle et al. 1995:2.34).

The Serrano are linguistically associated with the Takic language family, which also includes the Kitanemuk, Vanyume, and possibly the Tataviam (Bean and Smith 1978b:570; Hill 2007; Hinton 1991). The term “Serran” has been used to describe the Serrano and Kitanemuk more specifically as a way of distinguishing them from other Takic groups (Bean and Smith 1978b:570). Despite their wide-ranging territory, their population was probably sparse, perhaps numbering 1,500 prior to contact (Kroeber 1925:617). In the Mojave Desert to the west, north, and east were Great Basin groups that spoke Numic languages, including the Kawaiisu, Panamint, and Southern Paiute/Chemehuevi. All of these groups are known to have intermarried with the Serrano of the Victorville area and in the San Bernardino Valley during the historical period (Blomberg 1987).

Subsistence and Settlement

The Serrano were a hunting and gathering culture who utilized a wide variety of resources from the mountains, the desert, and the Mojave River (Bean and Smith 1978b:570). Their available resources included various plants, such as honey mesquite, oak, pinyon, cactus fruits, yucca, roots, and tubers, along with various berries, grasses, and seeds (Bean and Smith 1978b:571). Chia was a particularly important plant resource, and was burned periodically to increase the yield (Bean and Smith

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1978b:571). Game animals consisted of a variety of large and small mammals. Deer, pronghorn, bighorn sheep, rabbits, and various birds were common resources, as were some reptiles and fish species.

Although bows and arrows were used to capture large game, smaller animals (such as cottontail rabbits and jackrabbits) were caught with the use of drive nets, snares, traps, throwing sticks, and deadfalls (Bean and Smith 1978b:571). Food resources were prepared in various ways. Meat might be cooked in earthen ovens or boiled in watertight baskets with hot stones. Seeds were often parched, whereas other vegetable foods were consumed raw. Manos and metates were used to grind food, and mortars and pestles were used for pounding foods (Bean and Smith 1978b:571).

Many small satellite seasonal camps presumably associated with the Serrano have been found throughout the San Bernardino Mountains (Carrico et al. 1982; Lerch et al. 2007). These were most probably associated with larger winter villages located along the upper Mojave River to the north (such as at Oro Grande), in Cajon Canyon (such as at Muscupiabit), and in Crowder Canyon (such as the Sayles sites). The major criterion in the nature and distribution of Serrano villages was the presence of a perennial water source (Benedict 1924:368). Most Serrano villages were in the foothills, but a few were on the desert floor (Bean and Smith 1978b:570). Small villages were more common, such as Guapiabit (Sutton and Schneider 1996), although there were larger villages in the Summit Valley and Cajon Pass. Small special purpose sites, such as temporary camps, food processing stations, and lithic procurement areas, were located as needed. Excursions were occasionally made to other areas, such as the desert region, perhaps to procure seasonal or exotic resources (Sutton and Schneider 1996:4). Many villages may have had about 80 individuals in ethnohistoric times.

Social and Political Organization

The Serrano were organized into exogamous totemic moieties that recognized patrilineal descent from a common male ancestor (Gifford 1918:178). The moieties were known as Coyote and Wildcat. The clan was the largest autonomous political unit, which held landowning responsibilities. Each clan was headed by a hereditary leader who received his position from his father (Gifford 1918:181). Typically, the leaders were male; however, if there was no male heir, a woman could succeed to the title. These leaders were responsible for ceremonial and religious activities, dealings with other clans, and scheduling the timing of various food collecting expeditions (Gifford 1918). The territory of these clans included the Mojave Desert as well as the San Bernardino Mountains and Cajon Pass (e.g., Bean and Smith 1978b; Gifford 1918).

The Serrano typically broke off into family, task-oriented collection units, thus fragmenting the larger residential band grouping (e.g., Bean et al. 1981; Kroeber 1925). According to Johnston (1962:5), village lineages “owned” creeks, food gathering and hunting places, and other resource areas through a system of individual personal property applied to utensils, tools, bedrock mortars, and metates.

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External Relations

The Serrano were enemies of the Mojave and Chemehuevi, unlike the Vanyume (Bean and Smith 1978b:570). There was some intermarriage with the Cahuilla, indicating good relationships with that group (Sutton and Schneider 1996:4). Trade was conducted with the Serrano and groups on the Pacific coast. Shell beads and ornaments, steatite, and sea otter pelts were common exchange items, with ceramics and obsidian also being likely trade items (Sutton and Schneider 1996:5).

Material Culture and Technology

Common material cultural items of the Serrano, and also the linguistically related Gabrielino and Cahuilla, included bows and arrows (tipped with triangular concave-based arrow points), steatite arrow shaft straighteners, incised or painted stone slabs or pebbles, mortars, pestles, bone awls, stone pipes, stone bowls, and shell ornaments (Bean and Smith 1978b:571; Kowta 1969:44). The materials for these tools consisted of wood, bone, shell, stone, and clay. Other aspects of Serrano technology included coiled basketry, undecorated ceramic vessels, rabbit-skin blankets, sandals made of yucca leaves, rattles made of various materials (such as deer hooves, tortoise shells, and turtle shells), and bone or reed whistles (e.g., Smith and Simpson 1964). Clothing was usually adorned with extensive beadwork of shells, stones, bone, and seeds. Like other groups of the area, the Serrano often tattooed the upper portions of their bodies. Domestic structures included simple brush dwellings, dome-shaped huts, and rectangular armadas (Bean and Smith 1978b; Kroeber 1925:618).

During the Mission Period, Serrano and Gabrielino ethnic boundaries were very close to Cajon Pass, near modern-day San Bernardino and Redlands. Serrano and Cahuilla sites are differentiated from those of the Gabrielino by the presence of locally made desert ceramics, fired clay pipes, perforated pottery discs, and Desert Side-notched arrow points (Goldberg and Arnold 1988:55).

Religion and Ritual

An important aspect of Serrano life was the ritual activities related to stages of the life cycle, such as birth, child naming, puberty, marriage, and death (Bean and Smith 1978b). Part of the death ceremony involved the practice of cremation, at least prior to European contact. The cosmology of the Serrano resembled that of the neighboring Cahuilla, including a belief in twin creator gods (Bean and Smith 1978b:573). Shamans used psychic powers and herbal remedies to cure and heal. Part of the psychic abilities of a shaman included the sucking cure for disease (Bean and Smith 1978b:573).

Ethnohistoric Serrano Villages

Several ethnohistoric Serrano villages have been identified in the Cajon Pass area. The better known sites are Guapiabit in the Summit Valley and Muscupiabit in Cajon Pass itself. A third, and possibly fourth, village may have existed at the southern end of Cajon Pass. Each is described below.

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Guapiabit

Guapiabit is located in the Summit Valley on what is now known as Las Flores Ranch. In 1776, Garcés (Coues 1900) described a village of “eighty souls” in a geographical position that fits the description of the location of Guapiabit. It is possible, however, that Garcés did not travel through the Summit Valley (Weaver 1982).

The first definite visit to the site was by Father José María Zalvidea in 1806 (Beattie 1955a; Cook 1960:247). At Guapiabit, Zalvidea noted the presence of 19 men, 16 women, and 11 children. Zalvidea baptized five elderly people there (Beattie and Beattie 1939:4). The Nuez Diary (Beattie 1955b) contained an account of the Moraga Expedition of 1819, an abortive punitive expedition against the Mojave Indians for their raids on local Indian populations. Father Nuez described Guapiabit as being about nine leagues from “the Cajon” but did not give any information about the inhabitants. The village also may have been visited by Jedediah Smith in 1826 (Brooks 1977:92–93).

San Gabriel Mission records of baptisms, marriages, and deaths often included the native villages and names of the Indians who came to the mission. A preliminary survey of the mission records transcribed by Munoz (1982) indicated that over a period of 20 years (1785–1815), more than 70 individuals reportedly named Guapiabit as their village.

The large archaeological site at the location of Guapiabit (recorded as CA-SBR-93/H and CA-SBR-1913) was first recorded in 1938 by Gerald Smith and was situated on several benches along both sides of the upper Mojave River. The site was described as a large, diverse village containing numerous “house pits.” Some work was conducted there in 1939 (Smith 1939) and major excavations were carried out at the site in 1961 (Bowers 1976; Smith 1963; Smith and Moseley 1962). A total of 142 circular depressions were located and mapped (Smith and Moseley 1962:17) and several were test-excavated. It was concluded that the depressions were the remains of houses. Additional excavations were undertaken at the site in 1990 (Sutton and Schneider 1996).

Muscupiabit

This ethnohistoric village is known by a number of names, including Amuscupiabit, Muscupiabe, and Muscupiabit, the latter being the most common usage. The village was apparently first visited by Europeans in 1806 by the Zalvidea expedition. Zalvidea wrote in his diary (see Cook 1960:247) that on August 13, he “reached the village of Moscopiabit, in which we saw 15 to 18 adult[s] . . . and a few children” and he baptized two elderly people there (Beattie and Beattie 1939:3–4). Muscupiabit also was visited by Fr. Joaquin Pasquel Nuez in 1819 as part of the Moraga Expedition (Beattie 1955b). Lieutenant A. W. Whipple apparently visited the site in 1853 and noted the presence of “huts at Camp Cajon built upon circular depressions about ten feet in diameter and two feet deep.” (Smith 1963:125; Smith and Moseley 1962:2; also see Whipple et al. 1856)

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Kroeber (1907:134; citing Caballería 1902) listed Muscupiabit (or Muscupiabe) as a Serrano place name but did not give a location. Kroeber (1925: Plate 57) later noted two place names in the general area of Cajon Pass, Musku-pia-bit in its southern reaches and Wahinu-t in the north. These place names are confusing. If Kroeber's Musku-pia-bit refers to Muscupiabit, it should be in the northern reaches of the pass region.

The archaeological site of Muscupiabit was first recorded by Gerald Smith in 1938 and is generally known as Camp Cajon (now recorded as CA-SBR-425/H). Smith (1963:7) reported that the site contained "nearly ten circular pits - about 10' to 15' diameter [and] 2' deep." The site was investigated by Smith in 1949 (Smith and Moseley 1962) and later by other researchers (see Grenda [1988] for a history of investigations).

Other Possible Villages

There have been various reports of an ethnohistoric Serrano village in or near the southern end of Cajon Pass. In 1776, Garces encountered a village near the southern end of the pass but did not provide further information about it (Coues 1900:246–247). In 1806, after leaving Muscupiabit, Zalvidea (Cook 1960:247) moved south four leagues where he "found a village of five houses [apparently standing] which was uninhabited. Two leagues from the latter runs a big stream [Lytle Creek?] and, according to what I was told, this stream runs into the Santa Ana River." In 1819, Fr. Joaquin Pasquel Nuez stopped at a place at the southern end of Cajon Pass that he named La Beatísima Trinidad (or Santísima Trinidad) (Beattie 1955b). The name of Tusicabit has also been applied to an ethnohistoric village (of unknown size) in that same general area (King 2004:58). It is not at all clear whether there was an ethnohistoric village at the southern foot of Cajon Pass. If there was, it is not known where it was located. No archaeological site is known that would indicate its location.

Historical-Period Contact

At the time of Euroamerican contact, the Serrano population was very small, with perhaps 1,500 tribal members (Kroeber 1925). Establishment of the Spanish missions and Mexican ranchos and later settlement by Euroamericans drastically altered Native American settlement and subsistence systems throughout the region. Compared to neighboring tribes, however, the Serrano remained relatively isolated from Spanish and, later, Mexican intrusions. Many Serrano became experienced caballeros on Mexican ranchos in lowland areas. Ultimately, major conflicts with Euroamericans and a smallpox epidemic during this period had profound effects on local Native American settlements. During the U.S. Civil War years, the country was focused on the war, and many Native American concerns were largely ignored by federal authorities. By the 1890s, most of the Serrano moved to the San Manuel and Morongo Indian reservations. During the twentieth century, many Southern California Native Americans worked on the railroads, on ranches, and as wage earners in the cities.

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The Vanyume

The Vanyume are often considered a branch of the Serrano (they were called the “Serrano of the Mohave River” by Kroeber [1925:615]), but it remains possible that they were a distinct and independent group (Bean and Smith 1978b:570). Given this possibility, they are given separate consideration here.

Little is known about the Vanyume, because they were extinct as a cultural group by the time formal ethnographic inquiries were first made, at the end of the nineteenth century. Some information is available, and sources of data include Bean and Smith (1978b), Bright (1975), Coues (1900), Earle (1990, 2004), Fortier (2008), Harrington (1986), Kelly (1934), King (2004), King and Casebier (1976), Knack (1980), Kroeber (1925, 1959), Strong (1929), and Walker (1986).

The earliest account of the Vanyume was made by Garcés (Coues 1900), a missionary priest and member of the 1776 De Anza Expedition. Garcés encountered Indians living along the Mojave River below Victorville and called them the “Beñeme,” a name given them by the Mojave Indians. The name “Beñeme” later was transliterated to “Vanyume” by Kroeber (1925).

Some Vanyume appear to have been missionized. For example, Johnson (2006) reported that some 142 Vanyume were recorded as having been baptized at the Mission San Fernando. Today, the Vanyume are represented by the San Fernando Band of Mission Indians. Today, some of the Vanyume descendent communities live in Newhall and Hesperia (Fortier 2008:23).

Territory, Language, and Population

The Vanyume occupied portions of the western and central Mojave Desert, from Victorville downstream to the sink of the Mojave River (Kroeber 1925:614). The Vanyume also occupied an undetermined region on either side of the river.

Garcés reported that the Vanyume spoke the same (or similar—i.e., Takic) language as the Serrano Indians living in the San Gabriel Valley and along the Santa Clara River. Garcés also noted that the Vanyume language was different from both the Chemehuevi and the Mojave. Kroeber (1925:614) observed that the Vanyume dialect was “nearer to the Kitanemuk than to the Serrano proper” but that “all three idioms [Kitanemuk, Vanyume, and Serrano] appear to be largely interintelligible.” These linguistic data suggest a gradation of Kitanemuk/Vanyume/Serrano (also see Earle 1990:101) and hint at the possibility that Vanyume split from Kitanemuk, after which Serrano split from Vanyume. Another possibility is that the Vanyume were actually a branch of Kitanemuk (both in the Mojave Desert) rather than of the Serrano (in the San Bernardino Mountains).

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Kroeber (1925:614) reported that the population of the Vanyume was very small at the time of historical-period contact. Earle (2004:94) estimated the population in about 1776 at between 300 and 400 people.

Subsistence and Settlement

Very few specifics are known about Vanyume subsistence, other than that they were hunters and gatherers. The Vanyume generally are viewed as having been quite “poor” (e.g., Kroeber 1925:615; Bean and Smith 1978b:570), although it is not clear what that means.

Subsistence data for the Vanyume are generalized from that of the Serrano as a whole (Bean and Smith 1978b:571). Kroeber (1925:615) specifically reported that the Vanyume at one location ate mesquite (*Prosopis* spp.), but at another, the inhabitants “had nothing but tule roots to eat.”

The settlement pattern of the Vanyume is poorly known but can be partially reconstructed from entries contained in the diaries of Spanish missionaries. In March 1776, Garcés encountered a “rancheria of 40 souls” along the Mojave River in the vicinity of Barstow and Daggett (probably in the Nebo vicinity at the location historically known as the Fish Ponds). Three miles to the west, Garcés came to another rancheria where the “head chief” of the “Beñeme,” or Vanyume, resided and was presented with long strings of white seashells. Twenty miles farther upstream, the padre came to another rancheria with a population of 70, where he was again presented with shell beads. In addition to the inhabited villages, Garcés also noted a number of abandoned settlements, which suggests that not all village sites were occupied simultaneously (Coues 1900:I, 241–248; Walker 1986:79).

Four decades later, in 1819, Joaquín Nuez mentioned the village sites of *Atongaibit* above the Upper Narrows, in Victorville; *Topipabit* 8 leagues (about 24 miles) downstream; and *Cacaumeat* 3 leagues (about 9 miles) farther downstream. Four leagues (about 12 miles) farther downstream, he came to the village of *Sisugina*, and after another 14–15 leagues (about 22 miles) he arrived at *Angayaba* (Beattie 1955b:55–56). From the above accounts, it appears that aboriginal settlements along the river contained up to 75 persons and were situated approximately 10 miles apart. Earle (2004:104) argued that these river settlements were permanently occupied.

Social and Political Organization

Little is known about Vanyume social organization. The “chief” of the Vanyume was said to have lived in one of the villages at the upper reaches of the Mojave River, near Victorville. Earle (2004:104) reported that the Vanyume did have clans and that they were patrilineal, had patrilocal residence, and practiced some polygyny (2004:105).

External Relations

Kroeber (1925:614) reported that the Vanyume sometimes were friendly with the Mohave and the Chemehuevi. No additional information about Vanyume external relations is available.

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Material Culture and Technology

Kroeber (1925:615) stated that the Vanyume had “blankets of rabbit and otter fur” and snares made of “wild hemp.” Shell (“white,” probably *Olivella*) beads and milling stones also are known to have been used.

Religion and Ritual

No information regarding Vanyume religion or ritual is currently available.

Contemporary Native American Tribes

The pipeline segments pass through, or near, the lands of two federally recognized Native American Tribes: the San Manuel Band of Mission Indians and the Morongo Band of Mission Indians. A brief history of each tribe is provided below.

San Manuel Band of Mission Indians (Serrano)

In 1891, the Mission Indian Commission recommended that the San Manuel village be designated a reservation, and President Grover Cleveland signed the executive order to create it in 1893 (Spiller 1979:20, 28–29). A reservation of 657 acres was established in 1891 (San Manuel Band of Serrano Mission Indians [SMBSMI] 2013a). Additional land has since been added, and the reservation now encompasses approximately 800 acres (SMBSMI 2013b). According to the U.S. Census (2010), the reservation population was 112 in 2010. The tribal government consists of three bodies: the General Council, composed of all tribal members over the age of 21; the 7-member Business Committee, elected by the General Council for 2-year terms; and the Tribal Court, including trial and appeals courts (SMBSMI 2013c, 2013d). The tribal economy is supported by San Manuel Indian Bingo and Casino (SMBSMI 2013e) and a bottled-water company. The Serrano Language Revitalization Project seeks to ensure the continuation of the Serrano language (SMBSMI 2013f). Tribal enterprises include the San Manuel Cultural Awareness and Tribal Unity Program, which has a mission to maintain cultural heritage and share it with future generations (SMBSMI 2013g). The program holds classes on Serrano language, traditional skills, and games and songs and hosts the annual California Indian Cultural Awareness Conference to share information about California Indian nations with San Bernardino County schoolchildren (SMBSMI 2013h). The SMBSMI also holds an annual round dance and powwow (SMBSMI 2013i). The SMBSMI Cultural Resources Department works with archaeologists and other local tribes to ensure proper treatment of archaeological sites.

Morongo Band of Mission Indians (Cahuilla)

The Morongo reservation was established in 1865 by an executive order of President Ulysses S. Grant (Morongo Band of Mission Indians 2013a). Adjustments were made to the reservation boundaries several times, until the current configuration was confirmed by proclamation of President Woodrow Wilson, in 1913 (Morongo Band of Mission Indians 2013b). The reservation encompasses approximately 32,248 acres (Eargle 2008:280). The Morongo Band of Mission Indians (2013c) includes individuals of Cahuilla, Cupeño, Chemehuevi, and Serrano ancestry. The band is governed by a tribal council consisting

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of 7 members. The 2010 census reported a reservation population of 913 (U.S. Census Bureau 2010). Tribal enterprises are varied and include the Morongo Casino, Resort and Spa; the Morongo Golf Club at Tukwet Canyon; restaurants; a Morongo Travel Center; Hadley Fruit Orchards; and a water-bottling plant. The Morongo Band of Mission Indians is the largest private-sector employer in the Banning-Beaumont region, employing over 3,000 people in its various enterprises (Morongo Band of Mission Indians 2013d). The band maintains a cultural resource program.

Historical-Period Setting

Spanish Mission Period

During the eighteenth century, the Spanish extended their influence over what is now Southern California. The first task prior to settling the area was to explore its extent, and that fell largely to Spanish priests and military leaders. Several notable Spanish explorers passed through the region, including Gaspar de Portolá, Juan Bautista de Anza, and Garcés. Many of these early adventurers wrote detailed descriptions of their travels, providing unique glimpses of early Southern California (Bean and Mason 1962; Bolton 1930; Coues 1900; Kroeber 1925:802).

As the first Spanish settlements developed along the California coast, they relied on a number of Native American trails to travel farther inland. The Yuma and Cocomaricopa Trails ran east–west and connected Sonora and Arizona with Southern California (McCarthy 1982; Stewart 1983). The trails merged with the equally important Mojave Trail, which traversed the California desert and Cajon Pass, where it entered the San Bernardino Valley. The proposed pipeline passes near portions of both the Cocomaricopa and Mojave Trails.

Spanish travel across the inland areas waned temporarily following the 1781 rebellion of the Quechan Indians along the Colorado River, which closed the Yuma Trail. Spanish military expeditions were sent to punish the Quechan immediately following the rebellion, including one expedition commanded by Pedro Fages in 1781–1782, which is noteworthy because it was at that time that Fages opened a route from Southern California to Yuma, through Warner’s Ranch. The route passed along the Santa Ana River, although it was not widely used for several years thereafter (Foster et al. 1995:42; Hatheway 1989:10).

Mission San Gabriel was founded on September 8, 1771, the fourth of the Spanish missions established in California. The mission served as one of the loci of Spanish activity in the area and had a profound impact on the surrounding region. Following the completion of the mission, exploratory trips were made to determine the locations and extent of native groups in the surrounding countryside. As part of the missionizing work, the padres established outlying branch chapels, or *asistencias*, that sought to reach out to the native populations. In addition to the *asistencias*, the territory surrounding the missions was used as ranch land where large herds of cattle were grazed and cattle by-products were sold (Langenwalter and Brock 1985:3–12).

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During the first few decades of Spanish occupation, there was little activity in the inland valleys and deserts, but by the 1820s, a rancho had been established in the San Bernardino Valley, and by the 1830s, an *asistencia* to Mission San Gabriel was in place. By this time, trade in cowhides and trade in tallow had become the dominant economic practices in Southern California, and the mission ranchos were quick to capitalize on that trade, using Native American labor to produce the items for sale and export.

By the early nineteenth century, Native American groups in the Colorado and Mojave Deserts were dealing with pressures from expanding Mexican and U.S. frontiers. Slave trading in the U.S. Southwest and California had serious impacts on Native American groups. The Chemehuevi and other Southern Paiute groups saw their populations fall steeply, and already endemic warfare among Yuman groups had been further fueled by the trade of captives to the Spanish (Bean and Vane 1978a:5–25; Brugge 1967). The Serrano in the San Bernardino Mountains and San Geronimo Pass areas were moved to the *asistencia* in San Bernardino, and most of the traditional villages had been depopulated by the close of the Mission period (Bean and Smith 1978b).

As a result of the establishment of Mission San Gabriel, several new routes of travel emerged. The main route between the San Bernardino Valley and Mission San Gabriel varied, although it certainly passed along the Santa Ana River. It appears that at some point, most traffic began to follow Chino Creek from the Santa Ana River, thus avoiding Santa Ana Canyon. The canyon route was used again after the establishment of Bernardo Yorba's Rancho San Antonio during the Mexican period (Greenwood and Foster 1990:18).

Euroamerican expeditions into Southern California during the 1820s reopened the Yuma Trail, which had been closed in the 1780s. By the 1820s, Euroamerican trappers had established a well-defined trail from the east through the San Bernardino Valley (Hatheway 1989:13; Stewart 1983). As a result of the increasing number of trappers throughout Southern California, many of the well-established trails were modified and expanded. A slightly different route from Los Angeles to the Colorado River, for example, found increasing acceptance by 1831, following the expedition of David Jackson and J. J. Warner. The new route brought the party from Warner's Pass through Temecula and Lake Elsinore and continued north to cross the Santa Ana River near what would become the town of Rincon, in the Prado Basin. From there, the route continued to Chino Creek and then to Mission San Gabriel. It was slightly different from the route used several decades before by Fages, who passed through what is now Hemet and Riverside on his way to Mission San Gabriel.

The Rancho Period

In 1834, the entire mission system was dismantled, and all landholdings were secularized and subdivided. The mission lands were granted to the government to be deeded to private citizens. As a result, large ranchos, often encompassing thousands of acres, emerged across Southern California. Within San Bernardino and Riverside Counties, several ranchos were created, including the San Jacinto, Temescal, Temecula, Cucamonga, El Rincon, and San Bernardino Ranchos. In addition, new settlers from

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Mexico were arriving in Southern California on a regular basis, many of whom received large grants of land for themselves.

Because of the huge grants of land being dispensed by the Mexican government, ranching became the dominant economic practice following secularization. Native Americans who had been living at missions left to find work as wage laborers. During this period, with a plethora of cheap labor from Native Americans, virtually unlimited grazing lands, and little competition, ranching was quite profitable. The Mexican ranchos increasingly purchased goods from U.S. traders and, in turn, sold them cattle by-products, such as beef, tallow, and hides.

During the Mexican-American War, however, the collapse of the cattle trade brought California's economic boom to a standstill. With the end of the war and the ceding of California to the United States through the treaty of Guadalupe Hidalgo in 1848, the trade in hides and tallow resumed. The California Gold Rush of 1848–1849 created an incredible demand for beef and cattle by-products. The ranchos prospered again for a short while, but their end was nearing.

With the gold rush came increased immigration. Fortune seekers followed trails blazed by earlier expeditions through the area. The route from the Colorado River to Los Angeles was declared a public road and became known as the Colorado Road and, later, as the "Old Emigrant Trail." That same route would later be used by the Butterfield Overland Mail Company stage (Hatheway 1989:20).

California Statehood and the U.S. Civil War

By 1850, the year of California statehood, many of the gold deposits that had sparked the gold rush had played out, and an increasing number of immigrant miners found themselves without work or land. As a result, many of the new transplants began squatting on the lands of the Mexican ranchos in Southern California. During the ensuing decades, U.S. government land commissions attempted to validate land grants and titles, and the rancho owners attempted to remove squatters. These land proceedings were often long and costly and resulted in the bankrupting of many rancho owners. In an attempt to circumvent the land proceedings and potential disputes, many of the rancho owners subdivided their immense holdings among their children and other family members. Unfortunately, the limited property of the rancho heirs made it even more difficult to afford the costly land proceedings.

By the 1860s and the outbreak of the U.S. Civil War, the Butterfield Overland Mail Company had closed, but other fledgling stage and freight companies continued to use already-established routes. Although there were several routes through Southern California, a relatively major transit corridor ran through Riverside County. Many referred to that route as the Overland Trail, although there were likely several bifurcations of the main trail through the more-populous portions of Southern California. Nevertheless, a major overland travel route passed through the area and was used by stage and freight companies until well into the 1880s.

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Post–U.S. Civil War

Southern California witnessed dramatic changes after the end of the U.S. Civil War. Increased commercialization, expanding access (both regionally and nationally), and the emergence of a wealthy Euroamerican elite were all agents of change (Greenwood and Foster 1990:26). The first large-scale farmers arrived in the area during this period. Instead of using the expansive landscape only for cattle grazing, the new farmers transformed and intensified the use of the land. By the 1870s, farmers began to grow crops and raise a wide range of animals, both of which required more human input and manipulation than did cattle grazing.

The population boom of the mid-nineteenth century also led to increasing conflict with Native American groups. Along the Colorado River, Euroamerican farmers wanted greater access to the fertile bottomland along the river, which was in use by Quechan and Mojave farmers. By the 1890s, the Colorado River Indian and Fort Yuma–Quechan Reservations had been created, and the Fort Mojave Indian Reservation was established in the 1870s (Bee 1983; Stewart 1983). The Cahuilla and Luiseño in western Riverside and San Bernardino Counties were sent to several reservations in the 1870s (Bean and Shipek 1978; Bean and Smith 1978b).

Few things changed the face of California as dramatically as the construction of the railroad in the mid-1870s. The Southern Pacific Railroad reached the town of Colton in 1875, and by the end of the decade, the line crossed the San Geronio Pass, extending all the way to Arizona. By 1876, a line was completed across Cajon Pass, connecting the valley to the San Joaquin Valley and, ultimately, to San Francisco. San Bernardino would eventually eclipse Colton as a railroad hub, after the Santa Fe Railway purchased the Southern Pacific Railroad line from Mojave to Needles. The Santa Fe Railway then purchased the line over Cajon Pass, and it laid rail into San Bernardino in 1884. From San Bernardino, the Santa Fe Railway branched out across the valley and, eventually, into Los Angeles (Hampson et al. 1988:40).

Logging

Between 1865 and 1895, logging reached its peak in the San Bernardino and San Jacinto Mountains (Robinson 1989). From the initial seasonal, family-style operations, the mountain logging industry grew dramatically, supported increasingly by technical innovations. By the late 1870s, a number of steam-powered circular saws were busy at mountain sawmills, slicing up the larger sugar pines that had been passed over by earlier loggers. Timber cutting and milling were profitable in those years, but they were also dangerous. As with most moneymaking ventures of the day, though, injury and danger did little to slow the growth of logging in the mountains. Logging and milling in the San Bernardino and San Jacinto Mountains continued at full capacity through the 1880s, in response to the high demand for lumber to build homes, railroad ties, shoring for mine shafts, and wooden boxes for shipping citrus. The targeted trees were mainly ponderosa, Jeffrey, and sugar pines. In 1883, the San Bernardino Board of Trade estimated production at the mountain sawmills at 5 million board feet and a gross value of \$100,000. In 1888, the estimate had risen to 6 million board feet of sawed lumber.

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Despite the unguarded optimism of the 1880s, by 1891, the timber industry in the San Bernardino Mountains faced a major challenge. That year, the Arrowhead Reservoir Company was incorporated and began buying up land in Little Bear and Grass Valleys, in advance of the construction of a dam. Milling in the area continued for a few years, because the dam project required vast amounts of lumber. By the end of the nineteenth century, though, with the dam project nearing completion, all but a few of the loggers had moved out of the mountain valleys.

Mining

The first confirmed gold discovery in San Bernardino County was in 1849 at Salt Spring, in the Mojave Desert, just east of SR 127. The chance discovery of gold in 1860 in Holcomb Valley, north of Big Bear, which was followed a few years later by another strike in Lytle Creek, also brought people into the San Bernardino Mountains (Robinson 1989). A gold rush ensued during the U.S. Civil War and brought thousands of hopefuls to the region. It indelibly changed the character of the mountains and deserts of San Bernardino County. As a result of the discoveries, mining and prospecting became the dominant economic activities in parts of the county for many years (Carrico et al. 1982:4–61).

The first miners to arrive were prospectors who generally worked alone or in pairs and often left no paper trail. In the Mojave Desert, the Piute Company, with John Moss, had staked mining claims in the Clarke District in the late 1860s (White et al. 2008). Continued prospecting in the Crescent District led to precious-metal discoveries in late 1904 and early 1905 that resulted in the greatest period of district activity from 1905 to 1907 (Vanderburg 1989).

There are reports that Mexican prospectors found minerals in the San Bernardino Mountains as early as 1800 and that Mexicans were among the first to mine gold in Holcomb Valley (Carrico et al. 1982:4-58–4-59) and the Rose Mine area (Robinson 1989:75). The first authenticated gold strikes in the mountains, however, occurred in 1855 at Bear Lake (now known as Baldwin Lake) and in 1860 in Holcomb Valley. Miners at Bear Lake panned for streambed “placer” gold along Bear Creek (Robinson 1993:7). When a few miners came down the mountains and reported success, the newspapers were full of sensational accounts of gold in the mountains. The publicity drew numerous would-be prospectors to the mountain valleys. Their enthusiasm quickly died, however, as deposits failed to live up to expectations, and the winter turned cold.

The history of mining in Riverside County is characterized by sporadic, small-scale mining of precious metals and later, large-scale exploitation of quarry products, such as sand, gravel, and clay (Pabst 1938; Vredenburgh et al. 1981:24). In general, precious metals were mined in the region from the 1860s to the 1930s, and the recovery of iron ore and other commodities became more prevalent during the second half of the twentieth century (Jenkins 1951:93–94).

The first discoveries of gold in the desert portion of Riverside County were in the Mule Mountains and at Picacho in 1861 (Love 1974:57). Famed trapper, scout, and guide Paulino Weaver (Gunther 1984:562)

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discovered gold in the “Hodges Mountains,” alternately known as the Palo Verde Mountains and the Mule Mountains (Merrill 1919:81). Work conducted in the Mule Mountains District during the next half-century remains largely undocumented. By 1908, a 7-stamp mill was in operation, processing ore from the American Flag and Carnation Mines, and a Gibson (gyratory) mill was in use by the 1940s (Tucker and Sampson 1945:142–143). Few mines in the district remained in operation by the 1930s, when “dozens of shafts, drifts, and tunnels” were reported (Vredenburg et al. 1981:24–25). Cerusite (white lead ore) was found in mines of the Mule Mountains (Hodges) District (Pabst 1938:151), and uranium discoveries in the 1950s led to additional mining development (Vredenburg et al. 1981:26–27).

Other mines in the Mule Mountains District included the Double Eagle, Free Coinage, Palo Verde Group, Punch, Senate, and Steel mines (Gunther 1984:341). The Roosevelt and Rainbow Group of Mines was part of the Stanchfield property and became the most productive mines in the Mule Mountains District (Clark 1970:161).

Ranching

Most historians believe that cattle and sheep grazing on the northern side of the San Bernardino Mountains developed almost simultaneously with the better-known mining and lumbering activities. By the 1850s, large cattle ranches had been established along the Mojave River, where some served as way stations for freight and passenger traffic along the Mojave Road (built over the prehistoric Mojave Trail). In addition to the small U.S. Army camp at Camp Cady, east of present-day Barstow, there were several stations at the better-watered sections along the Mojave River. Lane’s Station (and store, near the site of Oro Grande) was one of these, as was Fish Pond Station, near today’s Nebo Marine Supply Center (Bard 1972:49). Cattle from these earliest ranches were wintered in the desert valleys and then driven into higher pastures in the summer. Some of these ranches continued well into the twentieth century.

By the early 1860s, two principal types of grazing were taking place in the region. One was a continuation of the small-scale pasturing associated with logging and prospecting, and the other was the large-scale understory grazing of cattle and sheep that was prompted by a severe swing in the regional climate. In the first case, after 1860, herds appeared with greater frequency in association with sawmills, grazing in flats and meadows adjacent to private lands. John Garner ran an early butchering outfit east of Seeley Mill, in the James Flat area (LaFuze 1971:l:79). Bear and Holcomb Valleys were also used for grazing in 1864, as was the naturally well-watered area known as Coxey Meadow.

The second type of grazing—large-scale pasturing in the mountains—began with a big push from the weather. Two years of heavy rain, in 1861 and 1862, were a major boon to the livestock industry. The valley pastures became lush, and the herds multiplied. Unfortunately, those halcyon days were followed by 3 years of crushing drought. To save their starving animals, cattlemen and sheepherders drove their herds up the steep slopes of the San Bernardino and San Jacinto Mountains to whatever pastures they could find. Once the routes had been established, seasonal grazing of large herds of sheep and cattle in

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the mountains became a routine practice that continued in ever-larger numbers as grazing land in the lower elevations was appropriated for agriculture and settlement.

Although cattle were always the primary stock, they were not the only animals raised in the area. Sheep grazing is mentioned as early as 1863, when sheep from the Rowland Ranch on the Mojave plains were driven from summer pastures along the coast to their home ranges in the desert via Cajon Pass (LaFuze 1971:153). Bear Valley also was a prime sheep-grazing area for many years, beginning in 1864, when the Chaves brothers drove 800 sheep to the well-watered meadows of the valley. By the turn of the twentieth century, grazing dominated other land uses in the mountains, in terms of acreage.

1880s Land Boom

Southern California experienced a rush of new settlers in the 1880s. Most of the new arrivals originated in the Midwest, arriving via the newly completed transcontinental railroad. One of the greatest factors contributing to the influx of settlers at this time was the attractiveness of rail transportation because of a railroad rate war. In 1886, both passenger and freight rates for all the major railroads were cut drastically.

For the first time, it became possible for middle-class people to travel across the country via the railroad at an affordable cost. Many people came to California during this period, both to visit and to settle. Several new towns emerged, although many faded just as quickly. Unlike the earliest settlements in Southern California, the new towns were not always located along major rivers. The new arrivals began buying up portions of the old ranchos or homesteading on whatever land was available. As settlers arrived in ever-increasing numbers, the principal economic activity in the inland valleys shifted from open-range stock raising to agriculture. By the closing of the 1870s, the old lifeways of the rancher had come to an end, and the era of the small farmer had begun. With the fertility of the land and the mild climate, the only lack was rainfall, and in the early years, the problem of inadequate water seemed to be solved simply by drilling wells and digging irrigation ditches.

The newly founded city of Riverside set the standard for local development, and many communities sought to mirror its success. Founded in 1870 on the empty plains of the Jurupa Rancho by a small group called the Southern California Colony Association, Riverside solved the problem of the lack of rainfall by building a network of irrigation canals that tapped the Santa Ana River. As a part of the land boom, citrus farming arrived and took hold with a vengeance, and acres of prime farmland was devoted to the crop. That industry would change the area forever and would come to dominate the economy for the next several decades. When the first Washington navel-orange crop was harvested in 1878, an era of unprecedented wealth and prosperity followed, prompting a real-estate boom that carried the city well into the following century (Robinson 1957:22–23, 27–28).

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5.5.2 Records Search

5.5.2.1 *Records-Search Methods*

A records search was conducted for the entire records-search area using the Applicant's electronic cultural resource database. The database contains information on previously recorded cultural resources and previous conducted cultural resource studies for the Applicant's service area. The records-search data for Riverside and San Bernardino Counties was supplied to the Applicant by the California Historical Resources Information System, Eastern Information Center (EIC) at the University of California, Riverside, and the San Bernardino Archaeological Information Center (SBAIC) at the San Bernardino County Museum. A portion of the Adelanto to Moreno pipeline in Riverside County was not included in the Applicant's electronic cultural resource database, so an additional records search was conducted at the EIC to acquire the data for this portion of the records-search area. An additional records search was also conducted at the San Bernardino National Forest headquarters in San Bernardino, California. The records-search area consisted of a 300-foot wide cultural resource study area (measuring 150 feet from each side of the pipeline centerline), and a records-search buffer area measuring $\frac{1}{8}$ -mile wide from each side of the cultural resource study area. The 300-foot-wide cultural resources study area was defined as the area where any potential impacts to cultural resources are expected to occur.

The goal of these records searches was to review any previous archaeological-survey projects that may have taken place within or adjacent to the records-search area and identify previously recorded archaeological resources located in the area. The records-search information from the EIC and SBAIC was acquired in a digital format. The records search at the EIC and San Bernardino National Forest was conducted by examining U.S. Geological Survey (USGS) topographical maps marked with the locations of all previous cultural resource surveys and known archaeological sites. Transparencies preprinted with USGS topographical maps and outlines of the cultural resource study area and the records-search buffer area were placed over the EIC and San Bernardino National Forest maps. The locations of previously recorded sites and the outlines of previous surveys were traced onto the transparencies. The locations of sites and previous surveys were then digitized and combined with the data from the SBAIC. Survey reports and site records for previously recorded sites pertaining to the surveys and sites traced to the transparencies were subsequently photocopied.

Records-Search Results

Previous Cultural Resource Studies

In total, 418 reports and other cultural resource studies were identified in the both the cultural resource study area and the records-search buffer area (Table 5.5-3; Figures 5.5-3, 5.5-4, and 5.5-5; Appendix C).

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**Table 5.5-3
Previous Cultural Resource Studies in the Records-Search Area**

Portion of Records-Search Area	Within Cultural Resource Study Area	Within Records-Search Buffer Area	Total
Adelanto Compressor Station	1 ^a	—	1
Adelanto to Moreno pipeline	263	27	290
Moreno to Whitewater pipeline	84	33	117
Both pipeline corridors	10	—	10
Total	358	60	418

^a Project is within both the Adelanto Compressor Station and Adelanto to Moreno pipeline corridor footprints.

Adelanto Compressor Station

One previous cultural resources study was completed in the area of the compressor station and the beginning of the Adelanto to Moreno pipeline.

Adelanto to Moreno Pipeline

In total, 290 projects were identified as being conducted within the Adelanto to Moreno pipeline. Of these, 263 projects were conducted within the cultural resource study area, and 27 projects were conducted within the records-search buffer area.

Moreno to Whitewater Pipeline

In total, 117 projects were conducted within the Moreno to Whitewater pipeline. In total, 84 projects were conducted within the cultural resource study area, and 33 projects were conducted within the records-search buffer area.

Both Pipeline Segments

In total, 10 projects were conducted within both pipeline corridors. All of these projects were completed within the cultural resource study area.

Previously Recorded Cultural Resources

Over 300 hundred cultural resources, including over 30 distinct resource types, have been previously recorded within the records-search area. To better manage this data set and to better understand the nature of prehistoric and historical-period activities that have occurred here, these sites were placed within seven site-resource categories: archaeological sites, agricultural resources, historic buildings or structures, utility resources, transportation resources, water-conveyance resources, and cemeteries. Archaeological sites include sites that date to either the prehistoric and historical periods. The other six categories all date to the historical period and relate to the built environment. Four resources have components dating to both the prehistoric and historical periods and are classified as multicomponent

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resources. Eleven resources identified within the records-search area could not be categorized because of incomplete information available from the information centers. Twenty-eight cultural resources consist of isolated finds. These isolated finds typically consist of fewer than three artifacts and are characterized below as either prehistoric or historical period, without further elaboration.

Archaeological Sites

Archaeological sites include many different types of prehistoric and historical-period resources. Prehistoric sites include artifact concentrations and lithic scatters, which consist of collections of stone tools or other artifact types; bedrock milling sites; temporary campsites; and larger habitation sites, which include permanent villages. Historical-period archaeological sites include artifact concentrations and foundations.

Agricultural Resources

Agricultural resources include a wide variety of site types, including irrigation systems and other irrigation-related water-control features, farms and ranches, groves, animal pens, and tree and fence lines. Some of these sites contain standing structures and may span several acres, whereas others are only fragmentary remains of larger developments that have been destroyed.

Historic Building or Structures

Historic buildings and structures include houses and homesteads, apartment buildings, government buildings, schools, historic districts, amusement parks, scientific or research buildings, and unidentified structures and walls. These resources are typically related to urban settlement, as opposed to agricultural activities.

Utility Resources

Utility resources include electrical transmission lines, telephone lines, and other utility lines.

Transportation Resources

Transportation resources are associated with the movement of goods and people. These include roads, highways, stagecoach lines, and railroads. These also include train stations, bridges, and other features associated with the main transportation lines.

Water-Conveyance Resources

Water-conveyance resources are related to the movement of water and primarily include canals and aqueducts. These sites are associated with the long-distance movement of water, as opposed to irrigation systems that carry water over short distances and are generally subsumed within the agricultural-resource category.

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Cemeteries

Cemeteries refer specifically to large, formal cemeteries and memorial parks dating to the historical period. Prehistoric burial grounds and small, historical-period burial grounds are included in the archaeological-site category.

Previously Recorded Prehistoric and Historical-Period Resources

The cultural resources previously recorded within the records-search area are summarized below, by cultural resource category and by Proposed Project component (Table 5.5-4). Specific information for each resource within the records-search area is included in Appendix C.

**Table 5.5-4
Summary of Previously Recorded Cultural Resources within the Records-Search Area, by Segment**

Site Category	Cultural Resource Study Area	Records-Search Buffer Area	Total
<i>Adelanto Compressor Station</i>			
	—	—	—
<i>Adelanto to Moreno Pipeline</i>			
Historical period			
Agricultural site	3	4	7
Archaeological site	9	19	28
Cemetery	1		1
Historic building or structure	13	23	36
Infrastructure site	5		5
Transportation site	12	21	33
Water-conveyance system	3	4	7
Subtotal	46	71	117
Multicomponent			
Archaeological site	2	2	4
Prehistoric			
Archaeological site	5	18	23
Unknown	1	10	11
Segment total	54	101	155
<i>Moreno to Whitewater Pipeline</i>			
Historical period			
Agricultural site	1	4	5
Archaeological site	4	7	11
Historic building or structure	6	81	87

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**Table 5.5-4
Summary of Previously Recorded Cultural Resources within the Records-Search Area, by Segment**

Site Category	Cultural Resource Study Area	Records-Search Buffer Area	Total
Infrastructure site	3	1	4
Transportation site	3	5	8
Water-conveyance system	4	1	5
Subtotal	21	99	120
Prehistoric			
Archaeological site		6	6
Segment total	21	105	126
Total	75	206	281

Prehistoric Resources

Twenty-nine prehistoric archaeological sites were identified within the records-search area.

Adelanto Compressor Station

No prehistoric archaeological sites have been previously recorded within the cultural resource study area or records-search buffer area of the Adelanto Compressor Station segment.

Adelanto to Moreno Pipeline

Twenty-three prehistoric archaeological sites are located within the Adelanto to Moreno pipeline records-search area. Of these, 5 sites are located within the cultural resource study area. These 5 sites consist of 1 bedrock milling site, 2 temporary campsites, and 2 habitation sites. Of the remaining sites, 18 consist of 4 bedrock milling sites, 6 campsites, 1 habitation site, and 7 lithic scatters.

Two prehistoric sites located within the Adelanto to Moreno pipeline cultural resource study area are particularly noteworthy. The first site, P-36-000421 (CA-SBR-421), also known as the Sayles' site, consists of a heavy concentration of flaked stone artifacts (e.g., projectile points, scrapers, and choppers) and ground stone artifacts (e.g., cogstones, manos, and metates) associated with a well-defined midden. This site has been recommended eligible for inclusion in the National Register of Historic Places (NRHP) and is part of a formally recorded archaeological district. P-36-000421 is the only site of this district that falls within the records-search area. The site is located within both the cultural resource study area and the records-search buffer area.

The second noteworthy site, P-33-000361 (CA-RIV-361), consists of a rockshelter with numerous milling features, a variety of petroglyphs, at least three human burials, as well as a well-defined midden. Records indicate that this site is possibly the ethnohistoric village of Homuba. Although there is no

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evidence in the site record regarding whether the site was ever evaluated for eligibility for listing in the California Register of Historical Resources (CRHR) or the NRHP, the site description strongly suggests that the site would qualify as eligible.

Moreno to Whitewater Pipeline

Six prehistoric archaeological sites (two lithic scatters and four bedrock milling sites) are within the Moreno to Whitewater pipeline records-search area. These six sites are all located outside of the cultural resource study area.

Historical-Period Resources

There are 237 previously recorded historical-period resources identified within the records-search area.

Adelanto Compressor Station

No historical-period resources were previously recorded within the cultural resource study area or records-search buffer area of the Adelanto Compressor Station segment.

Adelanto to Moreno Pipeline

There are 117 historical-period resources previously recorded within the Adelanto to Moreno pipeline records-search area. Of these, 46 historical-period resources are located within the cultural resource study area and 71 are located within the records-search buffer area. Resources within the cultural resource study area consist of 3 agricultural resources, 9 archaeological sites, 1 cemetery (Montecito Memorial Park), 13 historic buildings or structures, 5 utility resources, 12 transportation resources, and 3 water-conveyance resources. The agricultural resources consist of 1 landscape feature and 2 ranch/farms. The 9 historical-period archaeological sites consist of 8 artifact concentrations and 1 foundation. The historical-period buildings or structures consist of 4 commercial buildings, 2 homesteads, 5 houses, and 2 structures of unknown type. Four electrical transmission lines and 1 general-purpose utility line constitute the utility resources. The transportation resources consist of 3 railroad lines and 9 roads. The water-conveyance systems are composed entirely of canals/aqueducts.

Of the 71 historical-period resources that were identified within the records-search buffer area for the Adelanto to Moreno pipeline, 4 are agricultural resources, 19 are archaeological sites, 23 are historical-period buildings or structures, 21 are transportation resources, and 4 are water-conveyance resources. The agricultural resources consist of 1 irrigation system, 2 water tanks, and 1 ranch/farm. The historical-period archaeological sites consist of 11 artifact concentrations, 7 foundations, and 1 concrete structure of unknown function. The historical-period buildings or structures recorded within the records-search buffer area consist of 3 commercial buildings, 2 education buildings, 1 government building, 9 houses, 7 structures, and 1 wall feature. The 21 transportation resources consist of 6 bridges, 8 culverts, 1 foundation associated with a railroad work camp, 1 railroad line, 3 roads, 1 wall feature associated with

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bridge construction, and 1 well associated with the railroad. The water-conveyance resources consist of 3 canals/aqueducts and 1 culvert.

Moreno to Whitewater Pipeline

There are 120 historical-period resources previously recorded within the Moreno to Whitewater pipeline records-search area. Of these, 21 historical-period resources are located within the cultural resource study area and 99 are located within the records-search buffer area. Resources within the cultural resource study area consist of 1 agricultural resource, 4 historical-period archaeological sites, 6 historical-period buildings or structures, 3 utility resources, 3 transportation resources, and 4 water-conveyance resources. The agricultural resource consists of 1 irrigation system. The archaeological sites consist of 1 artifact concentration and 3 foundations. The 6 historic buildings or structures consist of 1 commercial building, 1 government building, and 4 houses. The utility resources are composed entirely of electrical transmission lines. The transportation resources consist of 1 railroad line, 1 road, and 1 stagecoach trail. Finally, the water-conveyance resources are entirely composed of canals/aqueducts.

The 99 historical-period resources within the records-search buffer area consist of 4 agricultural resources, 7 historical-period archaeological sites, 81 historical-period buildings or structures, 1 utility resource, 5 transportation resources, and 1 water-conveyance resource. The 4 agricultural resources consist of an agricultural feature (animal pen), 1 irrigation system, 1 landscape feature, and 1 ranch/farm. The 7 archaeological sites consist of 5 artifact concentrations and 2 foundations. The historical-period buildings or structures consist of 1 amusement area (the Cabazon Dinosaurs [P-33-007876]), 14 commercial buildings, 1 government building, 1 historic district (Downtown Banning Historic District), 60 houses, 1 scientific testing area (Beaumont Site No. 2 rocket test area), 2 structures of unknown type, and 1 wall feature. An electrical transmission line is the only utility resource. The transportation resources consist of 4 roads and 1 train station. The water-conveyance resource is a canal/aqueduct.

Multicomponent Resources

Adelanto Compressor Station

No multicomponent resources were previously recorded within the cultural resource study area or records-search buffer area of the Adelanto Compressor Station segment.

Adelanto to Moreno Pipeline

Four multicomponent resources are located within the Adelanto to Moreno pipeline records-search area. All four resources are archaeological sites. Two of the sites are located within the cultural resource study area. The first of these sites (P-33-17931, CA-RIV-9465) consists of the concrete foundations of an early twentieth-century school and a prehistoric bedrock milling feature with six mortars. The second site (P-36-005568, CA-SBR-5568/H) is particularly noteworthy. Site records for this resource indicate that it was recommended eligible for listing in the NRHP. This site is located along two ridges and contains a

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large prehistoric lithic scatter with debitage, cores, core fragments, partial bifaces, and milling implements. The historical-period component consists of two foundations, bottle fragments, a possible placer mining pit, and a prehistoric thermal feature. The site was test excavated in 2006, at which time subsurface deposits were encountered.

The other two multicomponent sites are located within the records-search buffer area. The first of these sites is the Blue Cut site (P-36-013389, CA-SBR-12569/H). The prehistoric component of this site represents a temporary camp consisting of a dense artifact concentration with multiple thermal features. The historical-period component involves the remains of a utility-pole line and scattered historical-period artifacts. Although not formally evaluated, the site is assumed to be eligible for listing on the NRHP. The second multicomponent site within the records-search buffer area is the site of the ethnohistoric village of Muscupiabit (P-36-000425, CA-SBR-425/H). The prehistoric component consists of a dense midden deposit dating to the late prehistoric and ethnohistoric periods. Artifacts recovered during previous excavations included historical-period glass trade beads, manos and metates, shaped pestles, stone bowls and mortars, ceramic artifacts, and projectile points. Mission records indicate that there may be a Native American burial ground at the site. The historical-period component of this site consists of the village itself, which was occupied into the historical period, as well as several historical-period trails, including the Santa Fe Trail, which crosses the site. The site has been determined eligible for listing in the NRHP.

Moreno to Whitewater Pipeline

No multicomponent resources were previously recorded within the cultural resource study area or records-search buffer area of the Moreno to Whitewater pipeline.

Unknown Resources

Eleven resources identified within the records search could not be categorized because of incomplete information available from the information centers. All of these resources are located within the Adelanto to Moreno pipeline records-search area: 1 within the cultural resource study area and 10 within the records-search buffer area. All 11 resources are believed to be historical-period archaeological sites.

Isolated Artifacts

Twenty-eight previously recorded isolated artifacts are located within the records-search area (Table 5.5-5; Appendix C).

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**Table 5.5-5
Summary of Previously Recorded Isolated Artifacts within the Records-Search Area, by Segment**

Site Category	Cultural Resource Study Area	Records-Search Buffer Area	Total
<i>Adelanto Compressor Station</i>			
	—	—	—
<i>Adelanto to Moreno Pipeline</i>			
Historical period	—	3	3
Prehistoric	4	14	18
Subtotal	4	17	21
<i>Moreno to Whitewater Pipeline</i>			
Historical period	—	5	5
Prehistoric	—	2	2
Subtotal	—	7	7
Total	4	24	28

Adelanto Compressor Station

No isolated artifacts were previously recorded within the cultural resource study area or records-search buffer area of the Adelanto Compressor Station segment.

Adelanto to Moreno Pipeline

Twenty-one isolated artifacts have been previously recorded within the Adelanto to Moreno pipeline. Of these, 4 are located within the cultural resource study area and are prehistoric in age. The other 17 isolated artifacts are located within the records-search buffer area. Of these, 14 are prehistoric in age and 3 date to the historical period.

Moreno to Whitewater Pipeline

Seven isolated artifacts have been previously recorded in the within the Moreno to Whitewater pipeline. All of these isolated artifact are located within the records-search buffer area. Of these, two are prehistoric in age and five date to the historical period. No isolated artifacts were found within the cultural resource study area for this segment.

CRHR and NRHP Eligibility of Previously Recorded Cultural Resources

Lists of cultural resources evaluated for their eligibility for listing in the CRHR and NRHP were reviewed as part of the records search. These lists are kept by the California Office of Historic Preservation (OHP) and are available at each respective California Historical Resources Information System information center. The lists include archaeological sites and elements of the built environment, such as road, buildings, and

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bridges. Isolated finds generally do not meet the eligibility criteria to be listed in the CRHR or the NRHP and are not included on the lists kept by the OHP. The eligibility listings maintained by the OHP only include cultural resources that have been formally evaluated and submitted to the OHP for concurrence. Because a recorded cultural resource is not included on the list does not mean that the resource is not eligible for listing or that it has even been evaluated.

Of the 281 archaeological sites and elements of the built environment (excluding isolated finds) within the cultural resource study area and records-search buffer area, at least 18 have been evaluated for the CRHR and NRHP. Of these, 12 resources have been determined eligible, 3 resources have been recommended eligible, 2 sites were determined not eligible, and 1 site was recommended not eligible. In addition, another 18 resources are listed as California State Landmarks or are listed on local historical registers (Table 5.5-6).

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**Table 5.5-6
CRHR and NRHP Eligibility and Other State and Local Listings of Previously Recorded Cultural Resources
within the Records Search Area, by County**

Primary Number	Trinomial	USFS Number	Project Segment	Age	Category	Resource Type	Description	NRHP and CRHR Eligibility	Other State and Local Listings	Location
<i>San Bernardino County</i>										
P-36-000421	CA-SBR-421	05-12-53-00016	Adelanto to Moreno	prehistoric	archaeological site	habitation site	heavy concentration of flaked stone and ground stone with midden; part of Sayles Complex	eligible		cultural resource study area
P-36-000425	CA-SBR-425/H		Adelanto to Moreno	multicomponent	archaeological site	habitation site and artifact concentration	Muscupiabit Village site: flaked stone and ground stone fragments; possible burial area; historical-period debris including bricks, automobiles, glass fragments, and cut bone; Santa Fe and Salt Lake Trail Monument; trail segment	recommended eligible		records-search buffer area
P-36-000425	CA-SBR-425/H		Adelanto to Moreno	historical period	transportation site	road	Baldy Mesa Road	eligible		cultural resource study area
P-36-002910	CA-SBR-2910H	05-12-53-075	Adelanto to Moreno	historical period	transportation site	road	two historic road alignments (U.S. Route 66 and National Old Trails Road) and associated refuse scatter	eligible		cultural resource study area

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**Table 5.5-6
CRHR and NRHP Eligibility and Other State and Local Listings of Previously Recorded Cultural Resources
within the Records Search Area, by County**

Primary Number	Trinomial	USFS Number	Project Segment	Age	Category	Resource Type	Description	NRHP and CRHR Eligibility	Other State and Local Listings	Location
P-36-005568	CA-SBR-5568/H	05-12-53-09	Adelanto to Moreno	multicomponent	archaeological site	artifact concentration and foundations	large lithic scatter including debitage, cores, core fragments, and milling implements, as well as two foundations, bottle fragments, and a thermal feature	recommended eligible		cultural resource study area
P-36-006793	CA-SBR-6793H		Adelanto to Moreno	historical period	transportation site	railroad	railroad alignment	eligible		cultural resource study area
P-36-006848	CA-SBR-6848H		Adelanto to Moreno	historical period	water conveyance system	canal/aqueduct	segment of the Cram - Van Leuven drainage ditch	not eligible		records-search buffer area
P-36-007694	CA-SBR-7694H		Adelanto to Moreno	historical period	infrastructure	transmission line	Boulder Dam 287.5 kV power lines	eligible		cultural resource study area
P-36-010316	CA-SBR-10316H		Adelanto to Moreno	historical period	infrastructure	transmission line	tower line 115kV transmission line	eligible		cultural resource study area

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**Table 5.5-6
CRHR and NRHP Eligibility and Other State and Local Listings of Previously Recorded Cultural Resources
within the Records Search Area, by County**

Primary Number	Trinomial	USFS Number	Project Segment	Age	Category	Resource Type	Description	NRHP and CRHR Eligibility	Other State and Local Listings	Location
P-36-013389	CA-SBR-12569/H		Adelanto to Moreno	multicomponent	archaeological site	camp site	Blue Cut site: The prehistoric component represents a temporary camp consisting of a dense artifact concentration with multiple thermal features. The historical-period component involves the remains of a utility pole line and scattered historical-period artifacts.	eligible		records-search buffer area
P-36-015497			Adelanto to Moreno	historical period	transportation site	road	Baseline Road	unknown	state historic landmark and/ or point of historic interest	records-search buffer area
P-36-016417			Adelanto to Moreno	historical period	transportation site	road	San Bernardino-Sonora Road	unknown	state historic landmark and/ or point of historic interest	cultural resource study area

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**Table 5.5-6
CRHR and NRHP Eligibility and Other State and Local Listings of Previously Recorded Cultural Resources
within the Records Search Area, by County**

Primary Number	Trinomial	USFS Number	Project Segment	Age	Category	Resource Type	Description	NRHP and CRHR Eligibility	Other State and Local Listings	Location
<i>Riverside County</i>										
P-33-006229			Moreno to Whitewater	historical period	transportation site	road	Jackrabbit Trail	unknown	local listing only	cultural resource study area
P-33-007879			Moreno to Whitewater	historical period	historic building or structure	commercial building	Reid building	eligible	-	records-search buffer area
P-33-007880			Moreno to Whitewater	historical period	historic building or structure	commercial building	Copland House/ Spokane Hotel	unknown	state historical landmark	records-search buffer area
P-33-008332			Moreno to Whitewater	historical period	historic building or structure	house	vernacular wood-frame house	unknown	local listing only	records-search buffer area
P-33-008333			Moreno to Whitewater	historical period	historic building or structure	house	vernacular wood-frame house	unknown	local listing only	records-search buffer area
P-33-008334			Moreno to Whitewater	historical period	historic building or structure	house	vernacular wood-frame house	recommended eligible	local listing	records-search buffer area
P-33-008335			Moreno to Whitewater	historical period	historic building or structure	house	Spanish-style house	unknown	local listing only	records-search buffer area
P-33-008336			Moreno to Whitewater	historical period	historic building or structure	house	vernacular wood-frame house	unknown	local listing only	records-search buffer area

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**Table 5.5-6
CRHR and NRHP Eligibility and Other State and Local Listings of Previously Recorded Cultural Resources
within the Records Search Area, by County**

Primary Number	Trinomial	USFS Number	Project Segment	Age	Category	Resource Type	Description	NRHP and CRHR Eligibility	Other State and Local Listings	Location
P-33-008337			Moreno to Whitewater	historical period	historic building or structure	house	vernacular ranch house	eligible		cultural resource study area
P-33-008338			Moreno to Whitewater	historical period	historic building or structure	house	vernacular wood-frame house	unknown	local listing only	cultural resource study area
P-33-008351			Moreno to Whitewater	historical period	historic building or structure	commercial building	Banning Women's Club	unknown	state historical landmark	records-search buffer area
P-33-008352			Moreno to Whitewater	historical period	historic building or structure	house	vernacular wood-frame house	unknown	local listing only	records-search buffer area
P-33-008356			Moreno to Whitewater	historical period	historic building or structure	commercial building	San Gorgonio Inn	unknown	local listing only	records-search buffer area
P-33-008357			Moreno to Whitewater	historical period	historic building or structure	commercial building	Fox Theatre	eligible		records-search buffer area
P-33-008358			Moreno to Whitewater	historical period	historic building or structure	commercial building	Hotel Banning	eligible		records-search buffer area
P-33-008363			Moreno to Whitewater	historical period	historic building or structure	house	vernacular wood-frame house	unknown	local listing only	records-search buffer area

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**Table 5.5-6
CRHR and NRHP Eligibility and Other State and Local Listings of Previously Recorded Cultural Resources
within the Records Search Area, by County**

Primary Number	Trinomial	USFS Number	Project Segment	Age	Category	Resource Type	Description	NRHP and CRHR Eligibility	Other State and Local Listings	Location
P-33-009130			Moreno to Whitewater	historical period	historic building or structure	commercial building	Banning Hardware store	unknown	local listing only	records-search buffer area
P-33-009134			Moreno to Whitewater	historical period	historic building or structure	commercial building	Odd Fellows building	eligible		records-search buffer area
P-33-009150			Moreno to Whitewater	historical period	historic building or structure	house	vernacular wood-frame house	unknown	local listing only	cultural resource study area
P-33-009153			Moreno to Whitewater	historical period	historic building or structure	commercial building	Hopper Café	unknown	local listing only	records-search buffer area
P-33-009157			Moreno to Whitewater	historical period	historic building or structure	house	Craftsman style	unknown	local listing only	records-search buffer area
P-33-009177			Moreno to Whitewater	historical period	historic building or structure	house	vernacular stone house	unknown	local listing only	records-search buffer area
P-33-013778			Moreno to Whitewater	historical period	archaeological site	foundation	five concrete foundations	recommended not eligible	local listing	cultural resource study area
P-33-015828			Moreno to Whitewater	historical period	historic building or structure	house	wood-frame ranch house	not eligible		records-search buffer area

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Adelanto Compressor Station

None of the cultural resources evaluated for the CRHR, NRHP, California State Landmarks, or local historical registers are located within the Adelanto Compressor Station area.

Adelanto to Moreno Pipeline

Of the 15 resources that have been determined eligible or recommended eligible for listing in the CRHR or NRHP, 9 are located within the Adelanto to Moreno pipeline. Of these 9 resources, 7 are located within the cultural resource study area and the other 2 are located within the records-search buffer area. The 9 resources located in this section of the pipeline include 5 prehistoric sites, all of which are located in Cajon Pass, and 4 historical-period sites. The historical-period sites consist of part of the U.S. Route 66 / National Trails Highway, a historic alignment of the Atchison, Topeka and Santa Fe Railroad and two electrical transmission lines.

Moreno to Whitewater Pipeline

All of the other six resources that have been determined eligible or recommended eligible for listing are located within the Moreno to Whitewater pipeline. Only one of these six resources is located within the cultural resource study area; the other five are located within the records-search buffer area. The resource within the cultural resource study area is a residential home in the city of Banning associated with Mary Davis, a founder of the Banning Women's Club. The five eligible resources located within the records-search area include additional residential homes and commercial buildings within the city of Banning.

Archival Research

In addition to the records search described above, Statistical Research, Inc. (SRI), conducted archival research to identify known and potential historical-period resources within the cultural resource study area and records-search buffer area. The archival sources included lists of archaeological zones and historic overlay zones from municipal planning agencies, as well as county assessor's parcel information.

Archaeological Zones and Historic Overlay Zones

Archaeological zones and historic overlay zones represent areas within cities and counties that are considered sensitive for cultural resources. These zones are not districts as defined by the OHP or National Park Service but are instead created by municipal governments for the purposes of planning. There are six archaeological zones and four historic overlay zones within the cultural resource study area and records-search buffer area (Table 5.5-7).

Adelanto Compressor Station

No archaeological zones or historic overlay zones are located within either the cultural resource study area or records-search buffer area for the Adelanto Compressor Station segment.

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**Table 5.5-7
Archaeological Zones and Historic Overlay Zones within the Records-Search Area, by Segment**

Zone	Sensitivity	
	<i>Cultural Resource Study Area</i>	<i>Records-Search Buffer Area</i>
<i>Adelanto Compressor Station</i>		
None		
<i>Adelanto to Moreno Pipeline</i>		
Archaeological Zones		
City of Hesperia Archaeological Zone	high	low to moderate
City of San Bernardino Archaeological Zone	none listed	none listed
San Bernardino County Archaeological Zone	high	high
Historic Overlay Zones		
City of San Bernardino Historic Overlay Zones	none listed	none listed
<i>Moreno to Whitewater Pipeline</i>		
Archaeological Zones		
City of Banning Archaeological Zone	low to moderate	moderate
City of Palm Springs Archaeological Zone	not applicable	low
City of Moreno Valley Archaeological Zone	high	high
Historic Overlay Zones		
City of Banning Overlay Zone	low	low
City of Moreno Valley Overlay Zone	none listed	none listed
City of Palm Springs Overlay Zone	none listed	none listed

Adelanto to Moreno Pipeline

Of the six archaeological zones, three (the City of Hesperia Archaeological Zone, the City of San Bernardino Archaeological Zone, and the San Bernardino County Archaeological Zone) are located within the Adelanto to Moreno pipeline. These zones are large enough that they include land within both the cultural resource study area and records-search buffer area. Within the Proposed Project area, the City of Hesperia and the San Bernardino County Archaeological Zones are listed as highly sensitive. Within the records-search buffer area, the City of Hesperia Archaeological Zone is listed as having a low-moderate level of sensitivity. The San Bernardino County Archaeological Zone is also listed as highly sensitive within the records-search buffer area. No indication of sensitivity was listed for the City of San Bernardino Archaeological Zone in either the cultural resource study area or records-search buffer area.

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Of the four historic overlay zones, only one (the City of San Bernardino Historic Overlay Zone) is located within the Adelanto to Moreno pipeline. This historic overlay zone includes land within both the cultural resource study area and records-search buffer area.

Moreno to Whitewater Pipeline

The three archaeological zones associated with the Moreno to Whitewater pipeline are the City of Banning Archaeological Zone, the City of Palm Springs Archaeological Zone, and the City of Moreno Valley Archaeological Zone. All three zones include land within the records-search buffer area, but only the City of Banning and City of Moreno Valley Archaeological Zones include land within the cultural resource study area. The City of Moreno Valley Archaeological Zone is listed as highly sensitive in both the cultural resource study area and records-search buffer area. The City of Banning Archaeological Zone is listed with a low–moderate level of sensitivity within the cultural resource study area and a moderate level of sensitivity within the records-search buffer area. The City of Palm Springs Archaeological Zone, which only intersects with the records-search buffer area, is listed as having low sensitivity.

Three historic overlay zones (the City of Banning Historic Overlay Zone, the City of Moreno Valley Historic Overlay Zone, and the City of Palm Springs Historic Overlay Zone) are located within the Moreno to Whitewater pipeline. All three overlay zones include lands within the cultural resource study area and the records-search buffer area. The City of Banning Historic Overlay Zone is listed with a low sensitivity and includes concentrations of early- to mid-twentieth-century buildings. There is no indication of the sensitivity level for the City of Moreno Valley and City of Palm Springs Overlay Zones.

Assessor’s Parcel Information

In order to predict the potential presence of historical-period cultural resources within the Proposed Project area, assessor’s parcels that have improvements constructed prior to 1965 were identified. This analysis focused on the records-search area. These parcels were divided into three groups: 1920 and prior, 1921–1945, and 1946–1965. Within the cultural resource study area, 5,811 assessor’s parcels meet these criteria. Table 5.5-8 and Figures 5.5-6 through 5.5-12 summarize the information presented below.

**Table 5.5-8
Potential Historic Resources from the Assessor’s Parcel Information
within the Records Search Area, by Segment**

Site Category	Cultural Resource Study Area	Records-Search Buffer Area	Total
<i>Adelanto Compressor Station</i>			
	—	—	—
<i>Adelanto to Moreno Pipeline</i>			
1920 and earlier	10	43	53
1921–1945	142	829	971

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**Table 5.5-8
Potential Historic Resources from the Assessor’s Parcel Information
within the Records Search Area, by Segment**

Site Category	Cultural Resource Study Area	Records-Search Buffer Area	Total
1946–1965	592	3,779	4,371
Subtotal	744	4,651	5,395
<i>Moreno to Whitewater Pipeline</i>			
1920 and earlier	5	12	17
1921–1945	17	60	77
1946–1965	73	249	322
Subtotal	95	321	416
Total	839	4,972	5,811

Adelanto Compressor Station

There were no assessor’s parcels with improvements prior to 1965 within the Adelanto Compressor Station segment records-search area.

Adelanto to Moreno Pipeline

There were 744 assessor’s parcels within the cultural resource study area within the Adelanto to Moreno pipeline that have improvements dating to 1965 and earlier. Ten of these parcels have improvements dating to 1920 and earlier, 142 parcels have improvements that date from 1921 to 1945, and 592 parcels have improvements that date from 1946 to 1965. Within the records-search buffer area, there were 4,651 assessor’s parcels. Forty-three of these parcels have improvements that date to 1920 and earlier, 829 parcels have improvements that date from 1921 to 1945, and 3,779 parcels have improvements that date from 1946 to 1965.

Moreno to Whitewater Pipeline

There are 95 assessor’s parcels within the cultural resource study area within the Moreno to Whitewater pipeline that have improvements dating to 1965 and earlier. Five of these parcels have improvements that date to 1920 and earlier, 17 parcels have improvements that date from 1921 to 1945, and 73 parcels have improvements that date from 1946 to 1965. Within the records-search buffer area, there are 321 assessor’s parcels. Twelve of these parcels have improvements that date to 1920 and earlier, 60 parcels have improvements that date from 1921 to 1945, and 249 parcels have improvements that date from 1946 to 1965.

Most of the parcels with improvements that date prior to 1965 are located within the Adelanto to Moreno pipeline.

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Native American Coordination

The records search and literature review also involved contacting the Native American Heritage Commission (NAHC) for a list of traditional-use areas or sacred sites within the cultural resource study area and for a list of specific Native American groups or individuals who could provide additional information on Native American Traditional Sites and Places within the Proposed Project area. The NAHC sacred lands file search indicated the presence of Native American Traditional Sites and Places within the project area. The NAHC identified areas within Cajon Pass, near the towns of Banning and Beaumont, and near the Morongo Indian Reservation as being culturally sensitive areas. The area to the east of Whitewater was also identified as being a culturally sensitive area, but it is outside of the current Proposed Project area. The NAHC provided a list of 22 contacts that could provide additional information on Native American Traditional Sites and Places within the Proposed Project area. These contacts represented a total of 11 tribes located in Southern California, including:

- San Manuel Band of Mission Indians
- Morongo Band of Mission Indians
- Cabazon Band of Mission Indians
- Torres-Martinez Desert Cahuilla Indians
- Los Coyotes Band of Mission Indians
- Twenty-nine Palms Band of Mission Indians
- Ramona Band of Mission Indians
- Chemehuevi Reservation
- Fort Mojave Indian Tribe
- Colorado River Indian Tribe
- Santa Rosa Band of Mission Indians.

As per the NAHC recommendations, once the public becomes notified of the Proposed Project, representatives from these tribes, as well as other individuals identified by the NAHC, would be contacted. The representatives will be consulted regarding additional information on Native American Traditional Sites and Places within the cultural resource study area.

Buried-Site Sensitivity Analysis

Because the entire cultural resource study area covers a wide variety of terrain, parts of the Proposed Project area may be sensitive for buried archaeological sites that have no surface manifestation. SRI conducted a geoarchaeological assessment of the cultural resource study area and records-search buffer area to model where buried archaeological sites may be present.

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Methods

Geoarchaeological investigations for the Proposed Project began with a background review of soil and geological literature. Soil and geologic maps were compiled and reviewed. Digital soil map data from the Soil Survey Geographic database available at the USDA NRCS Web site (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/geo/?cid=nrcs142p2_053627, accessed May 2014). Maps of buried-site sensitivity were created, based on analysis of the soil data.

The most-recent official soil-series descriptions were downloaded from the NRCS Web site (<https://soilseries.sc.egov.usda.gov/osdname.asp>, accessed May 2014). These soil-series descriptions (Appendix D) provided data (e.g., slope gradient, erosion class, soil texture, and soil taxonomic classes) that were useful for evaluating buried-site potential. For example, archaeological sites are usually associated with lower slope gradients, soils that are not significantly eroded, and medium-textured soils (e.g., ones that are not rocky, cobbly, gravelly, or have a high clay content). Diagnostic subsurface soil horizons supplied key data for assessing buried-site potential. For example, soils with duripans (subsoils cemented with silica) and argillic (soils with an illuvial accumulation of translocated clay in the subsoil) horizons are likely to predate the archaeological record of the Proposed Project area. Soils with a cambic (soils with minimal soil structure and/or a color change from the parent material) horizon and ones that lack a B horizon are younger and less well developed, so they have greater potential for containing buried cultural deposits, especially when associated with alluvial and aeolian deposition. The potential for each soil map unit in the Proposed Project area was classified as having a high, medium, low, or very low to no potential for containing buried archaeological sites.

Results

Soils were first mapped in part of the Proposed Project area (the San Bernardino Valley) by Holmes et al. (1905) and more recently by the NRCS at a 1:24,000 scale (Woodruff 1980). Detailed pedon descriptions are presented in Appendix C for all of the soil series in the Proposed Project area. Table 5.5-9 summarizes the taxonomic class, diagnostic horizons, physiographic setting, and buried-site probability for soil map units in the proposed gas-pipeline corridor. The buried-site-probability levels shown in Table 5.5-9 were used to create maps of the buried sensitivity. For soil map units consisting of soil complexes or associations, each probability level was classified for the dominant soil series (the first one listed in a complex or association). Table 5.5-10 shows the number of soil map units for each soil order/probability level combination.

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Table 5.5-9

Taxonomy, Diagnostic Horizons, Physiographic Setting, and Buried-Site Probability for Soil-Map Units in the Proposed Gas-Pipeline Corridor

Soil-Map-Unit Name	Map Unit Symbol	Soil Series	Taxonomic Class (USDA Soil Taxonomy)	Soil Order	Diagnostic Subsurface Horizons (Depth)	Physiographic Setting	Buried-Site Probability
Avawatz-Oak Glen Association, gently sloping	102	Avawatz	sandy, mixed, mesic Mollic Xerofluvents	Entisols		Avawatz soils are on alluvial fans and intermittent drainageways at elevations of 3,400–5,200 feet. Slopes are 2%–9%. The soils are subject to rare flooding in places. They formed in alluvium from mixed but dominantly granitic sources.	high
	102	Oak Glen	coarse-loamy, mixed, superactive, mesic Pachic Haploxerolls	Mollisols		Oak Glen soils are on alluvial fans and have slopes of 2%–25%. Elevations are 3,400–6,000 feet. The soils formed in alluvium from a variety of rock but dominantly from granitic rock sources.	medium
	102	Oak Glen	coarse-loamy, mixed, superactive, mesic Pachic Haploxerolls	Mollisols			high
Badland	BA						very low to none
Borrow pits	BP						very low to none
Bryman loamy fine sand, 0%–2% slopes	105	Bryman	fine-loamy, mixed, superactive, thermic Typic Haplargids	Aridisols	Argillic (23–203 centimeters)	Bryman soils are on terraces and older alluvial fans and have gradients of 0%–15%. They formed in mixed alluvium derived mainly from granitic sources. Elevations are 2,800–3,800 feet.	very low to none
Bryman loamy fine sand, 2%–5% slopes	106	Bryman	fine-loamy, mixed, superactive, thermic Typic Haplargids	Aridisols	Argillic (23–203 centimeters)		very low to none

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Taxonomy, Diagnostic Horizons, Physiographic Setting, and Buried-Site Probability for Soil-Map Units in the Proposed Gas-Pipeline Corridor

Soil-Map-Unit Name	Map Unit Symbol	Soil Series	Taxonomic Class (USDA Soil Taxonomy)	Soil Order	Diagnostic Subsurface Horizons (Depth)	Physiographic Setting	Buried-Site Probability
Cajon sand, 0%–2% slopes	112	Cajon	mixed, thermic Typic Torripsamments	Entisols		The Cajon soils have gradients of 0%–15% and are on recent alluvial fans, fan skirts, fan aprons, inset fans, and river terraces at elevations of 200–4,300 feet. They formed in sandy alluvium, mostly granitic rock sources, but a variety of sources are also included.	high
Cajon sand, 2%–9% slopes	113	Cajon		Entisols			medium
Cajon sand, 9%–15% slopes	114	Cajon		Entisols			medium
Carrizo stony sand, 2%–9% slopes	CcC	Carrizo	sandy-skeletal, mixed, hyperthermic Typic Torriorthents	Entisols		Carrizo soils are on numerous landforms on floodplains, fan piedmonts and bolson floors. Slopes range from 0% to 15%. The soils formed in mixed igneous alluvium. Elevations are 82 meters (270 feet) below sea level to 793 meters (2,600 feet).	high
Carsitas cobbly sand, 2%–9% slopes	ChC	Carsitas	mixed, hyperthermic Typic Torripsamments	Entisols		Carsitas soils are on alluvial fans, fan aprons, valley fills, dissected remnants of alluvial fans and in drainageways. Slopes range from 0%–30%. These soils formed in alluvium from granitoid and/or gneissic rocks. Elevations are 67 meters (220 feet) below sea level to 800 meters (2,625 feet).	medium

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Taxonomy, Diagnostic Horizons, Physiographic Setting, and Buried-Site Probability for Soil-Map Units in the Proposed Gas-Pipeline Corridor

Soil-Map-Unit Name	Map Unit Symbol	Soil Series	Taxonomic Class (USDA Soil Taxonomy)	Soil Order	Diagnostic Subsurface Horizons (Depth)	Physiographic Setting	Buried-Site Probability
Carsitas fine sand, 0%–5% slopes	CkB	Carsitas	mixed, hyperthermic Typic Torripsamments	Entisols			medium
Carsitas gravelly sand, 0%–9% slopes	CdC	Carsitas	mixed, hyperthermic Typic Torripsamments	Entisols			low
Carsitas gravelly sand, 9%–30% slopes	CdE	Carsitas	mixed, hyperthermic Typic Torripsamments	Entisols			low
Chuckawalla cobbly fine sandy loam, 9%–30% slopes	CnE	Chuckawalla	loamy-skeletal, mixed, superactive, hyperthermic Typic Calciargids	Aridisols	Argillic (8–41 centimeters)	Chuckawalla soils are on fan terraces. Slopes are 0%–15%. The soils formed in stratified mixed gravelly alluvium. They typically have a well-developed desert pavement with a thick varnish (patina).	very low to none
Cieneba-Rock outcrop complex	Cr	Cieneba	loamy, mixed, superactive, nonacid, thermic, shallow Typic Xerorthents	Entisols		Cieneba soils formed from material weathered from granite and other rocks of similar texture and composition. Gradients are 9%–85%. The soils are at elevations of 150–1220 meters (500–4,000 feet).	low
Cieneba rocky sandy loam, 15%–50% slopes, eroded	CkF2	Cieneba		Entisols			very low to none

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Soil-Map-Unit Name	Map Unit Symbol	Soil Series	Taxonomic Class (USDA Soil Taxonomy)	Soil Order	Diagnostic Subsurface Horizons (Depth)	Physiographic Setting	Buried-Site Probability
Fallbrook fine sandy loam, shallow, 8%–15% slopes, eroded	FkD2	Fallbrook	fine-loamy, mixed, superactive, thermic Typic Haploxeralfs	Alfisols	Argillic (30–71 centimeters)	Fallbrook soils are gently rolling to very steep and are on round hills at elevations of 200–3,000 feet or as high as 3,500 feet on south-facing slopes. They formed in material weathered from granite and closely related granitic rocks. Typically, the rock is deeply weathered. Rock outcrops are common in some areas.	very low to none
Fallbrook rocky sandy loam, shallow, 15%–50% slopes, eroded	FcF2	Fallbrook		Alfisols			very low to none
Fallbrook sandy loam, shallow, 15%–35% slopes, eroded	FbF2	Fallbrook		Alfisols			very low to none
Friant-Rock outcrop complex	Fr	Friant	loamy, mixed, superactive, thermic Lithic Haploxerolls	Mollisols		Friant soils are on hilly and mountainous landscapes at elevations of 500–3,500 feet. Slopes range from 9% to 75%. The soils formed in residuum weathered from mica schist, quartz schist, and gneiss.	low
Friant rocky fine sandy loam, 25%–50% slopes, eroded	FyF2	Friant		Mollisols			very low to none

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Soil-Map-Unit Name	Map Unit Symbol	Soil Series	Taxonomic Class (USDA Soil Taxonomy)	Soil Order	Diagnostic Subsurface Horizons (Depth)	Physiographic Setting	Buried-Site Probability
Gorgonio cobbly loamy fine sand, 2%–15% slopes	GnD	Gorgonio	Sandy, mixed, thermic Fluventic Haploxerolls	Mollisols		The Gorgonio soils are nearly level to moderately sloping. They are on alluvial fans at elevations of 20–3,000 feet. They formed in coarse-textured alluvium derived from granite, granodiorite, schist, and related rocks.	low
Gorgonio gravelly loamy fine sand, 2%–15% slopes	GmD	Gorgonio		Mollisols			low
Gorgonio loamy sand, 0%–8% slopes	GhC	Gorgonio		Mollisols			medium
Gorgonio loamy sand, channeled, 2%–15% slopes	GkD	Gorgonio		Mollisols			low
Gorgonio loamy sand, deep, 2%–8% slopes	GIC	Gorgonio		Mollisols			medium
Grangeville fine sandy loam	Gr	Grangeville	coarse-loamy, mixed, superactive, thermic Fluvaquentic Haploxerolls	Mollisols		Grangeville soils are on alluvial fans and floodplains at elevations of 0–1,800 feet. Slopes range from 0% to 2%. The soils formed in moderately coarse-textured alluvium dominantly derived from granitic rock sources. Some areas are saline and saline-sodic affected. Many areas have been reclaimed.	medium
Grangeville fine sandy loam, saline-alkali	Gs	Grangeville		Mollisols			low

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Taxonomy, Diagnostic Horizons, Physiographic Setting, and Buried-Site Probability for Soil-Map Units in the Proposed Gas-Pipeline Corridor

Soil-Map-Unit Name	Map Unit Symbol	Soil Series	Taxonomic Class (USDA Soil Taxonomy)	Soil Order	Diagnostic Subsurface Horizons (Depth)	Physiographic Setting	Buried-Site Probability
Gravel pits and dumps	GP						very low to none
Greenfield fine sandy loam, 9%–15% slopes	GtD	Greenfield	coarse-loamy, mixed, active, thermic Typic Haploxerafls	Alfisols	Argillic (78–130 meters)	Greenfield soils are on fans and terraces at elevations of 100–3,500 feet. Slopes range from 0% to 30%. The soils formed in moderately coarse and coarse-textured alluvium or some wind-deposited material derived from granitic and mixed sources.	low
Greenfield sandy loam, 15%–25% slopes, eroded	GyE2	Greenfield		Alfisols			very low to none
Greenfield sandy loam, 2%–8% slopes, eroded	GyC2	Greenfield		Alfisols			low
Greenfield sandy loam, 2%–9% slopes	GtC	Greenfield		Alfisols			low
Greenfield sandy loam, 8%–15% slopes, eroded	GyD2	Greenfield		Alfisols			very low to none
Gullied land-Haploxerafls association	126			Alfisols			very low to none
Hanford coarse sandy loam, 2%–8% slopes	HcC	Hanford	coarse-loamy, mixed, superactive, nonacid, thermic Typic Xerorthents	Entisols		The Hanford soils are on stream bottoms, floodplains, and alluvial fans at elevations of 150–3,500 feet. Slopes range from 0% to 15%. The soils formed in deep, moderately coarse-textured alluvium dominantly from granite and other quartz-bearing rocks of similar texture.	medium

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Taxonomy, Diagnostic Horizons, Physiographic Setting, and Buried-Site Probability for Soil-Map Units in the Proposed Gas-Pipeline Corridor

Soil-Map-Unit Name	Map Unit Symbol	Soil Series	Taxonomic Class (USDA Soil Taxonomy)	Soil Order	Diagnostic Subsurface Horizons (Depth)	Physiographic Setting	Buried-Site Probability
Hanford coarse sandy loam, 2%–9% slopes	HaC	Hanford		Entisols			medium
Hanford coarse sandy loam, 8%–15% slopes, eroded	HcD2	Hanford		Entisols			low
Hanford coarse sandy loam, 9%–15% slopes	HaD	Hanford		Entisols			low
Hanford cobbly coarse sandy loam, 2%–15% slopes, eroded	HdD2	Hanford		Entisols			low
Hanford sandy loam, 0%–2% slopes	HbA	Hanford		Entisols			medium
Helendale-Bryman loamy sands, 2%–5% slopes	133	Helendale	coarse-loamy, mixed, superactive, thermic Typic Haplargids	Aridisols	Argillic (10–120 centimeters)	Helendale soils are on fan piedmonts, fan remnants, alluvial fans, and terraces. Slopes range from 0% to 9%. Elevations are 610–1,200 meters (2,000–3,935 feet). These soils formed in alluvium from granitoid rock.	very low to none
	133	Bryman	fine-loamy, mixed, superactive, thermic Typic Haplargids	Aridisols	Argillic (23–203 centimeters)	Bryman soils are on terraces and older alluvial fans and have gradients of 0%–15%. They formed in mixed alluvium derived mainly from granitic sources. Elevations are 2,800–3,800 feet.	very low to none

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Taxonomy, Diagnostic Horizons, Physiographic Setting, and Buried-Site Probability for Soil-Map Units in the Proposed Gas-Pipeline Corridor

Soil-Map-Unit Name	Map Unit Symbol	Soil Series	Taxonomic Class (USDA Soil Taxonomy)	Soil Order	Diagnostic Subsurface Horizons (Depth)	Physiographic Setting	Buried-Site Probability
Hesperia loamy fine sand, 2%–5% slopes	134	Hesperia	coarse-loamy, mixed, superactive, nonacid, thermic Xeric Torriorthents	Entisols		Hesperia soils are on long smooth alluvial fans, and valley fill. The alluvium is from granite and closely related rocks. Elevations are as low as 200 feet in the San Joaquin Valley and as high as 4,800 feet in the high desert.	medium
Lithic Xerorthents, warm-Rock outcrop complex, 50%–100% slopes	DpG			Entisols			very low to none
Metz gravelly sandy loam, 2%–15% slopes	MID	Metz	Sandy, mixed, thermic Typic Xerofluvents	Entisols		Metz soils are on floodplains and alluvial fans at elevations of 25–2,500 feet. Gradient is 0%–15%. The alluvium is derived from mixed but mostly sedimentary sources.	high
Metz loamy fine sand, sandy loam substratum, 0%–5% slopes	MhB	Metz		Entisols			medium
Metz loamy sand, 2%–8% slopes	MdC	Metz		Entisols			medium
Metz loamy sand, channeled, 0%–15% slopes	MeD	Metz		Entisols			low

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Taxonomy, Diagnostic Horizons, Physiographic Setting, and Buried-Site Probability for Soil-Map Units in the Proposed Gas-Pipeline Corridor

Soil-Map-Unit Name	Map Unit Symbol	Soil Series	Taxonomic Class (USDA Soil Taxonomy)	Soil Order	Diagnostic Subsurface Horizons (Depth)	Physiographic Setting	Buried-Site Probability
Modesto-Osito families association, 15%–30% slopes	CmE	Modesto	fine-loamy, mixed, active, thermic Mollic Haploxeralfs	Alfisols	Argillic (30%–140 centimeters)	Modesto soils are nearly level, slowly drained alluvial fans or interfan areas approaching basin topography, formerly with mound microrelief, which is now largely destroyed by leveling for irrigation.	very low to none
	CmE	Osito	loamy, mixed, superactive, thermic, shallow Typic Haploxerepts	Alfisols	Cambic (13%–97 centimeters)	Osito soils are on uplands and have slopes of 15%–70%. Elevation is 200–1,200 meters (650–4,000 feet). They are formed in material weathered from interbedded fine-grained sandstone and shale.	low
Monserate sandy loam, 0%–5% slopes	MmB	Monserate	fine-loamy, mixed, superactive, thermic Typic Durixeralfs	Alfisols	Argillic (25–71 centimeters) Duripan (71–114 centimeters)	The Monserate soils are on nearly level to moderately steep old dissected terraces and fans at elevations of 700–2,500 feet. The soils formed in alluvium derived principally from granitic rocks.	very low to none
Monserate sandy loam, 5%–8% slopes, eroded	MmC2	Monserate		Alfisols			very low to none
Monserate sandy loam, 8%–15% slopes, eroded	MmD2	Monserate		Alfisols			very low to none
Monserate sandy loam, shallow, 15%–25% slopes, severely eroded	MnE3	Monserate		Alfisols			very low to none
Monserate sandy loam, shallow, 5%–15% slopes, eroded	MnD2	Monserate		Alfisols			very low to none

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Taxonomy, Diagnostic Horizons, Physiographic Setting, and Buried-Site Probability for Soil-Map Units in the Proposed Gas-Pipeline Corridor

Soil-Map-Unit Name	Map Unit Symbol	Soil Series	Taxonomic Class (USDA Soil Taxonomy)	Soil Order	Diagnostic Subsurface Horizons (Depth)	Physiographic Setting	Buried-Site Probability
Morical family, dry-Badland association, 15%–50% slopes	BgEF	Morical	fine-loamy, mixed, superactive, mesic Vitrandic Argixerolls	Mollisols	Argillic (58–94 centimeters)	Morical soils are on ridge tops, mountain slopes, and foothills. Slopes are 0%–90%. They formed in residuum and colluvium mixed with volcanic ash and loess in the surface overlying weathered granite or quartzite lithology. Elevation is 2,000–3,200 feet.	low
Myoma fine sand, 0%–5% slopes	MaB	Myoma	mixed, hyperthermic Typic Torripsamments	Entisols		Myoma soils are nearly level to rolling, have hummocky micro relief where unprotected and are at elevations of 200 feet below sea level to 1,800 feet above sea level. The soil formed in aeolian sand blown from recent alluvium.	high
Myoma fine sand, 5%–15% slopes	MaD	Myoma		Entisols			medium
Osito-Modesto families association, 30%–50% slopes	CmF	Osito	loamy, mixed, superactive, thermic, shallow Typic Haploxerepts	Inceptisols	Cambic (13–97 centimeters)	Osito soils are on uplands and have slopes of 15%–70%. Elevation is 200–1,200 meters (650–4,000 feet). They are formed in material weathered from interbedded fine-grained sandstone and shale.	low
		Modesto	fine-loamy, mixed, active, thermic Mollic Haploxerafs	Alfisols	Argillic (30–140 centimeters)	Modesto soils are nearly level, slowly drained alluvial fans or interfan areas approaching basin topography, formerly with mound microrelief, which is now largely destroyed by leveling for irrigation.	very low to none

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Taxonomy, Diagnostic Horizons, Physiographic Setting, and Buried-Site Probability for Soil-Map Units in the Proposed Gas-Pipeline Corridor

Soil-Map-Unit Name	Map Unit Symbol	Soil Series	Taxonomic Class (USDA Soil Taxonomy)	Soil Order	Diagnostic Subsurface Horizons (Depth)	Physiographic Setting	Buried-Site Probability
Pachappa fine sandy loam, 2%–8% slopes, eroded	PaC2	Pachappa	coarse-loamy, mixed, active, thermic Mollic Haploxeralfs	Alfisols	Argillic (36–114 centimeters)	Pachappa soils are nearly level to very gently undulating; the coarser-textured types where exposed to wind are slightly hummocky and windblown. The Pachappa soils occur at elevations under 1,000 feet.	very low to none
Placencia fine sandy loam, 0%–5% slopes	PIB	Placencia	fine, smectitic, thermic Typic Natrixeralfs	Alfisols	Argillic (33–147 centimeters)	Placencia soils are nearly level to moderately sloping and are on fans and terraces at elevations of 50–2,500 feet. They formed in alluvium from granite and other rocks of similar composition and texture.	very low to none
Psamments, Fluvents and Frequently flooded soils	Ps			Entisols		Alluvial landforms	high
Ramona sandy loam, 15%–25% slopes, severely eroded	RaE3	Ramona	fine-loamy, mixed, superactive, thermic Typic Haploxeralfs	Alfisols	Argillic (74–147 centimeters)	The Ramona soils are nearly level to moderately steep. They are on terraces and fans at elevations of 250–3,500 feet. They formed in alluvium derived mostly from granitic and related rock sources.	very low to none
Ramona sandy loam, 15%–30% slopes, eroded	RmE2	Ramona		Alfisols			very low to none
Ramona sandy loam, 2%–5% slopes, eroded	RaB2	Ramona		Alfisols			very low to none
Ramona sandy loam, 5%–8% slopes, eroded	RaC2	Ramona		Alfisols			very low to none

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Soil-Map-Unit Name	Map Unit Symbol	Soil Series	Taxonomic Class (USDA Soil Taxonomy)	Soil Order	Diagnostic Subsurface Horizons (Depth)	Physiographic Setting	Buried-Site Probability
Ramona sandy loam, 5%–8% slopes, severely eroded	RaC3	Ramona		Alfisols			very low to none
Ramona sandy loam, 8%–15% slopes, eroded	RaD2	Ramona		Alfisols			very low to none
Ramona sandy loam, 8%–15% slopes, severely eroded	RaD3	Ramona		Alfisols			very low to none
Ramona sandy loam, moderately deep, 15%–25% slopes, severely eroded	RdE3	Ramona		Alfisols			very low to none
Ramona sandy loam, moderately deep, 8%–15% slopes, eroded	RdD2	Ramona		Alfisols			very low to none
Ramona very fine sandy loam, 0%–8% slopes, eroded	ReC2	Ramona		Alfisols			very low to none
Ramona very fine sandy loam, moderately deep, 0%–8% slopes, eroded	RfC2	Ramona		Alfisols			very low to none
Riverwash	RA						very low to none

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Taxonomy, Diagnostic Horizons, Physiographic Setting, and Buried-Site Probability for Soil-Map Units in the Proposed Gas-Pipeline Corridor

Soil-Map-Unit Name	Map Unit Symbol	Soil Series	Taxonomic Class (USDA Soil Taxonomy)	Soil Order	Diagnostic Subsurface Horizons (Depth)	Physiographic Setting	Buried-Site Probability
Riverwash-Soboba families association, 2%–15% slopes	EsD	Soboba	sandy-skeletal, mixed, thermic Typic Xerofluvents	Entisols		Soboba soils are on alluvial fans and floodplains at elevations of 25–3,700 feet. Slopes range from 0% to 30%. The soils formed in recent alluvium, mostly from granitic rocks.	medium
Rock outcrop	RO						very low to none
Rockland	RtF						very low to none
San Emigdio fine sandy loam, 0%–2% slopes	ScA	San Emigdio	coarse-loamy, mixed, superactive, calcareous, thermic Typic Xerofluvents	Entisols		San Emigdio soils are on alluvial fans, floodplains, and in narrow valleys at elevations of 100–2,000 feet. Slopes are 0%–15%. The soils formed in moderately coarse-textured alluvium dominantly from sedimentary formations.	high
San Emigdio fine sandy loam, 2%–8% slopes, eroded	SeC2	San Emigdio		Entisols			medium
San Emigdio fine sandy loam, 2%–9% slopes	ScC	San Emigdio		Entisols			medium
San Emigdio fine sandy loam, 8%–15% slopes, eroded	SeD2	San Emigdio		Entisols			medium
San Emigdio gravelly sandy loam, 2%–9% slopes	SbC	San Emigdio		Entisols			low

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Soil-Map-Unit Name	Map Unit Symbol	Soil Series	Taxonomic Class (USDA Soil Taxonomy)	Soil Order	Diagnostic Subsurface Horizons (Depth)	Physiographic Setting	Buried-Site Probability
San Emigdio loam, 0%–2% slopes	SgA	San Emigdio		Entisols			high
San Emigdio loam, 2%–8% slopes	SgC	San Emigdio		Entisols			high
San Emigdio loam, 8%–15% slopes, eroded	SgD2	San Emigdio		Entisols			medium
San Emigdio sandy loam, channeled, 2%–15% slopes	SdD	San Emigdio		Entisols			low
San Timoteo loam, 30%–50% slopes, eroded	SgF2	San Timoteo	coarse-loamy, mixed, superactive, calcareous, thermic Typic Xerorthents	Entisols		San Timoteo soils have 2%–75% slopes and are on uplands at elevations of 300–3,500 feet. They formed in material weathered from shale, sandstone, and calcified weathered granite.	low
San Timoteo loam, 8%–25% slopes, eroded	SmE2	San Timoteo		Entisols			medium
Saugus sandy loam, 30%–50% slopes	ShF	Saugus	coarse-loamy, mixed, superactive, nonacid, thermic Typic Xerorthents	Entisols		The Saugus soils are on slopes of dissected terraces and foothills at elevations of 600–2,500 feet. Slopes range from 9% to 50%. The soils formed in material weathered from weakly consolidated sediments mostly from granitic and closely related rocks.	low

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Soil-Map-Unit Name	Map Unit Symbol	Soil Series	Taxonomic Class (USDA Soil Taxonomy)	Soil Order	Diagnostic Subsurface Horizons (Depth)	Physiographic Setting	Buried-Site Probability
Sheephead fine sandy loam, 8%–15% slopes, eroded	SnD2	Sheephead	loamy, mixed, superactive, mesic, shallow Entic Ultic Haploxerolls	Mollisols		Sheephead soils are in mountainous areas at elevations of 2,000–7,500 feet. Slopes are 9%–75%. The soils formed in material weathered from granitic rocks.	low
Soboba-Hanford families association, 2%–15% slopes	AbD	Soboba	Sandy-skeletal, mixed, thermic Typic Xerofluvents	Entisols		Soboba soils are on alluvial fans and floodplains at elevations of 25–3,700 feet. Slopes range from 0% to 30%. The soils formed in recent alluvium, mostly from granitic rocks.	medium
	AbD	Hanford	coarse-loamy, mixed, superactive, nonacid, thermic Typic Xerorthents	Entisols		The Hanford soils are on stream bottoms, floodplains and alluvial fans at elevations of 150–3,500 feet. Slopes range from 0% to 15%. The soils formed in deep, moderately coarse-textured alluvium dominantly from granite and other quartz bearing rocks of similar texture.	high
Soboba cobbly loamy sand, 2%–25% slopes	SrE	Soboba	Sandy-skeletal, mixed, thermic Typic Xerofluvents	Entisols		Soboba soils are on alluvial fans and floodplains at elevations of 25–3,700 feet. Slopes range from 0% to 30%. The soils formed in recent alluvium, mostly from granitic rocks.	medium
Soboba cobbly sand, 2%–15% slopes	SoD	Soboba		Entisols			medium
Soboba gravelly loamy sand, 0%–9% slopes	SoC	Soboba		Entisols			low

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Soil-Map-Unit Name	Map Unit Symbol	Soil Series	Taxonomic Class (USDA Soil Taxonomy)	Soil Order	Diagnostic Subsurface Horizons (Depth)	Physiographic Setting	Buried-Site Probability
Soboba stony loamy sand, 2%–15% slopes	SsD	Soboba		Entisols			low
Soboba stony loamy sand, 2%–9% slopes	SpC	Soboba		Entisols			low
Terrace escarpments	TeG			Entisols		Terrace escarpment	high
Trigo family-Lithic Xerorthents, warm complex, 30%–50% slopes	DnF	Trigo	loamy, mixed, superactive, nonacid, thermic, shallow Typic Xerorthents	Entisols		Trigo soils are on dissected fan terraces. The soils formed in consolidated sediments mainly from silty or fine sandy alluvium. Slopes are 2%–60%. Elevations are 200–2,000 feet.	low
Trigo family-Lithic Xerorthents, warm complex, 50%–75% slopes	DnG			Entisols			very low to none
Tujungang gravelly loamy sand, 0%–8% slopes	TwC	Tujungang	mixed, thermic Typic Xeropsamments	Entisols		Tujungang soils occur at elevations of 5–4,300 feet on alluvial fans and floodplains and have slopes of 0%–9%. The soils formed in sandy alluvium derived mostly from granitic sources.	medium
Tujungang gravelly loamy sand, 0%–9% slopes	TrC	Tujungang		Entisols			medium
Tujungang loamy fine sand, 0%–5% slopes	TsB	Tujungang		Entisols			medium
Tujungang loamy sand, 0%–5% slopes	TuB	Tujungang		Entisols			high

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Table 5.5-9

Taxonomy, Diagnostic Horizons, Physiographic Setting, and Buried-Site Probability for Soil-Map Units in the Proposed Gas-Pipeline Corridor

Soil-Map-Unit Name	Map Unit Symbol	Soil Series	Taxonomic Class (USDA Soil Taxonomy)	Soil Order	Diagnostic Subsurface Horizons (Depth)	Physiographic Setting	Buried-Site Probability
Tujunga loamy sand, channeled, 0%–8% slopes	TvC	Tujunga		Entisols			low
Typic Xerorthents-Morical family, dry association, 30%–75% slopes	MoFG	Morical	fine-loamy, mixed, superactive, mesic Vitrandic Argixerolls	Mollisols	Argillic (58–94 centimeters)	Morical soils are on ridgetops, mountain slopes, and foothills. Slopes are 0%–90%. They formed in residuum and colluvium mixed with volcanic ash and loess in the surface overlying weathered granite or quartzite lithology. Elevation is 2,000–3,200 feet.	very low to none
Typic Xerorthents, warm-Typic Haploxeralfs-Badland complex, 30%–100% slopes	ChFG			Entisols			very low to none
Vista coarse sandy loam, 15%–35% slopes, eroded	VsF2	Vista	coarse-loamy, mixed, superactive, thermic Typic Haploxerepts	Inceptisols	Cambic (122–226 centimeters)	Vista soils are on hilly slopes at elevations of 122–1,188 meters (400–3,900 feet) in Southern California and at less than 1,066 meters (3,500 feet) elevation in central California. Slopes range from 2% to 75%. The soils formed in material weathered from decomposed granite and other closely related rocks.	low
Vista coarse sandy loam, 8%–15% slopes, eroded	VsD2	Vista		Inceptisols			low
Vista rocky coarse sandy loam, 2%–35% slopes, eroded	VtF2	Vista		Inceptisols			low

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Table 5.5-9

Taxonomy, Diagnostic Horizons, Physiographic Setting, and Buried-Site Probability for Soil-Map Units in the Proposed Gas-Pipeline Corridor

Soil-Map-Unit Name	Map Unit Symbol	Soil Series	Taxonomic Class (USDA Soil Taxonomy)	Soil Order	Diagnostic Subsurface Horizons (Depth)	Physiographic Setting	Buried-Site Probability
Wapi-Pacifco families-Rock outcrop complex, 50%–75% slopes	DaG	Wapi	mixed, mesic Lithic Xeropsamments	Entisols		Wapi soils are on basalt plains. The soils formed in aeolian sands. Slopes range from 0% to 20% but are dominantly less than 8%. Most slopes are short and irregular due to frequent exposures of rock outcrops as knolls and ridges. Elevations range from 4,000 to 4,400 feet.	high
	DaG	Pacifco	mixed, mesic, shallow Typic Xeropsamments	Entisols		Pacifco soils are on uplands. Slope is 15%–75%. Elevation is 4,000–6,500 feet. They formed in residuum weathered from granite and anorthosite rock.	very low to none
Water	W						very low to none
Wrightwood- Bull Trail association, sloping	175	Wrightwood	coarse-loamy, mixed, superactive, mesic Typic Haploxerafals	Alfisols	Argillic (8–236 centimeters)	Wrightwood soils are on terraces and have slopes of 2%–9%. They formed from older, mixed alluvium dominantly from granitic sources. Elevations are 3,900–4,300 feet.	very low to none
	175	Bull Trail	fine-loamy, mixed, active, mesic Mollic Haploxerafals	Alfisols	Argillic (20–76 centimeters)	The Bull Trail soils are on gently sloping to moderately steep and are on alluvial fans and terraces at elevations of 2,700–5,600 feet.	very low to none

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Table 5.5-9

Taxonomy, Diagnostic Horizons, Physiographic Setting, and Buried-Site Probability for Soil-Map Units in the Proposed Gas-Pipeline Corridor

Soil-Map-Unit Name	Map Unit Symbol	Soil Series	Taxonomic Class (USDA Soil Taxonomy)	Soil Order	Diagnostic Subsurface Horizons (Depth)	Physiographic Setting	Buried-Site Probability
Wrightwood-Morical, dry families, association 2%–30% slopes	BeDE	Wrightwood	coarse-loamy, mixed, superactive, mesic Typic Haploxeralfs	Alfisols	Argillic (8–236 centimeters)	Wrightwood soils are on terraces and have slopes of 2%–9%. They formed from older, mixed alluvium dominantly from granitic sources. Elevations are 3,900–4,300 feet.	very low to none
	BeDE	Morical	fine-loamy, mixed, superactive, mesic Vitrandic Argixerolls	Mollisols	Argillic (58–94 centimeters)	Morical soils are on ridgetops, mountain slopes, and foothills. Slopes are 0%–90%. They formed in residuum and colluvium mixed with volcanic ash and loess in the surface overlying weathered granite or quartzite lithology. Elevation is 2,000–3,200 feet.	very low to none

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Table 5.5-10
Number of Soil Map Units for Each Soil Order/Buried-Site Probability Level Combination

SoilOrder	Buried-Site Probability			
	<i>High</i>	<i>Medium</i>	<i>Low</i>	<i>Very Low to None</i>
Alfisols	—	—	4	30
Aridisols	—	—	—	5
Entisols	13	22	16	6
Inceptisols	—	—	4	—
Mollisols	1	4	7	6
Total	14	26	31	47

Very Low to No Potential

Areas with very low to no potential have underlying deposits that predate human occupation of the landscape (generally latest Pleistocene or earlier) or consist of exposed bedrock, borrow pits, heavily eroded land, or water. Landforms are dominated by the upland terrain of ridge crests, mountain slopes, and foothills and older alluvial fans, fan remnants, and interfan areas. Soil series or phases (texture, slope gradient, or erosion class combinations within a soil series) with very low to no potential include Bryman, Bull Trail, Chuckawalla, Cieneba, Fallbrook, Friant, Greenfield, Helendale, Modesto, Monserate, Pachappa, Placentia, Ramona, Morical, Pacifico, and Wrightwood (see Table 5.5-9). These soils are dominated by Alfisols (soils with an argillic horizon and high base saturation) but also include some Aridisols (soils that are not moist for 90 or more consecutive days during most years; Aridisols in the Proposed Project area all have argillic horizons), Entisols (young, weakly developed soils), and Mollisols (dark-colored soils that are high in organic matter and that mainly form under grasslands) (see Table 5.5-9). Argillic horizons in the Proposed Project area generally date to the latest Pleistocene at a minimum, and they are thus unlikely to contain buried archaeological sites. Small, thin pockets of colluvium may exist in footslopes in this probability zone, so there is some potential for buried cultural deposits, but the likelihood is remote.

Low Potential

Areas of low potential consist mainly of soils formed in mountainous terrain, residual soils (soils weathered from bedrock), and dissected fan terraces. Soil series or phases (texture, slope gradient, or erosion class combinations within a soil series) with low potential include Carsitas, Cieneba, Friant, Gorgonio, Greenfield, Hanford, Osito, Morical, San Emigdio, Saugus, Sheephead, Sosoba, Tujunga, and Vista (see Table 5.5-9). Low-potential areas are dominated by Entisols, especially ones associated with high-energy environments characterized by coarse rock fragments (cobbles and gravel) but also include Mollisols, Alfisols, and Inceptisols (see Table 5.5-9). Inceptisols are characterized by the presence of a cambic horizon (an incipient B horizon, one marked by the development of some soil structure, but with little or no accumulation of translocated clay); these soils commonly have a higher probability for buried

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sites, but these Inceptisols are formed in residual soils weathered directly from bedrock and, thus, have a low potential for buried sites.

Medium Potential

Areas of moderate potential are associated with alluvial fans, fan aprons, valley fills, dissected remnants of alluvial fans, floodplains, and drainageways. Soil series or phases (texture, slope gradient, or erosion class combinations within a soil series) with medium potential include Cajon, Carsitas, Gorgonio, Grangeville, Hanford, Hesperia, Metz, Myoma, San Emigdio, Sosoba, and Tujunga. These soils are dominated by Entisols but also include some Mollisols (see Table 5.5-9).

High Potential

Areas of high potential are restricted to the alluvial stream terraces and floodplains, terrace escarpments, alluvial fans (fan skirts, fan aprons, and inset fans), and areas with aeolian deposits. Soil series or phases (texture, slope gradient, or erosion class combinations within a soil series) with high potential include Avawatz, Cajon, Carrizo, Metz, Myoma, Oak Glen, San Emigdio, Tujunga, and Wapi (see Table 5.5-9). All but one of these series are Entisols, weakly developed alluvial soils that lack a B horizon. Oak Glen is a Mollisol.

Summary and Conclusions

The potential for archaeological sites to be buried was determined by compiling and analyzing soil map data and soil descriptions. The potential for each soil map unit in the buried-site sensitivity model was identified as either (1) very low to none, with underlying deposits that predate human occupation of the landscape or consist of exposed bedrock, borrow pits, heavily eroded or gullied land, or water; (2) low, with underlying deposits that predate human occupation of the landscape, are high-energy deposits unlikely to contain cultural materials in a primary context, or are residual soils (soils weathered in place above bedrock); (3) medium, with underlying deposits that are most likely terminal Pleistocene or Holocene in age, possibly have intact buried surfaces, and have sediments that are likely to have been deposited in a low-energy environment; or (4) high, with underlying soils/sediment that most likely date to the terminal Pleistocene or Holocene, represent low-energy deposits, and have a high potential to contain buried intact geomorphic surfaces that could have been used by humans in the past.

The buried-site model presented graphically in Figures 5.5-13 through 5.5-15 provides information for devising an archaeological monitoring plan during construction. Table 5.5-11 summarizes the acreage and percentage of each probability zone by Proposed Project component. High- and medium-probability zones account for just over half (53%) of the total project area. Most of the high- and medium-probability zones are located in mountain valleys, such as Cajon Pass, and in valley bottoms, where low-energy alluvium regularly accumulates. Buried archaeological sites have been found in similar settings outside of the Proposed Project area in the Moreno and San Jacinto Valleys and also in areas of Cajon Pass. Most of the areas with low or very low to no potential for buried sites are located in mountainous

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areas, where soil is not accumulating, such as parts of the Transverse Ranges and the Badlands between Moreno Valley and the San Gorgonio Valley.

**Table 5.5-11
Areas of Buried-Site-Probability Zones, by Project Component**

Project Component	Buried-Site Probability							
	High		Medium		Low		Very Low to None	
	Acreage	%	Acreage	%	Acreage	%	Acreage	%
Adelanto Compressor Station	4	55	—		—		3	45
Adelanto to Moreno	372	16	1,049	46	302	13	575	25
Moreno to Whitewater	90	8	352	30	311	26	430	36
Total	466	13	1,400	40	613	18	1,008	29

Paleontological Resources

Paleontological resources (fossils) are defined as any trace of a past life form. While wood, bones, teeth, and shells are the most common fossils, under certain conditions soft tissues, tracts, and trails may be preserved as fossils.

Fossils are most commonly found in sedimentary rock layers. As such, paleontological sensitivity is correlative with the geologic units encountered, with geologic origin and age of the rock formations being primary contributors (Morton and Miller 2006; Bedrossian et al. 2012; Bortugno and Spittler 1986). Rocks of igneous and metamorphic origin will typically have no fossil remains and therefore no paleontological sensitivity. Sedimentary rocks may have a low to high sensitivity, again depending upon age and mode of deposition. An additional factor is whether the alignment traverses previously disturbed areas or native terrain, which affects the level of previous man-induced disturbance that may be present.

Fifty-nine different geologic formations and/or subunits are traversed by the Proposed Project routes defined within the seven segments. Of these formations/subunits, 13 are igneous and metamorphic bedrock formations (equivalent to 5 miles along the alignment), and 6 are sedimentary bedrock formations (equivalent to 11 miles). Within the non-bedrock sedimentary formations the very young and young (Holocene age—less than 10,000 to 12,000 years) deposits typically have a lower sensitivity since a) paleontological resources are considered older than 5,000 before present (BP), and b) many of these formations are associated with active deposition and erosion which has a detrimental effect on fossil preservation and recovery. These younger deposits make up 72% (equivalent to 69 miles) of the proposed alignment. For some formations (primarily the Holocene formations >5,000 BP) the

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paleontological resource potential remains indeterminate; therefore, 50% of the younger deposits are conservatively assumed to be indeterminate.

5.5.2 Regulatory Setting

The Proposed Project is subject to CEQA and Section 106 of the National Historic Preservation Act. The route of the proposed pipeline passes through the San Bernardino National Forest, which requires a permit to conduct cultural resource studies under the Archaeological Resources Protection Act. Additionally, portions of the Proposed Project also cross BLM-owned land, requiring additional federal approvals. The National Historic Preservation Act requires federal agencies to take into account the effects of an undertaking on historic properties, defined as cultural resources included in or eligible for listing in the NRHP.

National Register of Historic Places Criteria

Determination of NRHP eligibility for cultural resources prior to making a finding of effect is made according to the following criteria:

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association, and

- (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
- (b) that are associated with the lives of persons significant in our past; or
- (c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (d) that have yielded, or may be likely to yield, information important in prehistory or history (36 *Code of Federal Regulations* 60.4).

If cultural resources do not meet the above criteria, they are not historic properties and are not further considered in the Section 106 process.

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California Register of Historical Resources Criteria

For purposes of CEQA, a historical resource is any object, building, structure, site, area, place, record, or manuscript listed in or eligible for listing in the CRHR (*Public Resources Code* [PRC] 21084.1). A resource is eligible for listing in the CRHR if it meets any of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. Is associated with the lives of persons important in our past.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history [PRC 5024.1].

The California Code of Regulations further provides that cultural resources of local significance are CRHR eligible (14 CCR 4852).

Unique Archaeological Resources Criteria

CEQA also requires the lead agency to consider whether the Proposed Project will have a significant effect on unique archaeological resources (even if they are not eligible for listing in the CRHR) and to avoid unique archaeological resources when feasible or mitigate any effects to less than significant levels (California Public Resources Code, Section 21083.2). As used in CEQA,

“a unique archaeological resource” means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Applying the Eligibility Criteria

Historical resources defined by the CRHR criteria listed above (PRC 5024.1) are eligible for listing in the CRHR and include resources determined eligible for listing in the NRHP (14 CCR 4851[a][1]). Additionally, properties that are State Historical Landmarks from Number 770 onward are automatically listed in the

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CRHR. Points of Historical Interest nominated from January 1998 onward are to be jointly listed as Points of Historical Interest and in the CRHR. Landmarks prior to Number 770 and Points of Historical Interest that were nominated prior to 1998 may be listed through an action of the State Historical Resources Commission. Thus, the lead agency may apply the determinations of NRHP eligibility to its findings of historical significance under CEQA. However, cultural resources determined not eligible for listing in the NRHP may still qualify as historical resources under CEQA, and thus, a separate finding that they are not historical resources must be made by the lead agency.

In addition to having significance, resources must have integrity for the period of significance. The period of significance is the date or span of time within which significant events transpired or significant individuals made their important contributions. Integrity is the authenticity of a historical resource's physical identity, as evidenced by the survival of characteristics or historic fabric that existed during the resource's period of significance. Simply put, resources must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance (14 CCR 4852).

Sections 8010–8030 of the *California Health and Safety Code* contain provisions for the protection of Native American cultural resources. In addition, the federal Native American Graves Protection and Repatriation Act contains measures to ensure that Native American human remains and cultural items are treated with respect and dignity. Provisions of the PRC also govern archaeological finds of human remains or other related objects of archaeological or historical interest or value.

PRC 5097.9–5097.996 details the actions to be taken whenever Native American remains are discovered. Section 7050.5 of the *California Health and Safety Code* states that any person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor, except as provided in PRC 5097.99. Any person removing human remains without authority of law or written permission of the person or persons having the right to control the remains under PRC 7100 has committed a public offense that is punishable by imprisonment.

Paleontological Resource Regulations

Paleontology is the study of life in past geologic time based on fossil plants and animals. A number of Federal statutes specifically address paleontological resources, their treatment, and funding for mitigation as a part of federally authorized or funded projects (e.g., Antiquities Act of 1906 (16 U.S.C. 431–433), Federal-Aid Highway Act of 1960 (23 U.S.C. 305)), and the Omnibus Public Land Management Act of 2009 (16 USC 470aaa)). Under California law, paleontological resources are protected by CEQA.

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5.5.3 Significance Criteria

The significance criteria used to evaluate impacts to cultural resources are based on criteria listed in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.). A significant impact would occur if the project would:

- Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature
- Disturb human remains, including those interred outside of formal cemeteries.

5.5.4 Impact Analysis

The boxes in the chart below have been checked accordingly to characterize the level of significance for each CEQA criterion. The rationale for the anticipated significance levels is provided below the chart in each of the corresponding sections.

Would the project:	Potentially Significant Impact	Less Than Significant with APMs Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) *Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?*

Less than Significant Impact with APMs Incorporated. 14 CCR 21084.1 defines historic resources as any object, building, structure, archaeological site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the

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architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing on the CRHR (PRC 5024.1, 14 CCR 4852). Historic resources eligible for listing in the NRHP are automatically eligible for listing in the CRHR; see Section 5.5.2).

At least eight historical resources determined eligible or recommended as eligible for listing on the CRHR and NRHP are present within the 300-foot-wide cultural resources study area identified for the Proposed Project. These include three prehistoric archaeological sites, part of the U.S. Route 66 / National Trails Highway, a historic alignment of the Atchison, Topeka and Santa Fe Railroad, two electrical transmission lines, and the Mary Davis House in the city of Banning. Seven of the resources are located in the Adelanto to Moreno pipeline and one is located in the Moreno to Whitewater pipeline alignment.

The entire cultural resources study area has not been surveyed for cultural resources and additional historical resources may exist there. Historical resources within the construction corridor for the proposed pipeline would be adversely affected by the direct and indirect impacts from the Proposed Project. Trenching, drilling, and access road grading would all directly impact the archaeological sites, the U.S. Route 66 / National Trails Highway, and the historic alignment of the Atchison, Topeka and Santa Fe Railroad, if they are within the construction corridor. The transmission lines and the Mary Davis House are not likely to be directly impacted by the Proposed Project.

All eight historic resources may also be subject to indirect impacts, as well. The archaeological sites may be subject to increased vandalism and looting if they become more easily accessible through new access roads built along the pipeline segments. The five historical-period historic resources may be subject to visual effects and noise and vibration during construction. Prior to Proposed Project implementation, **APM-CUL-1** through **APM-CUL-8** would be implemented to reduce adverse changes to historical resources to less than significant levels.

b) *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

Less than Significant Impact with APMs Incorporated. Archaeological resources that are eligible for listing in the CRHR and NRHP are considered historical resources and subject to the provisions of 14 CCR 15064.5 above. At least three of the historic resources mentioned above are archaeological resources. All three of these archaeological resources are located in the Adelanto to Moreno pipeline segment and are present within the 300-foot-wide cultural resources study area.

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If an archaeological site does not meet the criteria for listing in the CRHR, but does meet the definition of a “unique archeological resource” in PRC 21083.2, the site shall be treated in accordance with the provisions of PRC 21083.2. No archaeological resources that are not eligible for the NRHP or CRHR but could be classified as “unique archaeological resources” were identified within the records search area.

The entire cultural resources study area has not been surveyed for cultural resources and additional archaeological resources may exist there. Archaeological resources within the construction corridor for the proposed pipeline would be adversely affected by the direct and indirect impacts from the Proposed Project, as described above. Prior to Proposed Project implementation, **APM-CUL-1** through **APM-CUL-8** would be implemented to reduce adverse changes to archaeological resources to less than significant levels.

c) *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Less than Significant Impact with APMs Incorporated. The proposed 95-mile pipeline alignment is divided into seven segments extending south and east from Adelanto to Whitewater. It is estimated that the alignment will have roughly 23% high potential, 36% low potential, 5% no potential, and 36% indeterminate potential. The high potential areas are most likely in segments 1 (e.g., Pleistocene older alluvium), 2 (e.g., Miocene Punchbowl Formation), 4 and 5 (both San Timoteo Formation and very old alluvium), where the older Quaternary alluvial fan deposits, and Tertiary marine and non-marine deposits are found. These formations are documented to have yielded numerous vertebrate and invertebrate fossil remains.

All ground-disturbing activities in high potential areas could result in adverse impacts to significant paleontological resources. Given the extent of ground disturbing activities in areas with high paleontological sensitivity, **APM-CUL-9** is provided to further define the paleontological potential of each formation along the alignment. Additionally, **APM-CUL-10** is provided to reduce impacts to paleontological resources during construction to a less than significant level.

d) *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

Less than Significant Impact with APMs Incorporated. Burials have been found in at least one known prehistoric site located within the cultural resources study area. The current pipeline alignment passes through the center of the site, and therefore additional human remains may be encountered during the construction of the pipeline. Additionally, the Adelanto to Moreno pipeline passes near Montecito Memorial Park, a cemetery built in 1925. The proposed pipeline

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alignment passes along Barton Road, just north of the cemetery. The road has been widened from its original historical alignment, and as such, parts of the cemetery may now be buried underneath the modern alignment of Barton Road.

The entire cultural resources study area has not been surveyed for cultural resources and additional historical resources, including historical-period cemeteries and prehistoric archaeological sites with human burials may exist there. Historical resources with human burials within the construction corridor for the proposed pipeline would be adversely affected by direct and indirect impacts from the Proposed Project, as described above. Prior to Proposed Project implementation, **APM-CUL-1** through **APM-CUL-8** would be implemented to reduce adverse changes to historical resources to less than significant levels.

5.5.5 Applicant Proposed Measures

- APM-CUL-1 Native American Traditional Sites and Places.** Additional coordination with Native Americans tribes and individuals will be conducted prior to initiation of the Proposed Project to identify traditional Native American sites and places in the cultural resources study area. These might include locations of on-going religious and ceremonial activities, traditional plant gathering areas, and landscape elements important to the cultural practices of the tribes. This effort will implement the recommendations made by the NAHC to follow-up by telephone and in writing with the tribes and entities named by the NAHC. Any information learned during the follow-up will be considered during subsequent identification, evaluation, and mitigation efforts. This information will also be available to the CEQA lead agency and federal lead agency for use during government-to-government Native American consultation for the Proposed Project.
- APM-CUL-2 Built-Environment Historical Resources.** Local historical societies and other repositories of information regarding cultural resources of the historical-period will be consulted prior to initiation of the Proposed Project. Any new information will augment the information already gathered during the records search and archival research.
- APM-CUL-3 Identify Unrecorded Cultural Resources.** A cultural resources survey of the cultural resources study area will be conducted prior to initiation of the Proposed Project. This survey will identify and record all cultural resources observed in the study area.
- APM-CUL-4 Evaluate Cultural Resources.** All cultural resources identified in the cultural resources study area will be evaluated to determine if they meet the definition of a historical resource (i.e., eligible for listing on the CRHR and NRHP). Evaluation will take place prior to initiation of the Proposed Project and will involve developing and implementing a project-specific evaluation plan. This plan will include a research design to identify

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important research topics and periods of significance of all historical-period and archaeological resources within the cultural resources study area, a plan of work describing the field and laboratory methods to be used for the study, provisions for a technical report of findings, and a curation agreement for any artifacts recovered. When feasible, evaluations will be based on survey data and preliminary archival research. In some instance, evaluation of historical-period structures and buildings may require additional archival research, and in the case of archaeological sites, evaluation may require test excavation and artifact analysis.

APM-CUL-5 Assess Effects of the Project on Historical Resources. Once all historical resources are identified (i.e., cultural resources eligible for listing on the CRHR or NRHP), the effects of the Proposed Project on these resources will be assessed prior to initiation of the Proposed Project. This assessment will take into account significant direct effects from construction and other earth-moving activities, as well as indirect effects, such as visual effects caused by permanent changes to the landscape or in the case of archaeological sites, increased site vandalism encouraged by enhanced access to sites that were previously inaccessible.

APM-CUL-6 Treatment of Historical Resources. A treatment plan will be prepared and implemented prior to initiation of the Proposed Project. The treatment plan will describe the course of action necessary to reduce Proposed Project impacts to a less than significant level for each historical resource that will be affected. Avoidance, when feasible, is the preferred treatment of all historical resources. For historical resources that cannot be avoided, the treatment plan will identify the course of action needed to reduce Proposed Project effects to a less than significant level. The treatment plan will include a research design, a plan of work describing the field and laboratory methods to be used for the study, provisions for a technical report of results, and a curation agreement for any documents created and artifacts recovered.

APM-CUL-7 Unanticipated Discovery Plan. An unanticipated discovery plan will be prepared and implemented prior to construction to insure that cultural resources inadvertently discovered during Proposed Project implementation are treated properly. The unanticipated discoveries plan will include a provision for archaeological monitoring during earth-moving activities. Specifically, archaeological monitoring will be conducted in all high- and medium-probability areas as identified on Table 5.5-11. Partial monitoring will be conducted for all low-probability areas, especially if pockets of colluvial footslopes are observed in the field. Areas with very low to no potential for buried sites should be spot-checked opportunistically by archaeological monitors. In addition to identifying where monitoring will occur, the plan will also identify the types

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of cultural resources that might be expected, and treatment protocols. The plan will also include communication protocols for notifying all relevant parties and agencies of any unanticipated discoveries. The plan will also include a provision for developing and implementing a construction worker awareness training program designed to teach construction personnel the protocols to follow if unanticipated discoveries are made.

APM-CUL-8 Treatment of Human Remains. If human remains are discovered, all ground-disturbing activities will cease in the immediate area and the Riverside or San Bernardino County Coroner will be contacted. Disposition of human remains and any associated grave goods, if encountered, would be in accordance with procedures and requirements set forth in California Health and Safety Code Section 7050.5 and PRC 5097.91 and 5097.98, as amended.

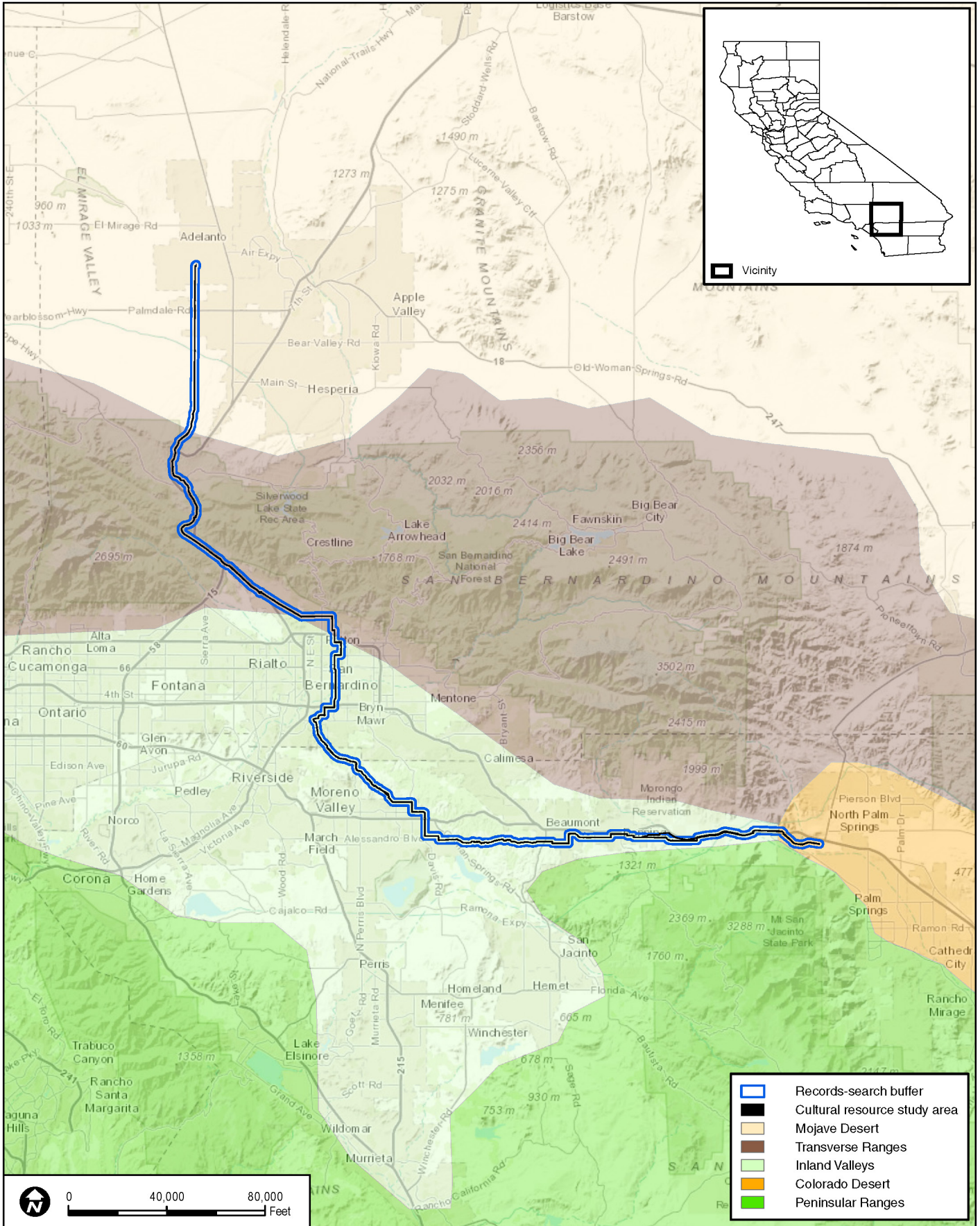
APM-CUL-9 Paleontological Literature Review and Records Search. The Applicant will conduct a paleontological literature review and resources records search for the proposed alignment to further define the potential for impacts to paleontological resources during ground disturbing activities. The records search will include available records at the San Bernardino County Museums and the Los Angeles County Natural History Museum. The results of the records search will be compiled into a paleontology report identifying the areas of high paleontological sensitivity for the Proposed Project.

APM-CUL-10 Paleontological Mitigation Plan. Prior to construction, a Mitigation Plan will be prepared for the Proposed P, including the following components:

- Preconstruction surveys in areas of high paleontological sensitivity
- Establishment of preconstruction coordination procedures and protocols
- Implementation of a training program for construction personnel
- Monitoring for ground-disturbing activities in areas of high paleontological sensitivity
- Establishment of sampling and data recovery procedures
- Development of a repository plan for curation of recovered materials
- Preparation of mitigation monitoring and reporting guidelines and protocols.

5.5.6 References

Refer to Appendix C for Section 5.5 references.



SOURCE: SOURCE: SoCalGas 2014, <http://services.arcgis.com/arcgis/services>

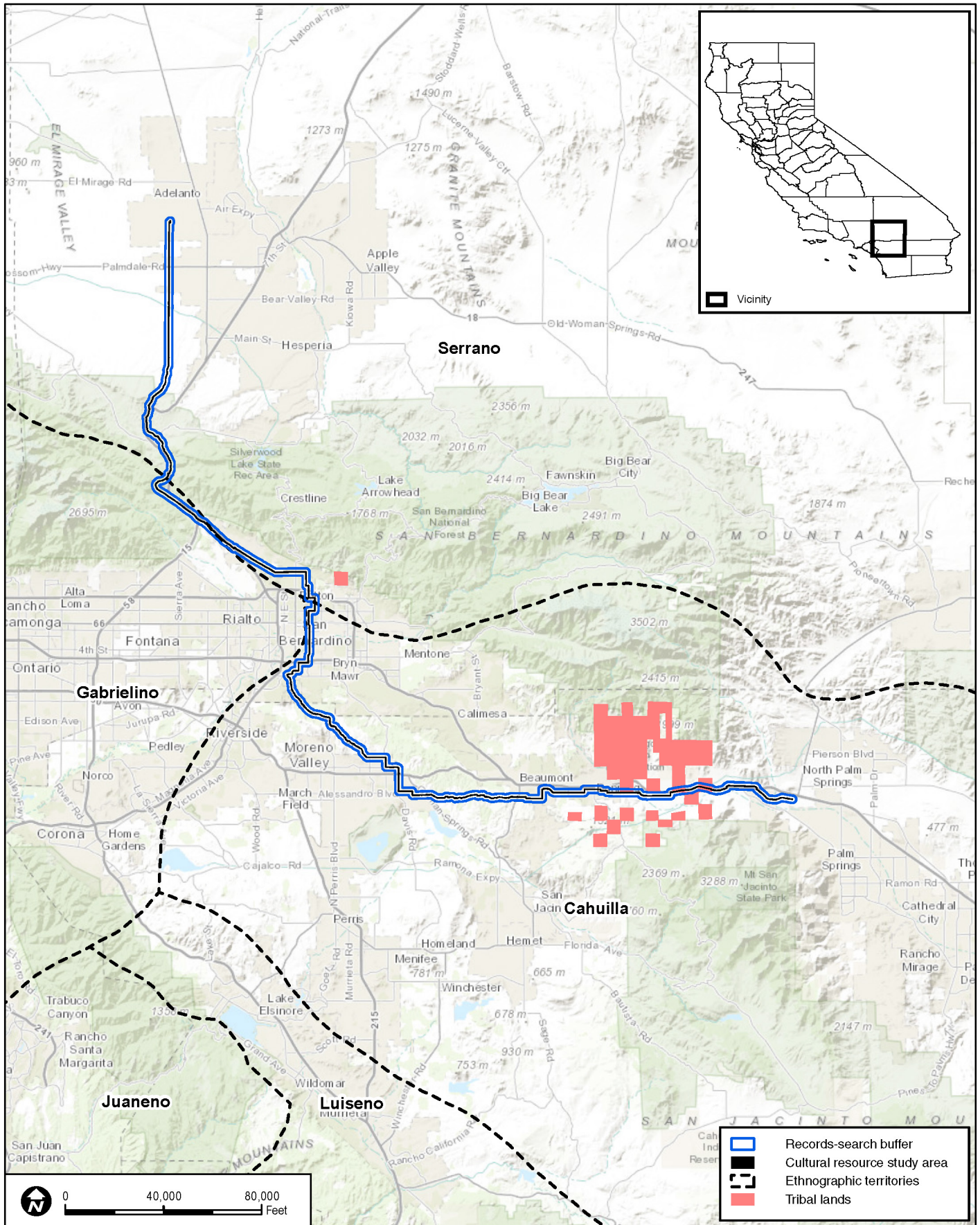
FIGURE 5.5-1
Geomorphic Provinces of Southern California Crossed by the Proposed Pipeline







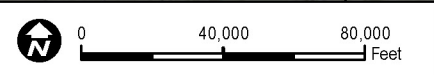
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-  Records-search buffer
-  Cultural resource study area
-  Ethnographic territories
-  Tribal lands



SOURCE: SoCalGas 2014, ESRI 2013, <http://services.arcgis.com/arcgis/services>

FIGURE 5.5-2

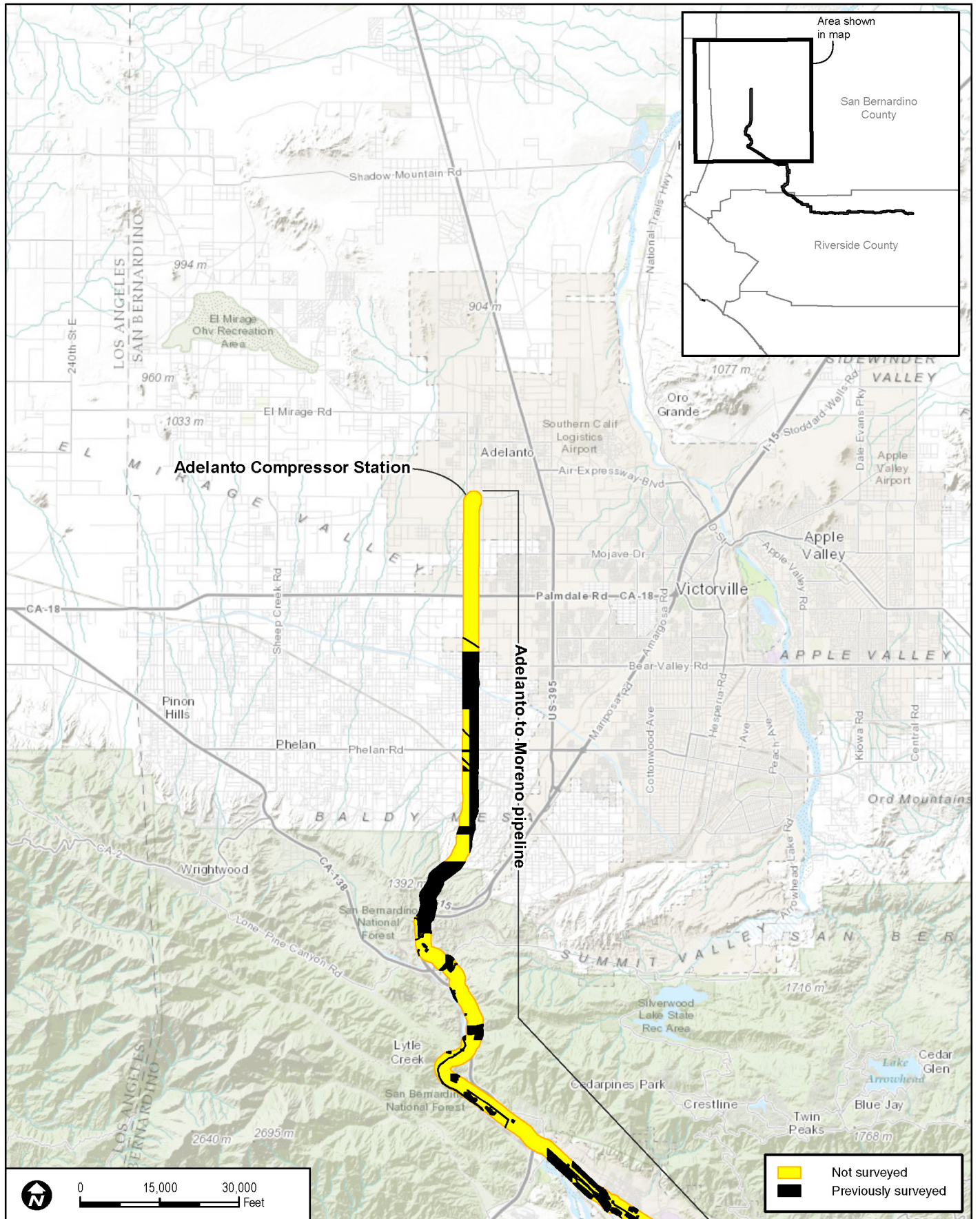
Ethnographic Boundaries of Native American Tribes Crossed by the Proposed Pipeline (after Kroeber 1925)

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SOURCE: SoCalGas 2014, <http://services.arcgisonline.com/arcgis/services>

FIGURE 5.5-3

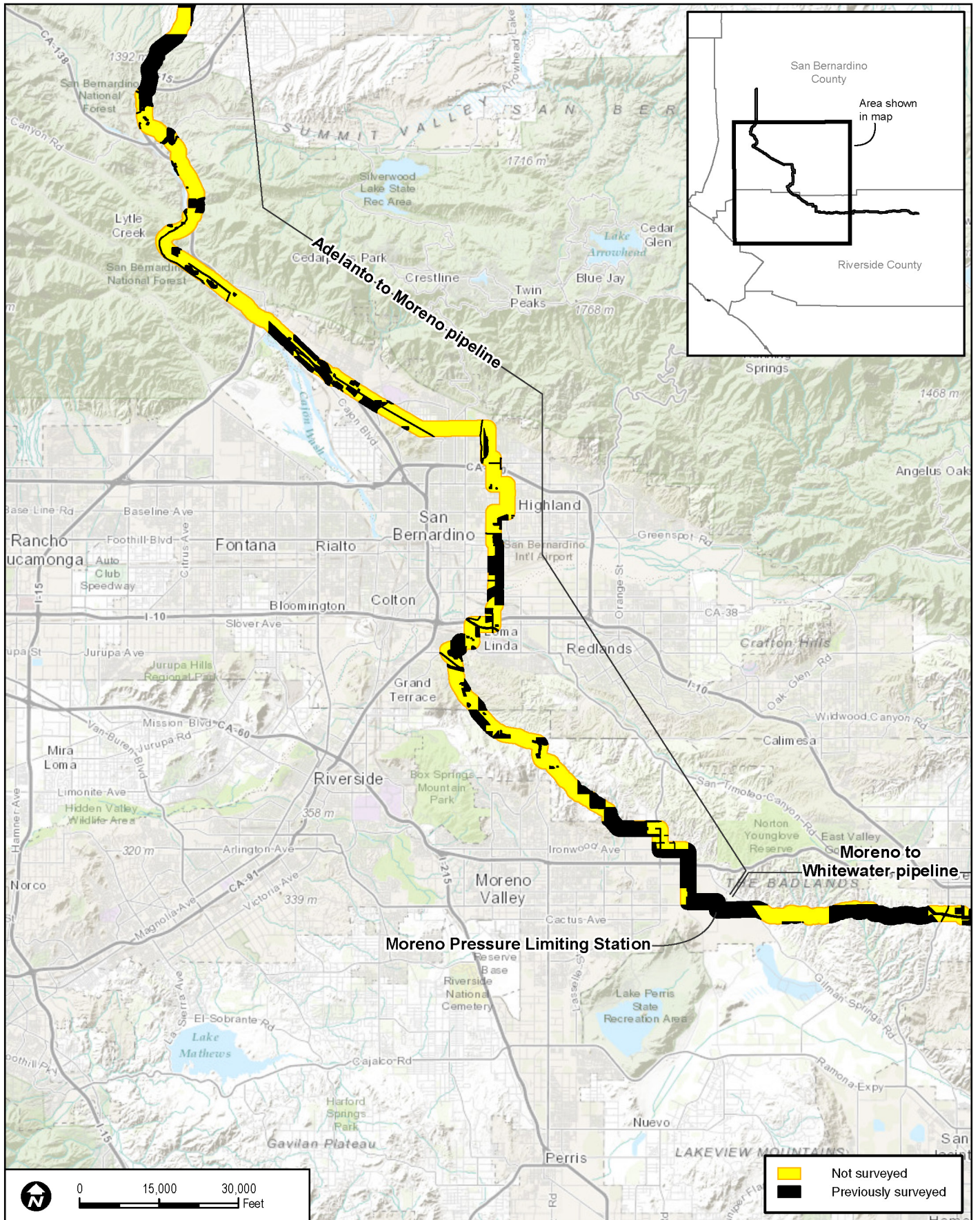
Previous Cultural Resource Studies Conducted in the Records-Search Area (Map 1 of 3)



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SOURCE: SoCalGas 2014, <http://services.arcgis.com/arcgis/services>

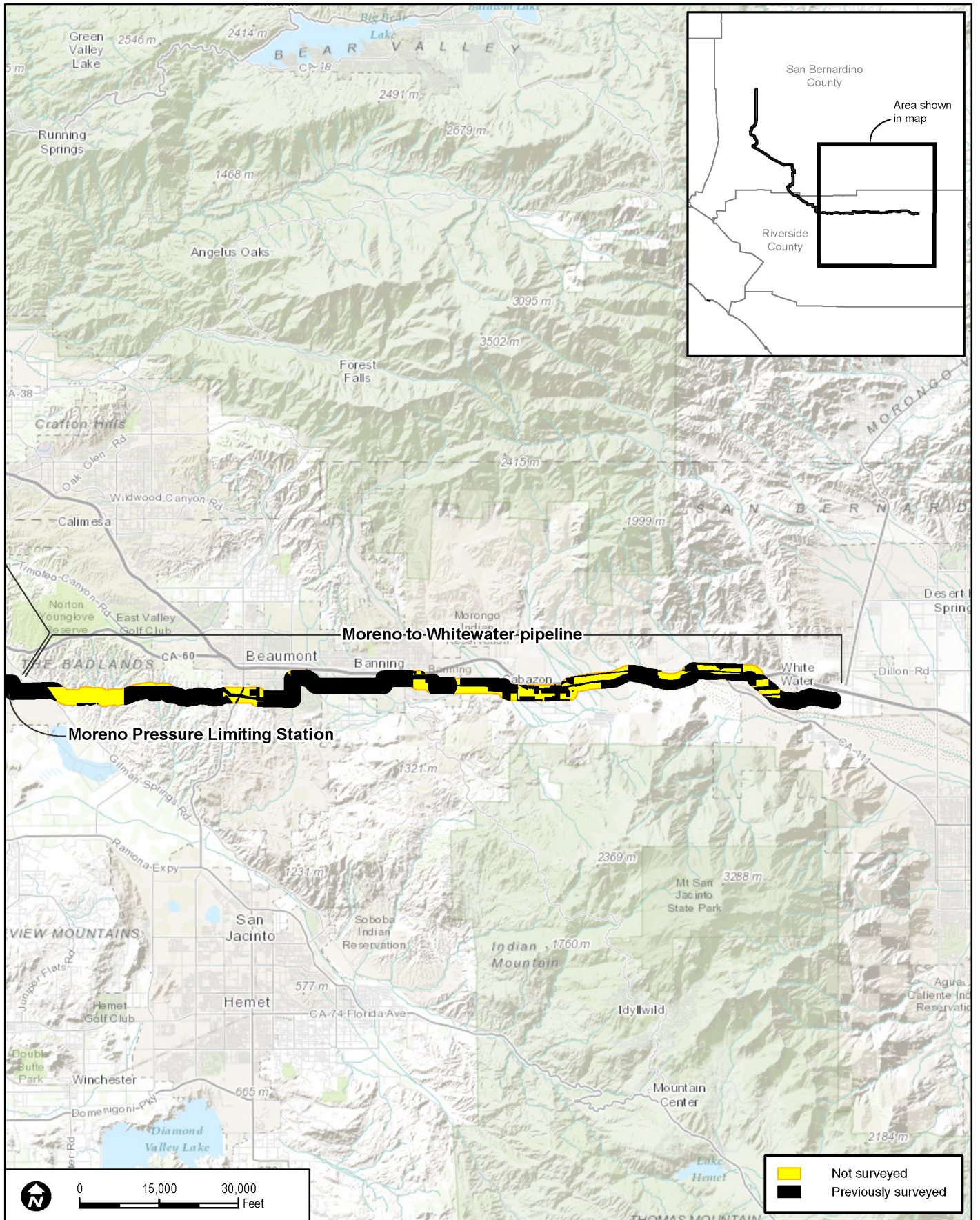
FIGURE 5.5-4
Previous Cultural Resource Studies Conducted in the Records-Search Area (Map 2 of 3)



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SOURCE: SoCalGas 2014, <http://services.arcgisonline.com/arcgis/services>

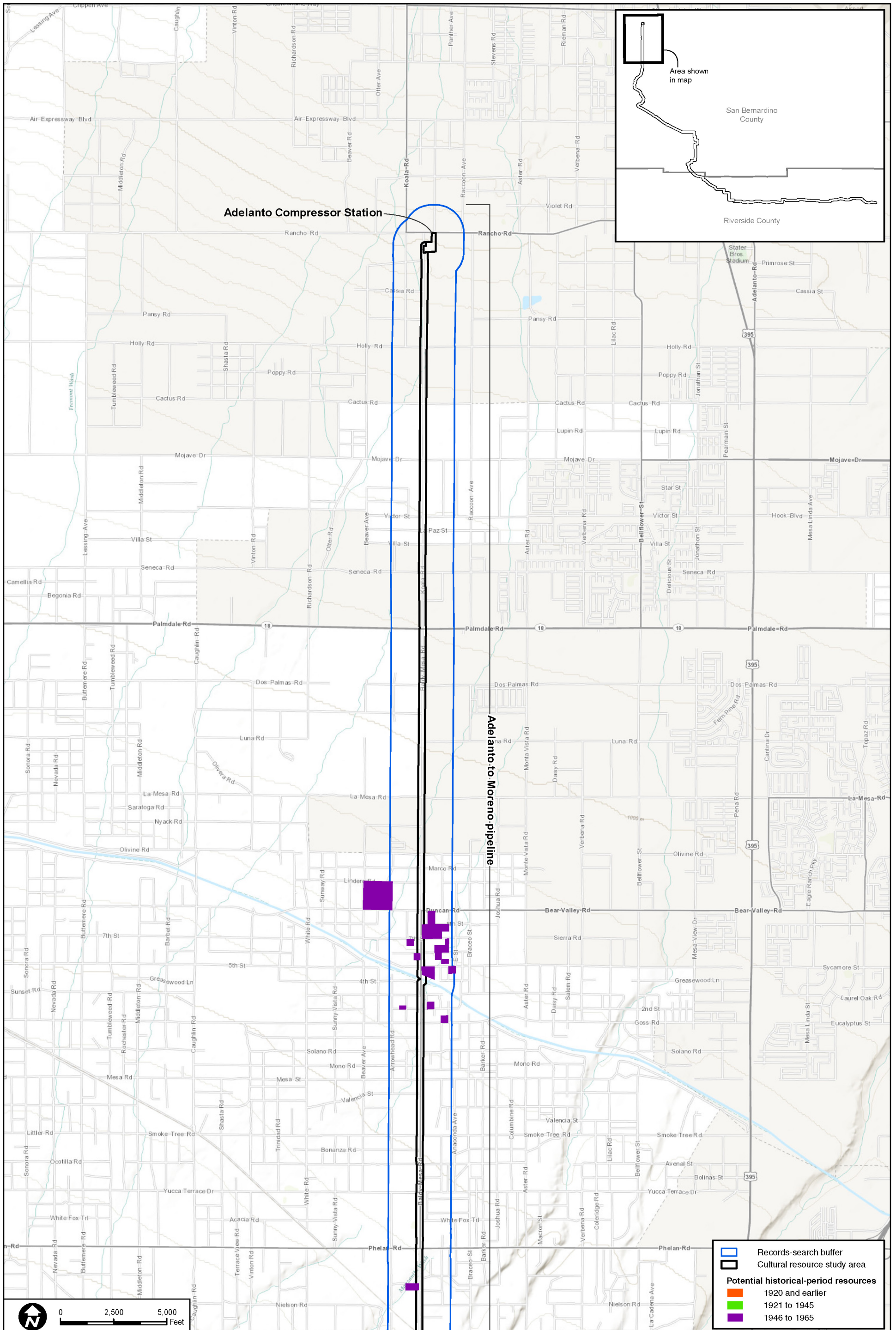
FIGURE 5.5-5
Previous Cultural Resource Studies Conducted in the Records-Search Area (Map 3 of 3)



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SOURCE: SoCalGas 2014, <http://services.arcgis.com/arcgis/services>

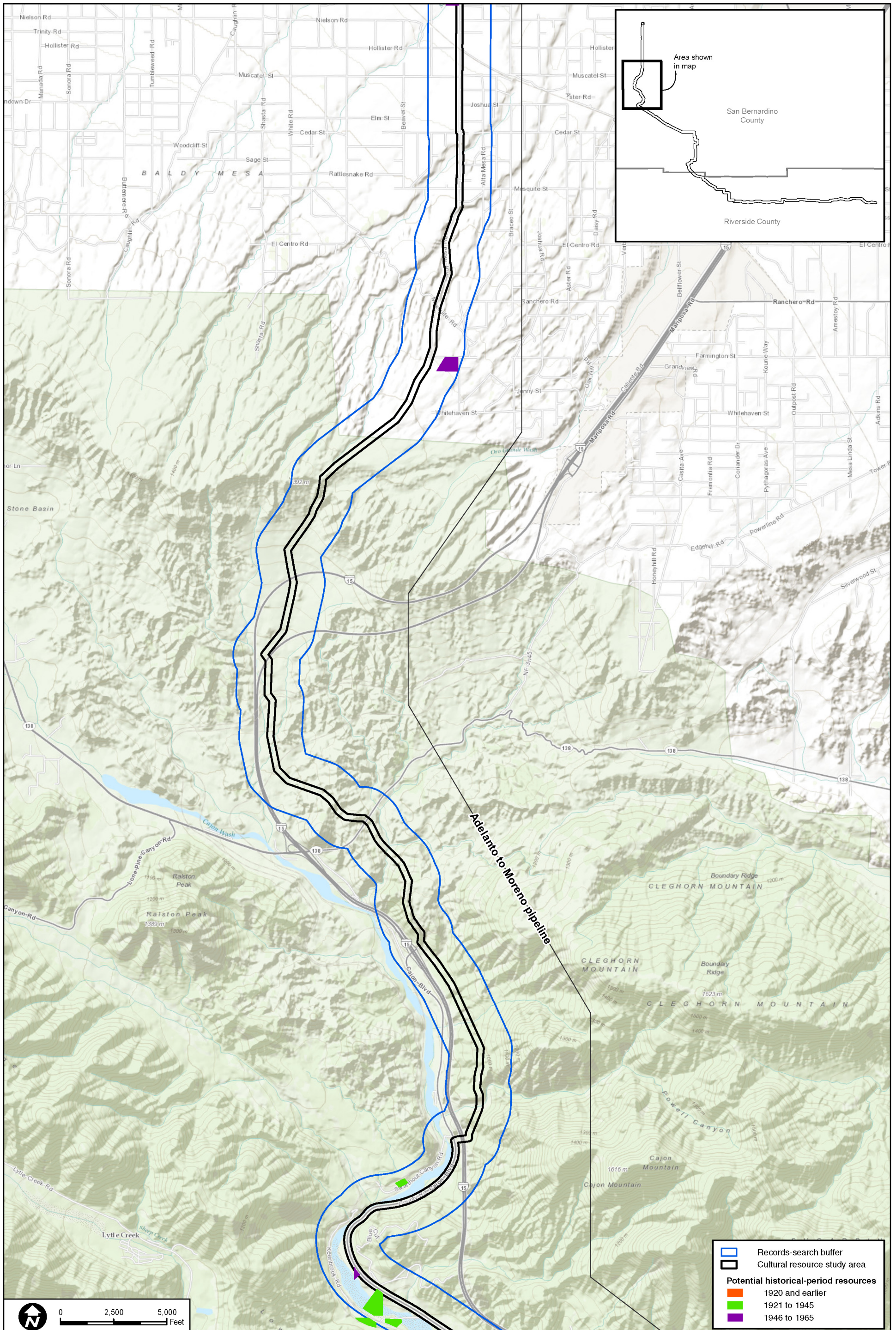
FIGURE 5.5-6

Assessor's Parcel Information Showing Potential Historical-Period Resources (Map 1 of 7)

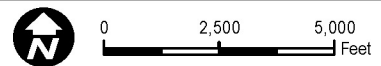


North-South Project

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	Records-search buffer
	Cultural resource study area
Potential historical-period resources	
	1920 and earlier
	1921 to 1945
	1946 to 1965



SOURCE: SoCalGas 2014, <http://services.arcgis.com/arcgis/services>

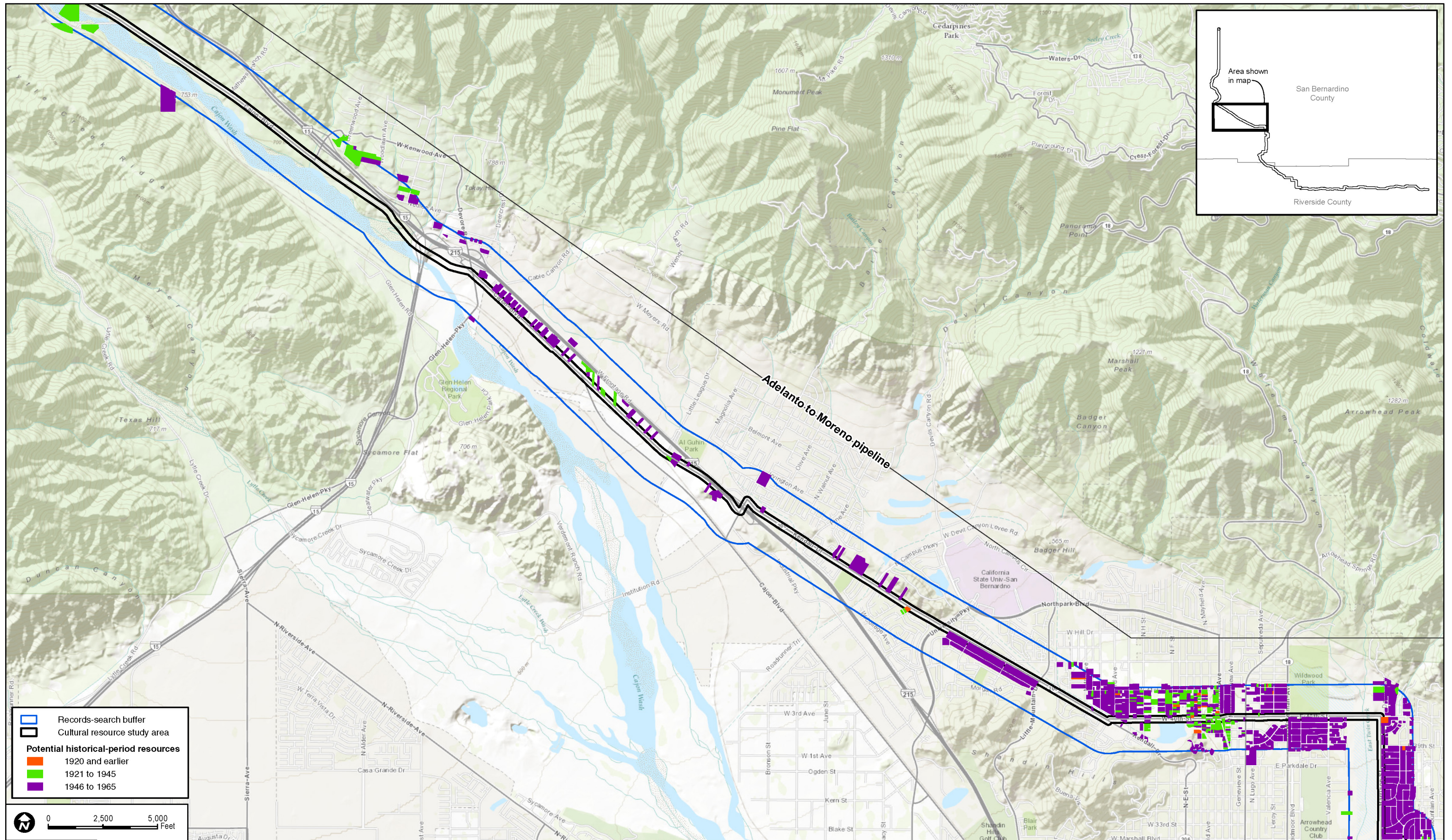
Assessor's Parcel Information Showing Potential Historical-Period Resources (Map 2 of 7)

FIGURE 5.5-7

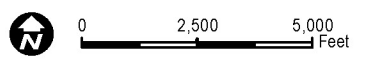


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- ▭ Records-search buffer
- Cultural resource study area
- Potential historical-period resources**
- ▭ 1920 and earlier
- ▭ 1921 to 1945
- ▭ 1946 to 1965



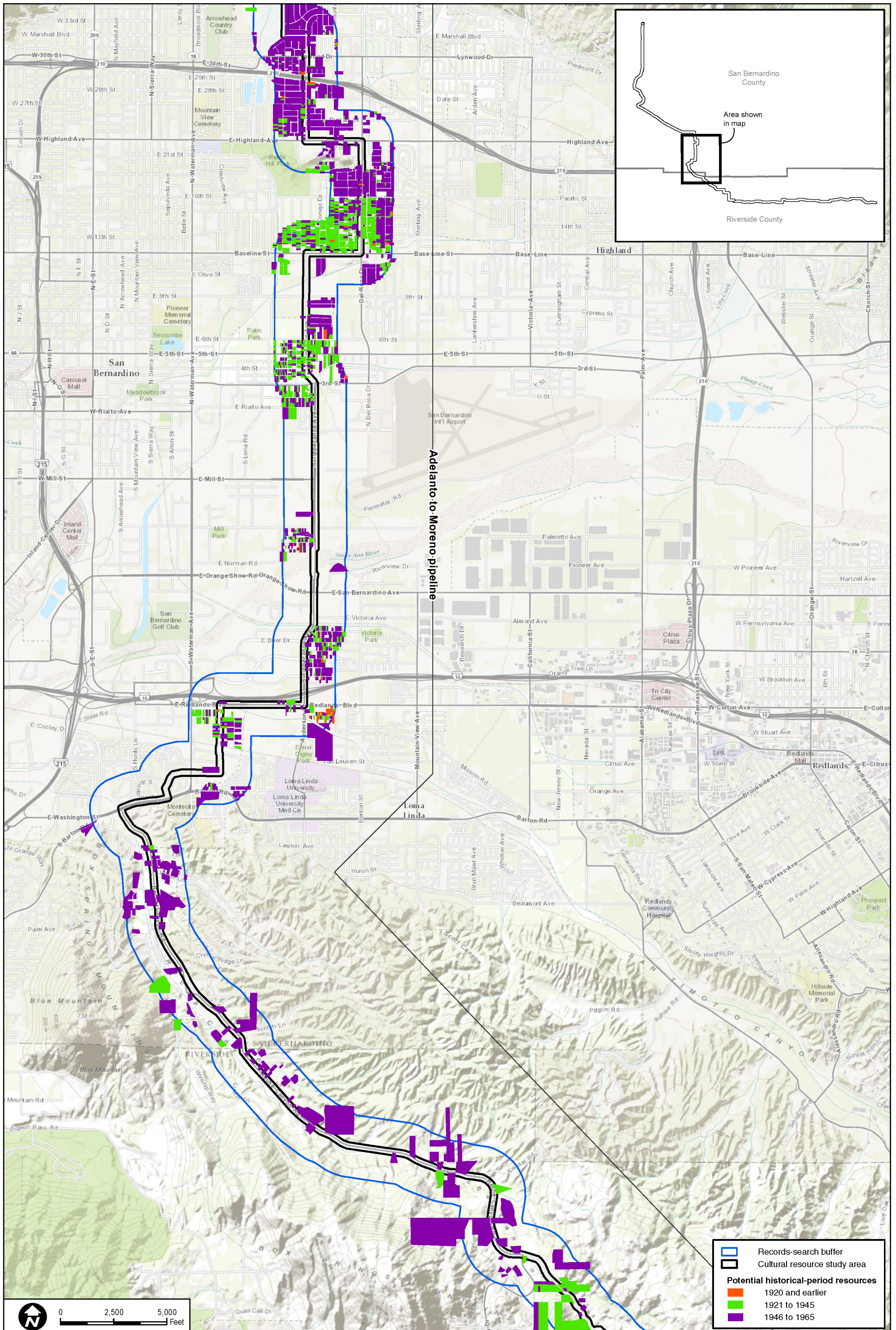
SOURCE: SoCalGas 2014, <http://services.arcgisonline.com/arcgis/services>



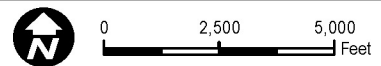
North-South Project

FIGURE 5.5-8
Assessor's Parcel Information Showing Potential Historical-Period Resources (Map 3 of 7)

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	Records-search buffer
	Cultural resource study area
Potential historical-period resources	
	1920 and earlier
	1921 to 1945
	1946 to 1965



SOURCE: SoCalGas 2014, <http://services.arcgis.com/arcgis/services>

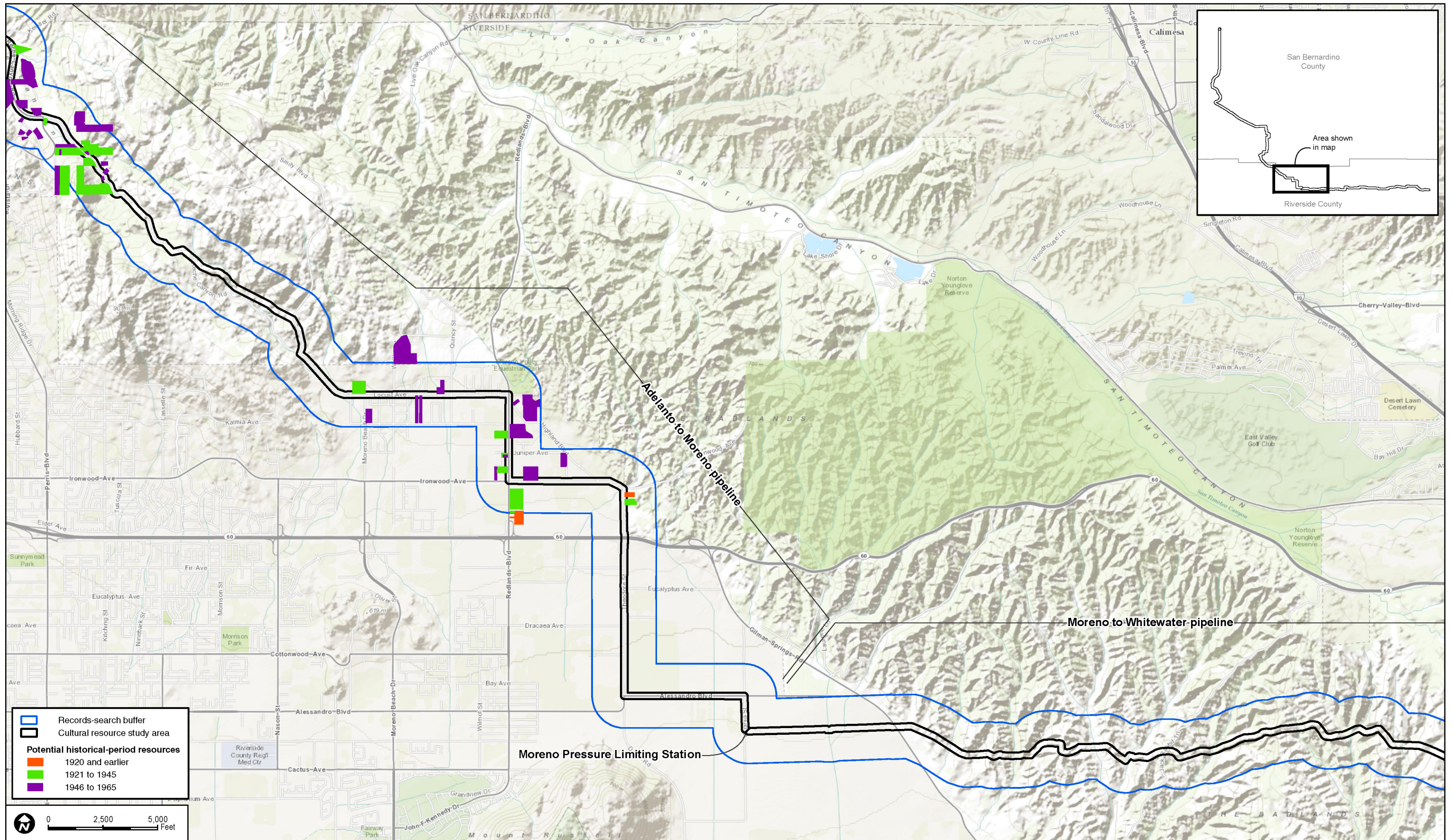
FIGURE 5.5-9

Assessor's Parcel Information Showing Potential Historical-Period Resources (Map 4 of 7)

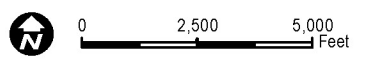


North-South Project

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- ▬ Records-search buffer
- Cultural resource study area
- Potential historical-period resources**
- 1920 and earlier
- 1921 to 1945
- 1946 to 1965



SOURCE: SoCalGas 2014, <http://services.arcgisonline.com/arcgis/services>

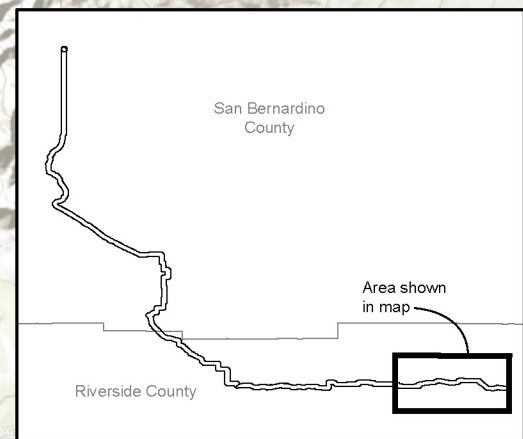
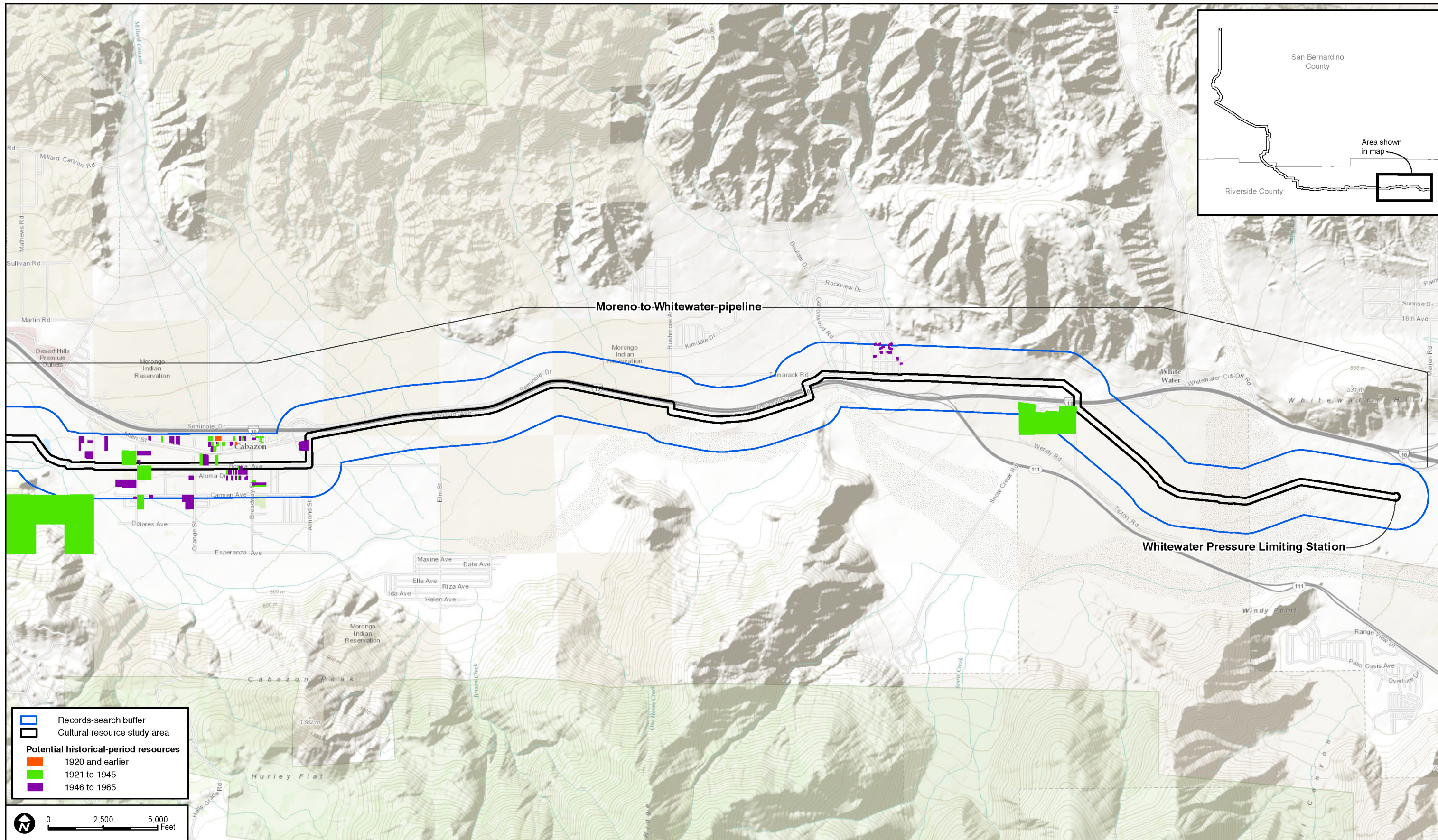


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FIGURE 5.5-10
Assessor's Parcel Information Showing Potential Historical-Period Resources (Map 5 of 7)

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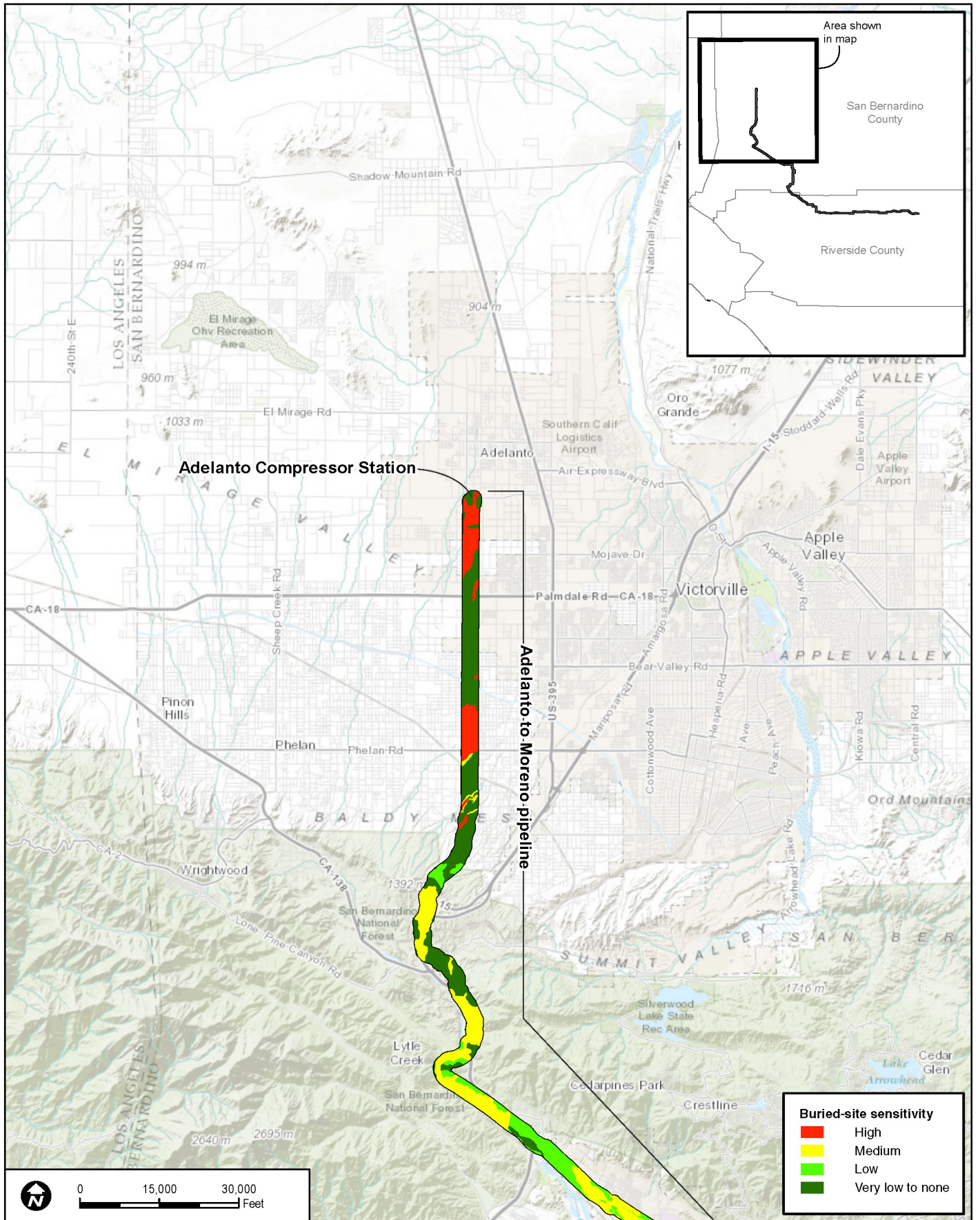
SOURCE: SoCalGas 2014, <http://services.arcgis.com/arcgis/services>



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FIGURE 5.5-12
Assessor's Parcel Information Showing Potential Historical-Period Resources (Map 7 of 7)

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SOURCE: SoCalGas 2014, <http://services.arcgisonline.com/arcgis/services>

FIGURE 5.5-13

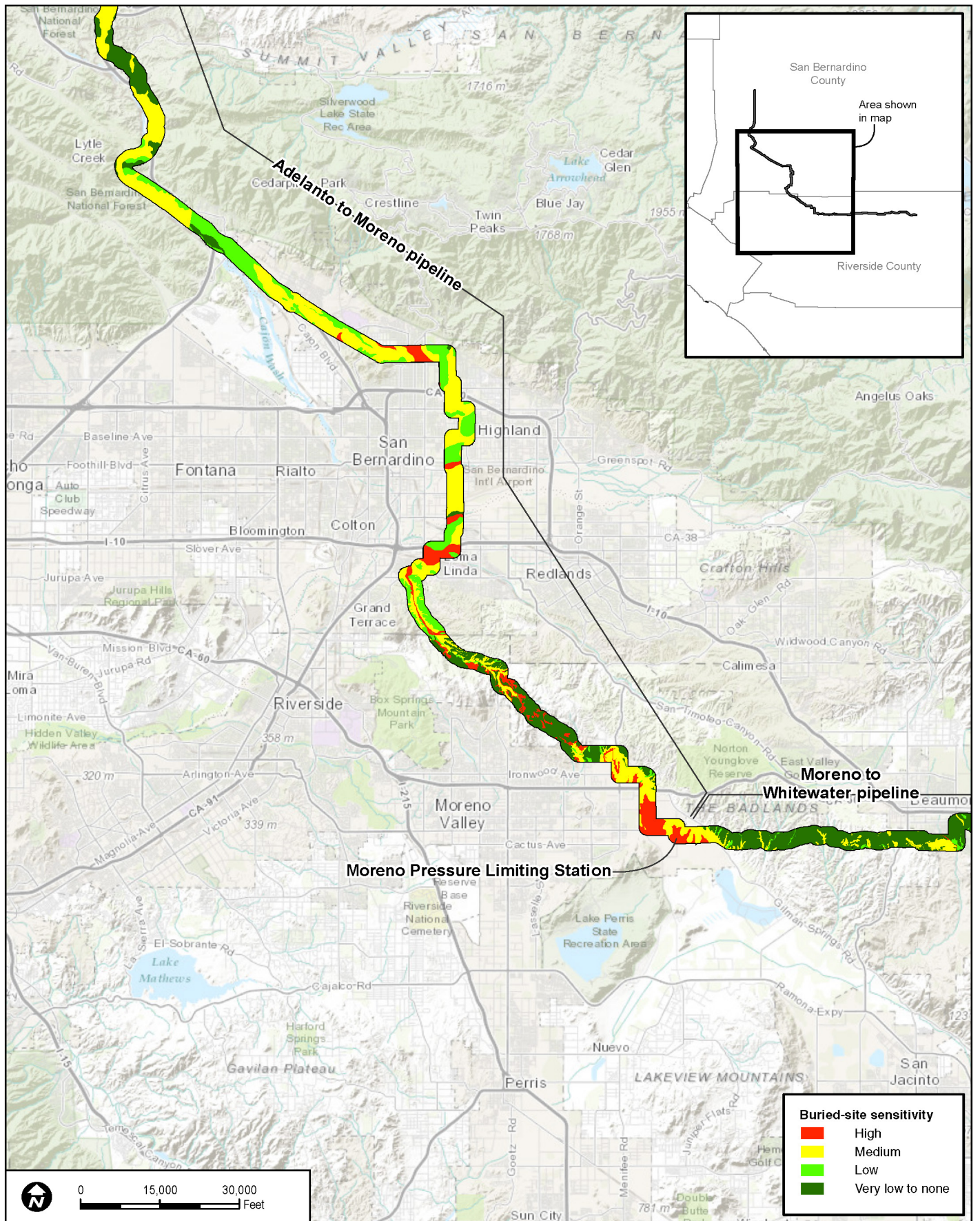
Buried-Sites Sensitivity Map, Northern Portion of the Project Area



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SOURCE: SoCalGas 2014, <http://services.arcgis.com/arcgis/services>

FIGURE 5.5-14

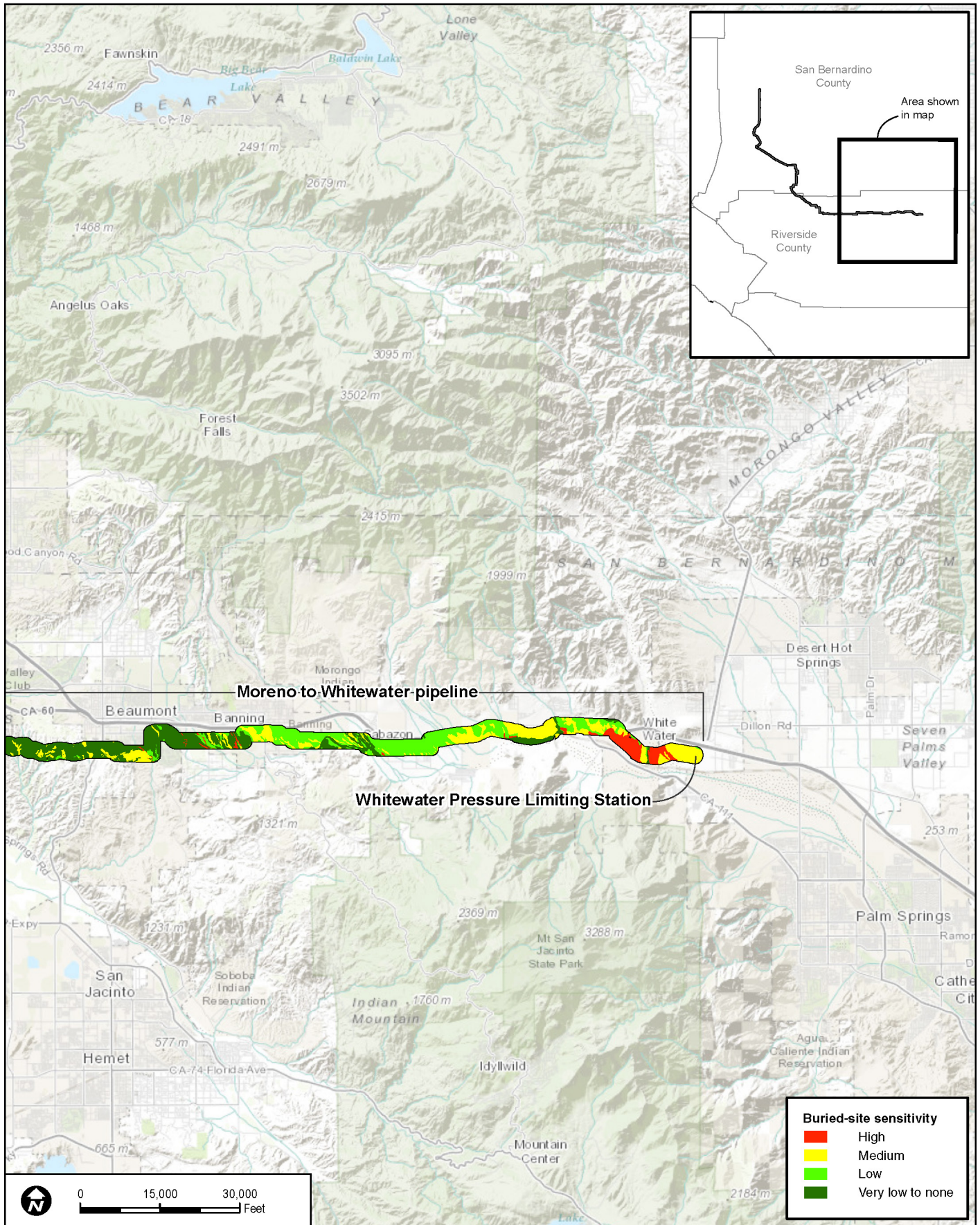
Buried-Sites Sensitivity Map, Central Portion of the Project Area



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SOURCE: SoCalGas 2014, <http://services.arcgis.com/services>

FIGURE 5.5-15
Buried-Sites Sensitivity Map, Eastern Portion of the Project Area



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5.6 Geology, Soils, and Seismicity

This section provides an overview of geological and seismic conditions, evaluates potential impacts associated with the Proposed Project, and provides APMs. This section was prepared utilizing available documents and maps published by the U.S. Geological Survey (USGS), California Department of Conservation, California Geological Survey (CGS), the County of San Bernardino, and the County of Riverside, as well as other applicable sources.

5.6.1 Environmental Setting

Geomorphology

The proposed alignment crosses three California geomorphic provinces. Approximately 10 miles of the alignment traverses the Mojave Desert Province to the north, 6 miles extends through the east-west-trending Transverse Ranges Province, and the final 80 miles of the alignment traverses the northwest-trending Peninsular Ranges Province (see Figure 5.5-1). Significant active and potentially active faults (CGS 2010) and seismic activity are characteristic of the Peninsular and Transverse Ranges Provinces. The Mojave Desert Province extends northward from the Cajon summit and extends northward beyond the City of Adelanto. From Cajon Summit south to approximately the SR-210/I-15 intersection, the Transverse Ranges Province and the remainder of the proposed alignment are within the Peninsular Ranges.

Faulting and Seismicity

Southern California active faulting is dominated by the intersection of the Transverse and Peninsular Ranges, with the orientation and activity resulting from strain that is produced by the relative motions of the Pacific and North American Tectonic Plates. This strain is relieved mainly by right-lateral strike-slip faulting on the San Jacinto-San Andreas (and related) fault systems, as well as the left-lateral thrust faulting on the Sierra Madre-Cucamonga system (see Figure 5.6-1). Effects of this structural deformation include mountain building, basin development, widespread regional uplift, and earthquake generation.

Numerous major earthquakes have impacted the Proposed Project area, including the 1992 Big Bear (M6.5) and Landers (M7.3) events, the 1812 Wrightwood (M7.5?), the 1857 Fort Tejon (M7.9?), 1899 Cajon Pass (M5.7?), 1923 North San Jacinto (M6.3), and the 1970 Lytle Creek (M5.2) earthquakes (SCEC 2014). The absence of a large historic earthquake centered in the San Bernardino Valley suggests the theory of a “seismic gap” in this zone that could portend the area is overdue for a moderate to large earthquake. The faults mentioned above, in particular the San Andreas and San Jacinto faults, are capable of generating approximately M7.0 to 7.5 events.

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Geologic Units

Over the 95-mile length of the Proposed Project, regional geology maps (Morton and Miller 2006; Bedrossian et al. 2012; Bortugno and Spittler 1986) indicate that 55 different geologic formations or sub-units are traversed by the proposed alignment (see Figure 5.6-2). Of these formations, 10 are igneous and metamorphic formations (4% and 4 miles), and 6 are sedimentary formations (10% and 10 miles), each with unique map symbols (e.g., ps = Pelona Schist). Engineering geology and geotechnical properties of these bedrock formations vary, but generally the older igneous, metamorphic, and sedimentary bedrock formations are hard and stable in open trenches. Within the non-bedrock sedimentary formations, the very young and young (Holocene age—less than 10,000 to 12,000 years old with map symbols such as Qa, Qw, and Qy) deposits make up 75% (72 miles) of the proposed alignment. Old and very old alluvium formation (Pleistocene age with map symbols such as Qof and Qvof) deposits make up 12% (11 miles) of the proposed alignment. These alluvial formations in general are loose to dense and have less favorable geotechnical engineering properties than bedrock, although the older alluvial units can perform similarly to softer bedrock.

The proposed alignment will have roughly 25% moderate- to high-quality geotechnical properties and 75% low- to moderate-quality properties. The areas with more bedrock properties are most likely to occur in Segments 2 (e.g., Pelona Schist, quartz diorite, Miocene Punchbowl Formation) and 5 (both San Timoteo Formation and very old alluvium). In these areas of the proposed alignment, igneous, metamorphic, and sedimentary bedrock, older Quaternary alluvial fan deposits, and Tertiary marine and non-marine deposits are present.

5.6.2 Regulatory Setting

Alquist–Priolo Earthquake Fault Zoning Act of 1972

The Alquist–Priolo Earthquake Fault Zoning Act of 1972 (formerly the Special Studies Zoning Act) regulates development and construction of buildings intended for human occupancy to avoid the hazard of surface fault rupture. The act helps define areas where fault rupture is most likely to occur. The act groups faults into categories of active, potentially active, and inactive. Historical and Holocene-age faults are considered active, late-Quaternary- and Quaternary-age faults are considered potentially active, and pre-Quaternary-age faults are considered inactive. These classifications are qualified by the conditions that a fault must be shown to be “sufficiently active” and “well defined” by detailed site-specific geologic explorations in order to determine whether building setbacks should be established.

California Seismic Hazards Mapping Act: Seismic Ground Shaking Hazards

The California Seismic Hazards Mapping Act of 1990 (California Public Resources Code, Sections 2690–2699.6) is designed to protect the public from the effects of strong ground shaking, liquefaction, landslides, other ground failures, or other hazards caused by earthquakes. The act requires site-specific

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geotechnical investigations to identify the hazard and the formulation of mitigation measures before the permitting of most developments designed for human occupancy. Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California (California Geological Survey 19972008), constitutes the guidelines for evaluating seismic hazards other than surface fault rupture and for recommending mitigation measures as required by California Public Resources Code Section 2695(a).

California Building Code

The California Building Code (CBC) (20071) is based on the 1997 Uniform Building Code (UBC), with the addition of more extensive structural seismic provisions. The State of California provides minimum standards for structural design and site development for projects containing buildings for human occupancy through the CBC (20071). The CBC is based on the UBC, which is used widely throughout the United States, when adopted on a state-by-state or district-by-district basis, and has been modified for California conditions with numerous more detailed and/or more stringent regulations.

Chapter 16 of the CBC (20071) reduces impacts associated with exposure of people and structures to seismic hazards, and ensures that structures meet specific minimum seismic safety and structural design standards. Chapter 33 specifies the requirements to be fulfilled for site work, demolition, and construction, including the protection of adjacent properties from damage caused by such work. The CBC requires a site-specific geotechnical study to address seismic issues and identifies seismic factors that must be considered in structural design. Chapter 33 requires all development intended for human occupancy to adhere to regulations pertaining to grading activities, including drainage and erosion control and treatment of expansive soils.

Pipeline Safety Regulations

State and federal regulations pertaining to the pipeline safety are discussed in Section 5.7, Hazards and Hazardous Materials.

5.6.3 Significance Criteria

The significance criteria used to evaluate impacts involving geology, soils, and seismicity are based on criteria listed in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.). A significant impact would occur if the project would:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other

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substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42

- ii. Strong seismic ground shaking
- iii. Seismic-related ground failure, including liquefaction
- iv. Landslides
 - Result in substantial soil erosion or the loss of topsoil
 - Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse
 - Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property
 - Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

5.6.4 Impact Analysis

The boxes in the chart below have been checked accordingly to characterize the level of significance for each CEQA criterion. The rationale for the anticipated significance levels is provided below the chart in each of the corresponding sections.

Would the project:	Potentially Significant Impact	Less Than Significant with APMs Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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Would the project:	Potentially Significant Impact	Less Than Significant with APMs Incorporated	Less Than Significant Impact	No Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) ***Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:***

i) ***Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.***

Less than Significant Impact with APMs Incorporated. The proposed alignment crosses (or passes very near) several geologic faults (active or potentially active) capable of producing earthquake ground rupture. From north to south these include the Cleghorn, San Andreas, Glen Helen, San Jacinto, Beaumont Plain, and San Gorgonio Pass faults (CGS 2010; CDMG 1997). Maximum expected ground displacements in the Proposed Project area have the potential to range from several feet to 20 feet or more. However, expected displacements of several inches to several feet would be more likely. Displacement would have the potential to be predominantly horizontal, predominantly vertical, or both horizontal and vertical (USGS 2008). With implementation of **APM-GEO-1** and **APM-GEO-2** any potential impacts resulting from fault rupture would be reduced to a less than significant level.

ii) ***Strong seismic ground shaking?***

Less than Significant Impact with APMs Incorporated. Based on the state ground motion interpolator (CGS 2014) the estimated peak ground acceleration that would have a 2% chance of occurring within a 50-year period along the proposed alignment ranges from approximately 0.60g (g = force of gravity) near Adelanto (Index Map 1) to 1.30g at Cajon Creek/Lone Pine Canyon (Index Map 8-Blue Cut). This indicates that the potential for significant seismically

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induced ground motion is relatively high within the Proposed Project area. However, with the implementation **APM-GEO-1** and **APM-GEO-3**, impacts associated with strong seismic ground shaking would be reduced to a less than significant level.

iii) Seismic-related ground failure, including liquefaction?

Less than Significant Impact with APMs Incorporated. Earthquakes can cause permanent ground movements and deformation of soil masses due to the properties of the soil, e.g., density and degree of saturation. Liquefaction occurs when saturated, cohesionless (low relative density) materials (usually sand or silty sand) are transformed from a solid to a near liquid state. This phenomenon occurs when moderate to severe seismic ground shaking causes pore-water pressure to increase. Liquefaction usually results in horizontal and vertical movements from loss of strength in the liquefied materials, including earthquake (dynamic) settlement of liquefied materials and overlying dry materials, and post-earthquake settlement.

The expected level of ground shaking in the Proposed Project area is high enough to initiate liquefaction. In addition to sufficiently high seismic shaking levels, the two other key conditions conducive to liquefaction, shallow groundwater and cohesionless sands, are potentially present along portions of the proposed alignment (San Bernardino County 2001; Riverside County 2002). Locations where these conditions have the potential to occur are along Cajon Creek (Segment 3 of the proposed alignment), the southern portion of the San Bernardino Valley (Segment 3 of the proposed alignment), Moreno Valley (Segment 4 of the proposed alignment), and portions of the San Gorgonio Pass (Segments 6 and 7 of the proposed alignment).

Although the proposed alignment includes areas that have the potential to undergo liquefaction, implementation of **APM-GEO-1** and **APM-GEO-4** would reduce any potential impacts associated with liquefaction to a less than significant level.

iv) Landslides?

Less than Significant Impact with APMs Incorporated. Less than 1,200 feet of the proposed alignment are presently mapped as landslide deposits, although numerous formations and sub-units have the potential to be susceptible to landslide failures if disturbed. Specifically, landslides are mapped along SR-60 Index (Segments 5 and 6) associated with the badlands San Timoteo Formation (Morton and Miller 2006; Bedrossian 2012). However, given the relatively small scale of the planned excavations, it is unlikely that landslide movements would be generated by excavation associated with construction activities. Any potential for landslides to occur along or near the proposed alignment would be reduced to less than significant levels by implementation of **APM-GEO-1** and **APM-GEO-5**.

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b) *Would the project result in substantial soil erosion or the loss of topsoil?*

Less than Significant Impact. The proposed alignment generally extends along areas that have already been disturbed, such as roadways or existing utility corridors. Although temporary disturbance of soils would occur in less developed areas during construction, standard construction BMPs would prevent soils disturbance from leading to erosion. Therefore, impacts would be less than significant. **APM-GEO-6** would be implemented to further address soil erosion and loss of topsoil.

c) *Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

Less than Significant Impact with APMs Incorporated. Landslides and liquefaction are discussed above. Lateral spreading is a function of liquefaction susceptibility and lateral spread landslides can occur on relatively shallow slopes. Liquefaction of shallow layers causes a loss of earth material shear strength, allowing the overlying material to move laterally along the liquefied layer across gentle slopes. Areas with lateral spreading potential would most likely be adjacent to drainages where slopes are steep and water would have the potential to accumulate (e.g., along Cajon Creek near Segment 3 of the proposed alignment). Along with soil compressibility, lateral spreading is not readily predictable at this level of study. Subsidence is the gradual downward settling of the land surface with little or no horizontal movement. It can be caused by many different factors. Extracting large fluid volumes (such as water, oil, or gas) from thick layers of poorly consolidated sediments is a principal cause of surface subsidence. Riverside County (2002) has mapped areas susceptible to subsidence and areas of documented subsidence. Areas with young alluvial deposits are considered susceptible, and no alignment areas within Riverside County have documented subsidence. It can be assumed that the same geologic deposit versus susceptibility relationship is true for San Bernardino County as well. Any potential impacts associated with unstable soils or unstable geological units would be reduced to a less than significant level with implementation of **APM-GEO-1** and **APM-GEO-7**.

d) *Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?*

Less than Significant Impact with APMs Incorporated. Expansive soils associated with soils, alluvium, and bedrock formations that contain clay minerals are susceptible to expansion under wetting conditions and contraction under drying conditions. Depending upon the type and amount of clay present in a geologic deposit, these volume changes (shrink and swell) can cause severe damage to slabs, foundations, and concrete flatwork. Expansive soils are not mapped within the Proposed Project area at the regional level. **APM-GEO-8** would be implemented for

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the Proposed Project, which would reduce impacts associated with the presence of expansive soils to a less than significant level.

- e) ***Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?***

No Impact. This issue is not applicable to the Proposed Project, as no septic tanks or sewer alternatives would be constructed as part of the Proposed Project.

5.6.5 Applicant Proposed Measures

APM-GEO-1 Geotechnical Investigation. One or more project-specific geotechnical investigations conducted under the most current state and county guidelines will be completed by a California-licensed geotechnical engineer and California-certified engineering geologist. The investigation will address the Proposed Project design to minimize effects from: adverse soil conditions including any liquefiable or otherwise unstable/consolidation-prone soils; bedrock characteristics; subsidence; earthquake ground shaking; slope instability; subsurface gas; groundwater; fault rupture; and/or other geotechnical and engineering geologic hazards. The design and construction recommendations will be incorporated into the foundation, structural, and pipeline design of Proposed Project components, implemented in accordance with the design, and subjected to inspection by the relevant entities/agencies. Grading/building inspectors would perform site inspections to assure construction occurs in accordance with any building permits and plans.

APM-GEO-2 Fault Rupture. It will be necessary to determine each location where the pipeline crosses an active or potentially active fault. For each fault crossing location, determination will be made as to the estimated fault rupture characteristics, such as movement direction and amount, likely intervals between movements, and the width of the zone that may experience movement. Design recommendations will be incorporated to establish block valve locations.

APM-GEO-3 Strong Seismic Ground Shaking. The geotechnical investigations required by APM-GEO-1 will provide appropriate design ground motion values that will assist in the design to prevent or limit damage during earthquake events that may impact specific sections of the pipeline, compressor station, and appurtenant structures.

APM-GEO-4 Seismic-Related Ground Failure, Including Liquefaction. The engineering geologic and geotechnical investigations and reports will map the locations and define the nature of any areas that may experience seismic-related ground failure, including liquefaction.

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Reports will provide appropriate hazard information that will assist in the design to prevent or limit liquefaction damage to the pipeline, compressor station, and appurtenant structures during earthquake events.

APM-GEO-5 Landslides. The engineering geologic and geotechnical investigations will map the locations and define the nature of any landslides or landslide-prone areas that could impact the Proposed Project. Reports will provide appropriate hazard information to prevent or limit landslide/slope instability damage to the pipeline.

APM-GEO-6 Soil Erosion or Loss of Topsoil. The geotechnical investigations will evaluate the erosion characteristics of soils and geologic formations/sub-units along the length of the Proposed Project. Reports will provide appropriate construction, design, and operational measures to prevent or limit surface erosion due to the pipeline construction and due to runoff from conditions near the Proposed Project.

APM-GEO-7 Unstable Geologic Unit or Soil--Off-Site Landslide, Lateral Spreading, Subsidence, Liquefaction or Collapse. The engineering geologic and geotechnical investigations will map the locations and define the nature of any areas of unstable geologic units or soils that could affect off-site areas or be affected by off-site areas. Considerations include, but are not limited to, landslides, lateral spreads, subsidence, and soil collapse. Reports will provide appropriate design measures to prevent or limit damage to the pipeline and appurtenant structures due to these conditions.

APM-GEO-8 Expansive Soil. The engineering geologic and geotechnical investigations will define formations that contain sufficient clay materials to be considered sufficiently expansive to affect the pipeline and appurtenant facilities. These formations shall be mapped and analyzed (sampled and tested) to determine the degree of expansion that may be expected. Reports shall provide appropriate design and construction measures to prevent or limit expansive material damage to the pipeline and appurtenant structures.

5.6.6 References

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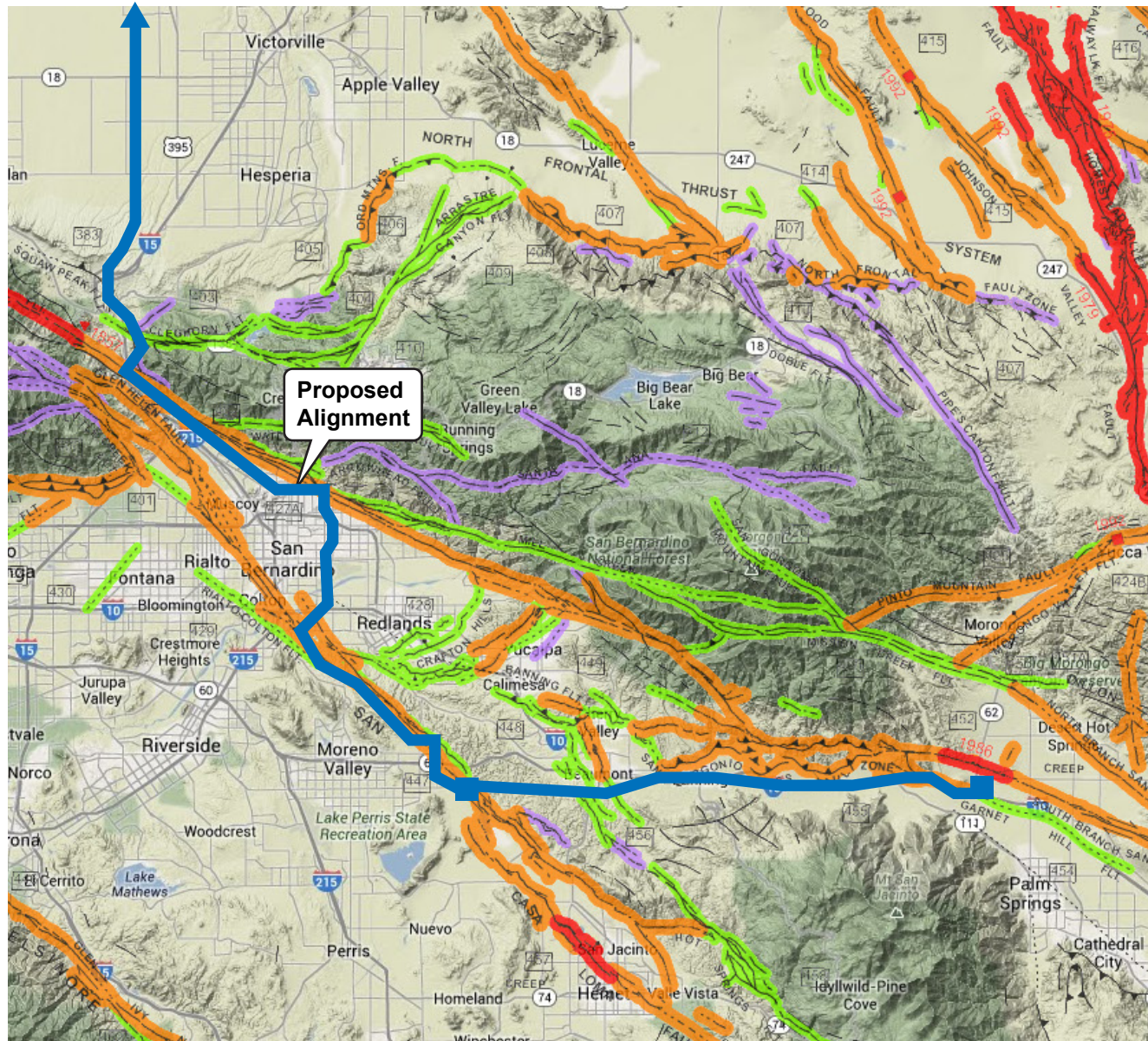
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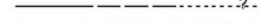
USGS (U.S. Geological Survey). 2008. The Uniform California Earthquake Rupture Forecast, Version 2 (UCERF 2). 2007 Working Group on California Earthquake Probabilities, authors E.H. Field, T.E. Dawson, K.R. Felzer, A.D. Frankel, V. Gupta, T.H. Jordan, T. Parsons, M.D. Petersen, R.S. Stein, R.J. Weldon II, and C.J. Wills. United States Geological Survey Open File Report 2007-1437, Version 1.1; also CGS Special Report 203 and SCEC Contribution.







EXPLANATION

Fault traces on land are indicated by solid lines where well located, by dashed lines where approximately located or inferred, and by dotted lines where concealed by younger rocks or by lakes or bays. Fault traces are queried where continuation or existence is uncertain.

FAULT CLASSIFICATION COLOR CODE
(Indicating Recency of Movement)

-  Fault along which historic (last 200 years) displacement has occurred.
-  Holocene fault displacement (during past 11,700 years) without historic record.
-  Late Quaternary fault displacement (during past 700,000 years).
-  Quaternary fault (age undifferentiated).
-  Pre-Quaternary fault (older than 1.6 million years) or fault without recognized Quaternary displacement.

ADDITIONAL FAULT SYMBOLS

-  Bar and ball on downthrown side (relative or apparent).
-  Arrows along fault indicate relative or apparent direction of lateral movement.
-  Arrow on fault indicates direction of dip.
-  Low angle fault (barbs on upper plate).

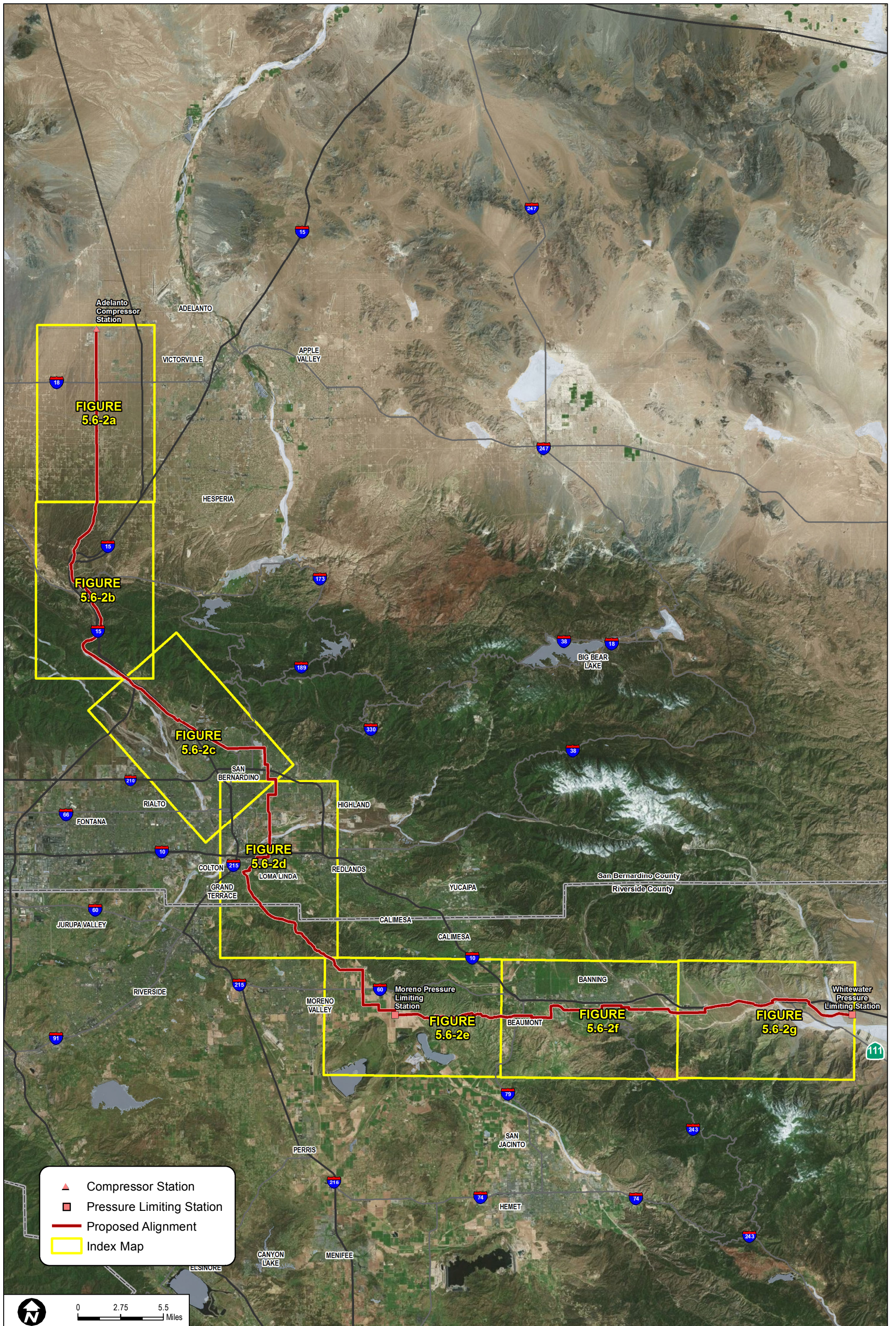
SOURCE: US Geological Survey, 2010 Fault Activity Map of California, Geologic Data Map No. 6



North-South Project

FIGURE 5.6-1
Fault Activity Map

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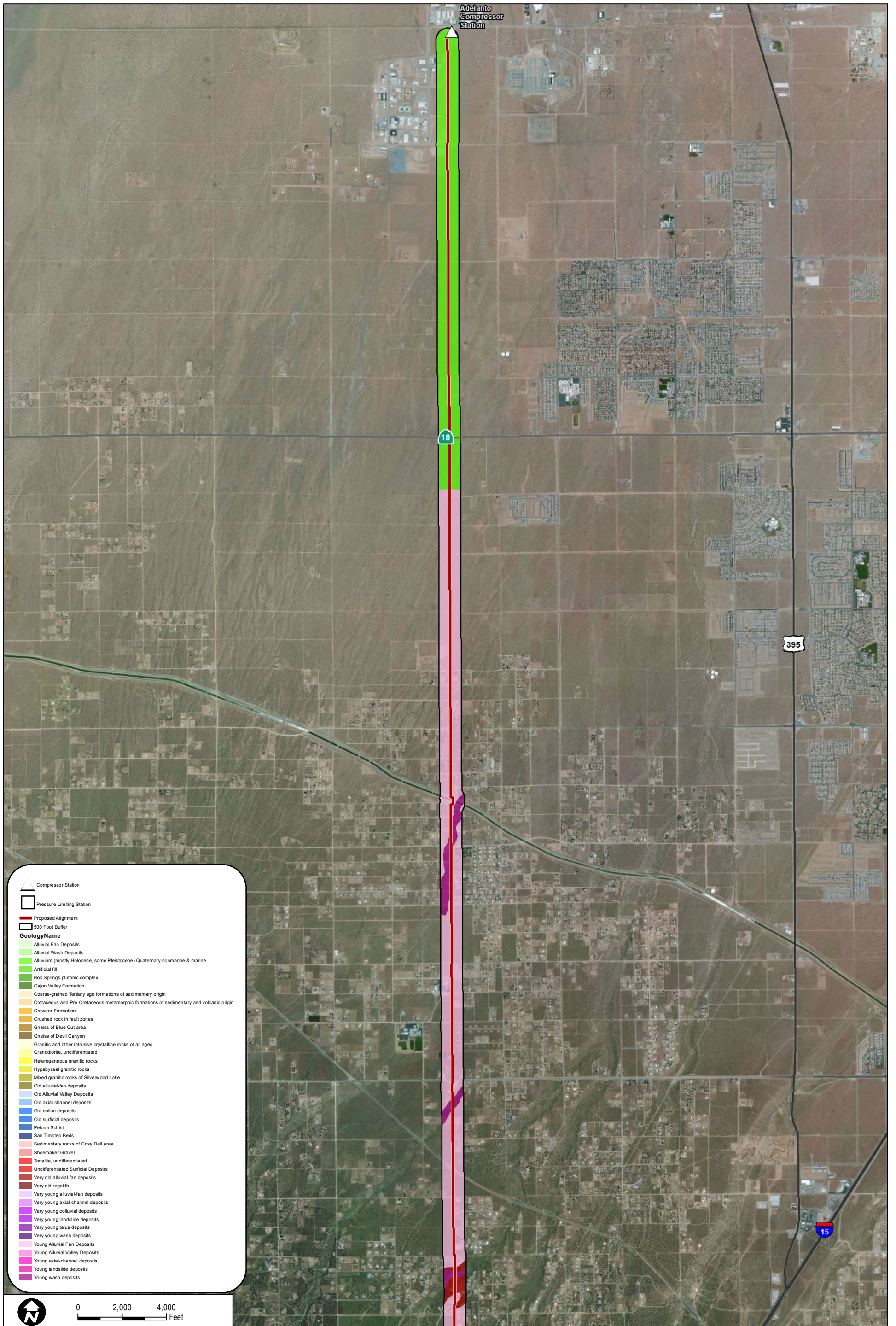
SOURCE: BING Maps 2014; Southern California Gas Company 2014



North South Project

FIGURE 5.6-2
Geologic Formations - Index Map

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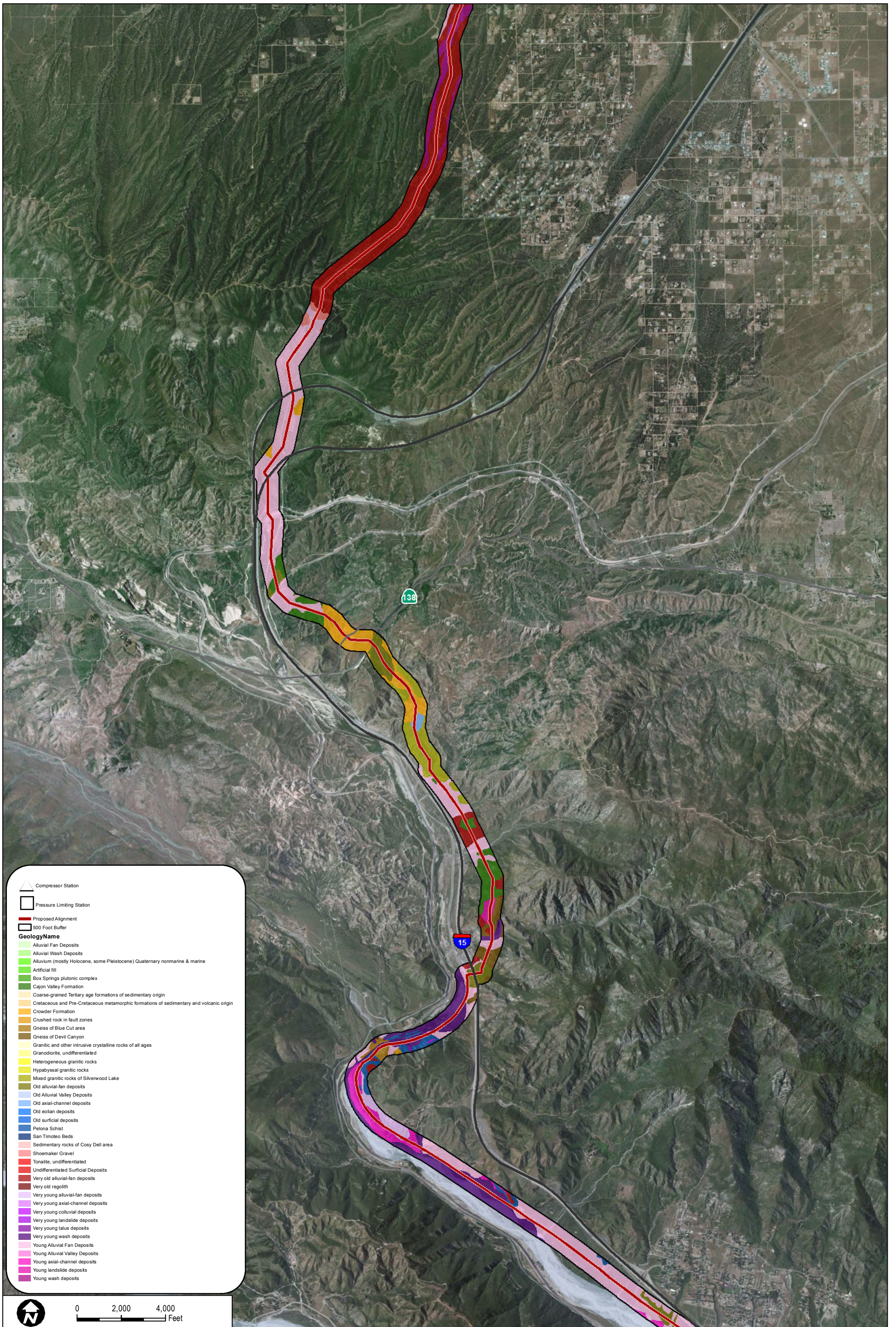
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CA Department of Conservation 2010; USGS 2006

FIGURE 5.6-2a
Geologic Formations



North South Project

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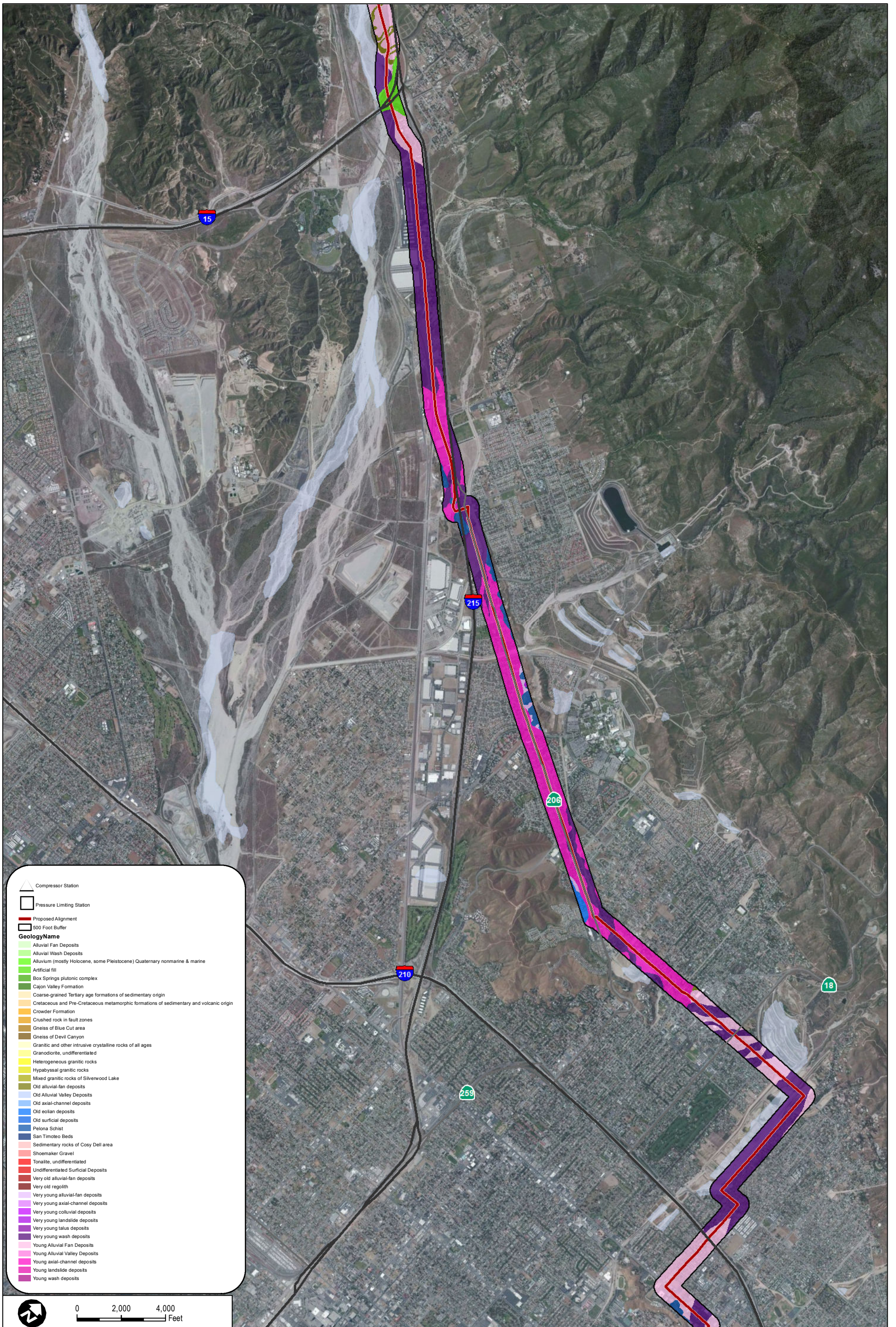
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CA Department of Conservation 2010; USGS 2006

FIGURE 5.6-2b
Geologic Formations



North South Project

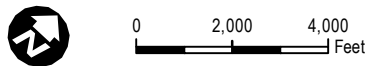
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▲ Compressor Station
 □ Pressure Limiting Station
 — Proposed Alignment
 □ 500 Foot Buffer

GeologyName

- Alluvial Fan Deposits
- Alluvial Wash Deposits
- Alluvium (mostly Holocene, some Pleistocene) Quaternary nonmarine & marine
- Artificial fill
- Box Springs plutonic complex
- Cajon Valley Formation
- Coarse-grained Tertiary age formations of sedimentary origin
- Cretaceous and Pre-Cretaceous metamorphic formations of sedimentary and volcanic origin
- Crowder Formation
- Crushed rock in fault zones
- Gneiss of Blue Cut area
- Gneiss of Devil Canyon
- Granitic and other intrusive crystalline rocks of all ages
- Granodiorite, undifferentiated
- Heterogeneous granitic rocks
- Hypabyssal granitic rocks
- Mixed granitic rocks of Silverwood Lake
- Old alluvial-fan deposits
- Old Alluvial Valley Deposits
- Old axial-channel deposits
- Old eolian deposits
- Old surficial deposits
- Pelona Schist
- San Timoteo Beds
- Sedimentary rocks of Cosy Dell area
- Shoemaker Gravel
- Tonalite, undifferentiated
- Undifferentiated Surficial Deposits
- Very old alluvial-fan deposits
- Very old regolith
- Very young alluvial-fan deposits
- Very young axial-channel deposits
- Very young colluvial deposits
- Very young landslide deposits
- Very young talus deposits
- Very young wash deposits
- Young Alluvial Fan Deposits
- Young Alluvial Valley Deposits
- Young axial-channel deposits
- Young landslide deposits
- Young wash deposits



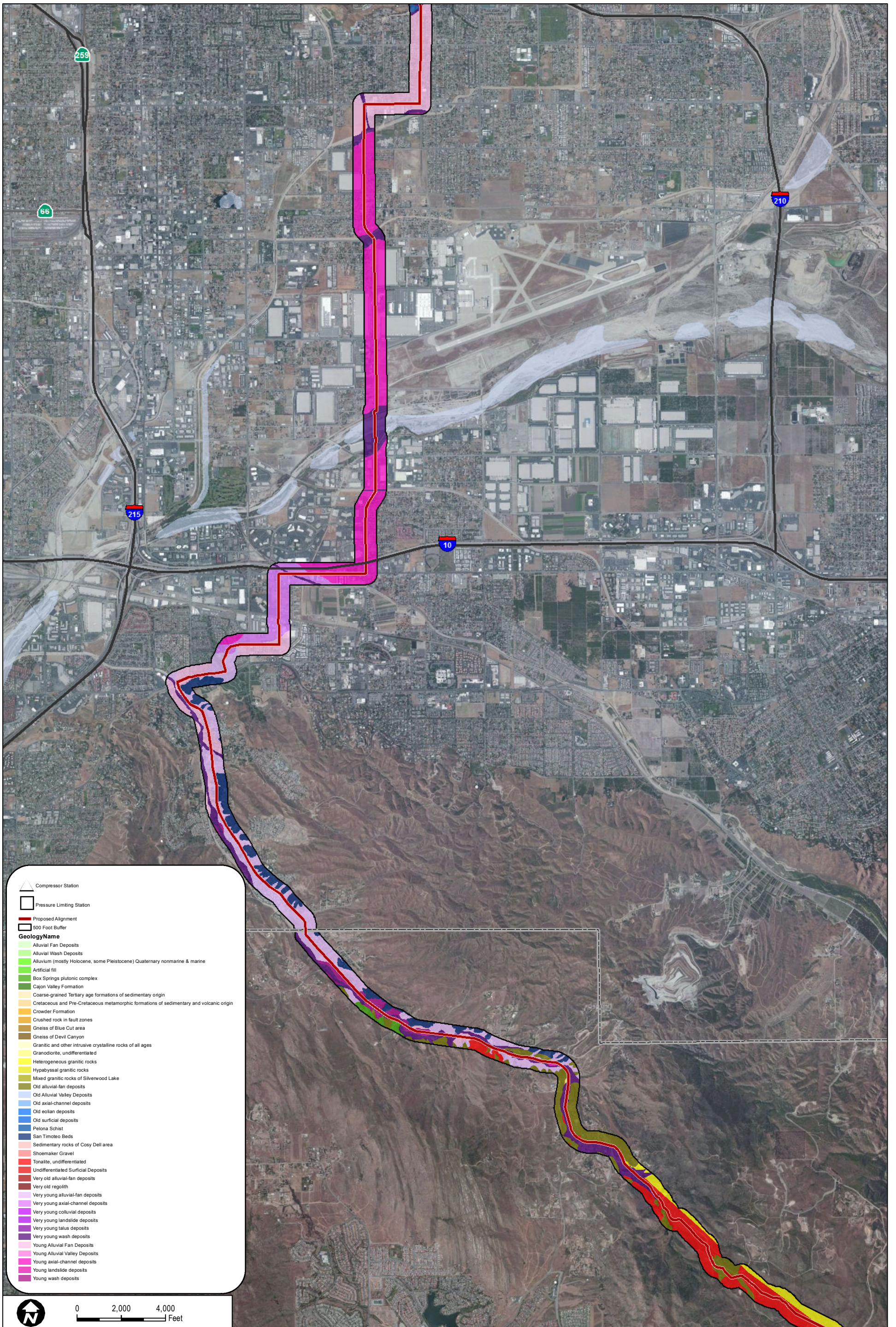
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CA Department of Conservation 2010; USGS 2006



North South Project

FIGURE 5.6-2c
Geologic Formations

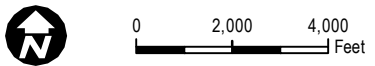
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▲ Compressor Station
 □ Pressure Limiting Station
 — Proposed Alignment
 — 500 Foot Buffer

GeologyName

- Aluvial Fan Deposits
- Aluvial Wash Deposits
- Alluvium (mostly Holocene, some Pleistocene) Quaternary nonmarine & marine
- Artificial fill
- Box Springs plutonic complex
- Cajon Valley Formation
- Coarse-grained Tertiary age formations of sedimentary origin
- Cretaceous and Pre-Cretaceous metamorphic formations of sedimentary and volcanic origin
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- Young landslide deposits
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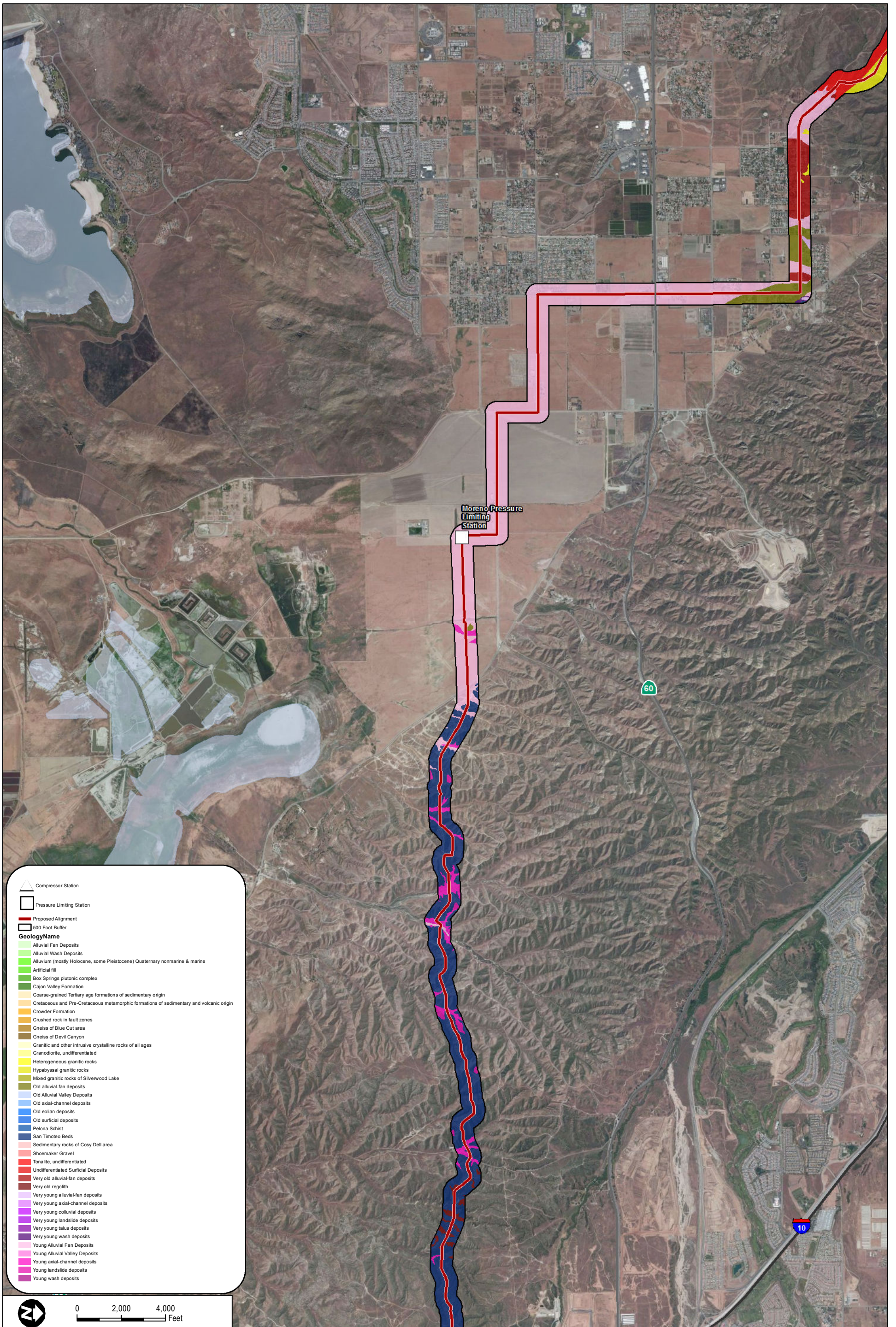
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CA Department of Conservation 2010; USGS 2006

FIGURE 5.6-2d
Geologic Formations



North South Project

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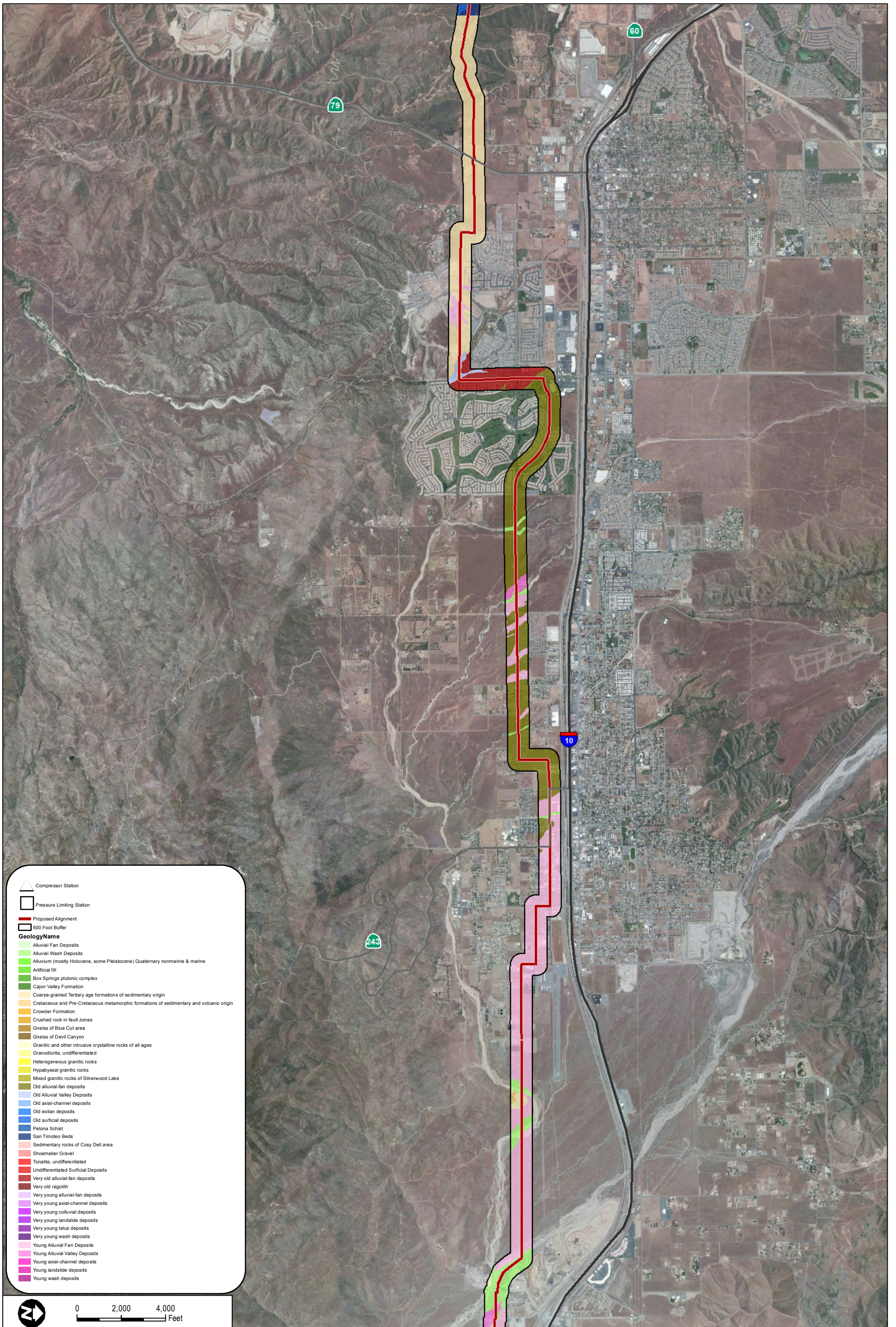
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CA Department of Conservation 2010; USGS 2006

FIGURE 5.6-2e
Geologic Formations



North South Project

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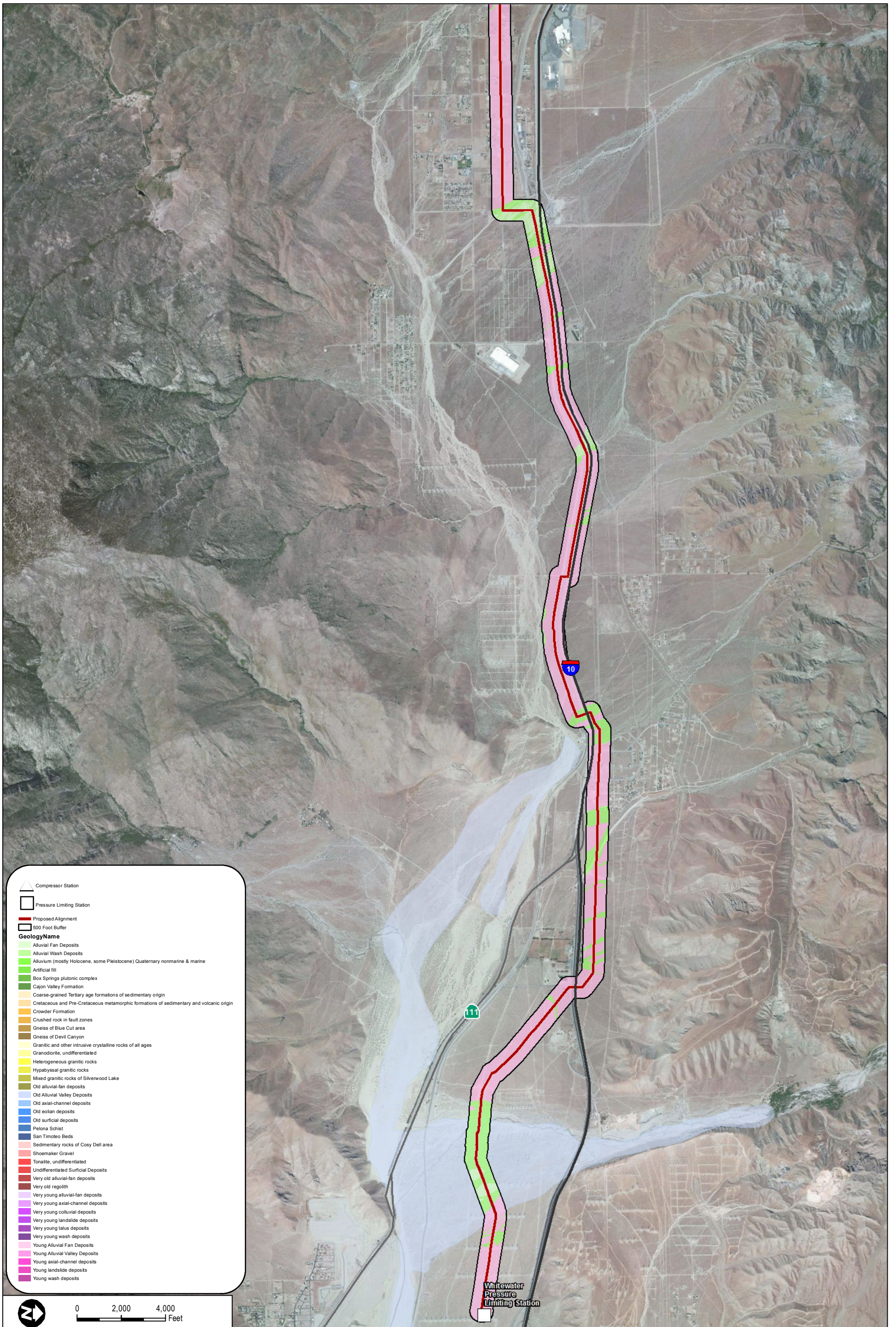
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CA Department of Conservation 2010; USGS 2006

FIGURE 5.6-2f
Geologic Formations

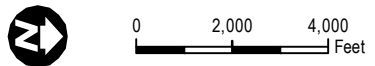


North South Project

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- Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- 500 Foot Buffer
- GeologyName**
- Alluvial Fan Deposits
- Alluvial Wash Deposits
- Alluvium (mostly Holocene, some Pleistocene) Quaternary nonmarine & marine
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- Very young talus deposits
- Very young wash deposits
- Young Alluvial Fan Deposits
- Young Alluvial Valley Deposits
- Young axial-channel deposits
- Young landslide deposits
- Young wash deposits



SOURCE: BING Maps 2014; Southern California Gas Company 2014; CA Department of Conservation 2010; USGS 2006



North South Project

FIGURE 5.6-2g
Geologic Formations

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5.7 Hazards and Hazardous Materials

This section describes the impacts related to hazards and hazardous materials resulting from the Proposed Project.

5.7.1 Environmental Setting

Hazardous substances are defined by state and federal regulations as substances that must be regulated in order to protect the public health and the environment. Hazardous materials have certain chemical, physical, or infectious properties that cause them to be hazardous. The California Code of Regulations provides the following definition:

A hazardous material is a substance or combination of substances which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of or otherwise managed (22 CCR 66261).

According to California Code of Regulations Title 22 (Chapter 11, Article 3), substances having a characteristic of toxicity, ignitability, corrosivity, or reactivity are considered hazardous. Hazardous wastes are hazardous substances that no longer have a practical use, such as material that has been abandoned, discarded, spilled, contaminated, or which is being stored prior to disposal.

Hazardous Waste

Regulatory Database Listings

Regulatory agency databases maintained by the Department of Toxic Substances Control (DTSC) and SWRCB were searched to evaluate environmental conditions of potential concern that would impact the Proposed Project. The DTSC and SWRCB databases maintain listings of sites that have known contamination, sites that are under investigation for potential contamination, and facilities that treat, store, dispose or transfer hazardous waste. Sites that are included in these databases include: Federal Superfund sites (National Priority List); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; permitted Underground Storage Tanks (UST); Leaking Underground Storage Tanks (LUST); Department of Defense; Spills, Leaks, Investigation and Cleanup (SLIC) sites; and land disposal sites. The databases also include information related to: corrective action status; permitting; closure of hazardous waste management units or entire facilities; and post-closure activities.

A total of 137 unique sites were identified within a 0.50-mile of the Proposed Project.

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A total of 58 of the 137 sites are listed in databases related to permitting and assessment have no information indicating environmental conditions that would adversely impacted by the Proposed Project. A total of 69 of the 137 sites are listed in databases related to releases of contaminants to land (e.g. LUST); however, all of these sites reportedly received case closure (from the regulatory authority).

The remaining 10 of the 137 sites are listed in databases that indicate adverse environmental conditions, such as contaminated soil and/or groundwater, and are listed as open by the regulatory authority. These sites may be undergoing monitoring, investigation or remediation. In some cases, remedial action may be pending. Further details regarding these sites are as follows:

- Landfill Cajon Illegal is located at 15551 Cajon Blvd (Figure 3-3h) within the Proposed Project area. This site is a land disposal site. As of July 1, 2010 this site is listed as an open site and undergoing monitoring. Based on the current status and proximity to the Proposed Project, it is possible that this site has impacted the environmental conditions within the Proposed Project area.
- Cajon Landfill is located at the intersection of Cajon Boulevard and Palm Avenue/Institution Road (Figure 3-3k), less than 0.50-mile south of the proposed alignment. While it has a different physical address than the site discussed above, it may be part of it, given the similar names. This site is also a land disposal site. Reportedly, the facility operated from 1963 until October 1, 1980. The site consists of two landfill areas. This facility was permitted to accept Class II wastes including residential, demolition, commercial refuse, and non-decomposable inert solids. The facility was not permitted to accept hazardous wastes. According to the report, groundwater flow is to the southwest—away from the proposed alignment.
- Former M&M Smog and Muffler is located at 1915 E. Tippecanoe Avenue (Figure 3-3o) within the Proposed Project area, east of Tippecanoe Avenue. The site is a LUST cleanup site and listed as open as of December 1, 2013. Based on the *Preliminary Site Investigation (PIS) Report* dated October 2011, elevated concentrations of petroleum hydrocarbons are likely present in the soil from the surface to 10 feet below ground surface.
- Bear Oil Company/Former Texaco Site is located at 24913 Redlands Boulevard (Figure 3-3o), within the Proposed Project area, at the corner of Redlands Boulevard and S. Tippecanoe Avenue. This site is a LUST cleanup site and is listed as open as of November 20, 2006. Based on the *Soil and Groundwater Investigation Report* dated April 23, 2003, in 1999 two USTs were removed from the site. In March 2000, 24 soil samples were collected from four borings. Analytical results showed the presence of petroleum hydrocarbons. The highest concentration was at the 15-foot depth interval. The site is petitioning for low-risk case closure, based on the following: impacted soil largely limited to depths of 20 feet below ground surface; residual petroleum hydrocarbons are not expected to produce vapors or other hazardous conditions, the

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extent of impacted soil is limited to the site boundary; and concentrations of benzene, toluene, ethylbenzene, and xylenes (BTEX) do not exceed the “low risk” threshold values.

- Eric Realty Property/Former aboveground solvent storage at 495 East Commercial Road (Figure 3-3o), is located within the Proposed Project area. This site is a cleanup program site. The site was previously occupied by a bulk distributor of tetrachlorethene (PCE). Reportedly, during an inspection in March 1987, pump and piping connections to an above ground storage tank (AST) were leaking and PCE was being discharged onto the ground. The AST was removed. Soil and groundwater investigations occurred between 2001 and 2004. PCE was detected in soil and groundwater samples; the highest concentrations were 26,000 milligrams/kilogram (mg/kg) in soil and 58,000 micrograms/liter ($\mu\text{g/L}$) in groundwater. A groundwater extraction and treatment system was installed and operated at the site from 2004 and 2011. The treatment system was shut down due to decreasing groundwater elevations. A soil vapor extraction system was installed in 2005 and operated for 5 years. A soil vapor survey was conducted in September 2013. The upper 5 feet of the soil was sampled. PCE was detected in all of the soil vapor samples. Concentrations ranged from 2.5 $\mu\text{g/L}$ to 56,100 $\mu\text{g/L}$.
- Brine Fac/ Moreno Compressor Station at 14601 Virginia Street (Figure 3-3u) is located less than 0.25 south of the Proposed Project. This site is a land disposal site. Reportedly this site is currently subject to a Detection Monitoring Program to monitor groundwater for any releases from the site. Groundwater flow is reportedly to the south, away from the Proposed Project.
- Perfection Plating at 1284 East Lincoln Street (Figure 3-3z), is located within the Proposed Project area. This site is reportedly undergoing evaluation. According to a letter dated June 25, 2004 from the DTSC, the County of Riverside Department of Environmental Health, Hazardous Materials Management Division will oversee the facility closure. The cleanup involves soils containing heavy metals.
- Banning Rifle Range is located less than 0.25 mile south of the Propose Project (Figure 3-3z). This site is a Formerly Used Defense Site. As of September 13, 2012, it is inactive and its status is listed as “action required.” According to the *Technical Project Planning Memorandum and Associated Documentation* dated February 2011, the site was used by the Army for a small-arms firing range during World War II. The Banning Waste Water Treatment Plant is located immediately west of the site. The Banning Waste Water Treatment Plant owns and maintains evaporation ponds on a portion of the Banning Rifle Range. According to the *Technical Project Planning Memorandum*, soil samples were proposed to be analyzed for explosives and selected metals (antimony, copper, and lead). Depth to groundwater at the site is approximately 240 feet below ground surface.
- Texaco-Cabazon Truck Stop at 50875 Seminole Drive is located less than 0.25-mile north of the Proposed Project. This site is listed as a LUST cleanup site and is currently undergoing

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remediation. Reportedly, in March of 1995, a tractor trailer knocked over 2 diesel dispensers causing a release of approximately 100 gallons of diesel into the soil under one of the dispensers. Soil samples were collected and up to 2900 ppm of diesel was detected in the soil under the dispenser.

- Union Pacific Railroad – Palm Springs at the Yuma Main Line Palm Desert (Figure 3-3cc), is located within the Proposed Project area. This site is a Clean Up Program Site. Reportedly, on July 5, 1999 a train derailment occurred approximately 11 miles west of Palm Springs on the Yuma Mainline Mile Post 581.3. Approximately 8,000 gallons of diesel fuel spilled as a result of the derailment. Diesel fuel released to the ground was contained in the rail bed, ballast and shallow depressions adjacent to rail bed within 75 feet of the derailment location on both the north and south sides of the track. The release reportedly impacted soil only and is in an open status as of April 3, 2009.

Historical Aerial Photographs

Historical aerial photographs are used to assess the possibility of past activities, such as agriculture, that could present an environmental concern, such as pesticide contamination in the soil. At least one historical aerial photograph for each segment of the Proposed Project was reviewed. The table below is a summary of the photographs that may indicate a potential environmental concern.

**Table 5.7-1
Aerial Photography Review**

Figure	Observations
3-3d	Evidence of potential agriculture within the Proposed Project area was visible in the year 2005.
3-3h	Evidence of potential agriculture within the Proposed Project area was visible in the year 2008
3-3m	Orchards were visible in the year 1959.
3-3t	Evidence of potential agriculture within the Proposed Project area was visible in the years 1967, 1968, 1978, and 2005.
3-3u	Evidence of potential agriculture within the Proposed Project area was visible in the years 1967 and 1978.

Airports

The nearest airports to the Adelanto Compressor Station are the Adelanto Airport and the Southern California Logistics Airport. The Adelanto Airport, a private airstrip, is located approximately 1.5 miles southwest of the compressor station. The Southern California Logistics Airport is located approximately 4.25 miles northeast of the compressor station in the City of Victorville. This airport, formerly George Air Force Base, has two runways and serves as an international logistics gateway.

The nearest airports to the Adelanto to Moreno pipeline segment are the Adelanto Airport (0.5 miles west of the alignment between Mile Posts AM-1 and AM-2) and the San Bernardino International Airport (immediately east of the alignment at Mile Post AM-43). The San Bernardino International

5 Environmental Impact Assessment

Airport, formerly Norton Air Force Base, is a public airport, providing general aviation and cargo services with one runway.

The only airport within two miles of the Moreno to Whitewater pipeline segment is the City-owned Banning Municipal Airport located approximately 0.25 miles north of the alignment between Mile Posts MW-17 and MW-18. The airport has one runway and provides general aviation operations.

There are no airports located within two miles of the Shaver Summit Pressure Limiting Station and Desert Center Compressor Station sites.

Schools

Table 5.7-2 identifies all schools located within ¼ mile of the Proposed Project. As shown, there are no schools within ¼ mile of the compressor station site. The nearest school to the compressor station site is the Harold George Visual and Performing Arts Magnet and Middle School located approximately 1.9 miles to the north east (10650 Bartlett Avenue, Adelanto, CA 92301).

As shown on Table 5.7-2, there are 12 elementary and middle schools located within ¼ mile of the Adelanto to Moreno pipeline alignment and 3 schools located within ¼ mile of the Moreno to Whitewater alignment.

There are no schools located within ¼ mile of the Moreno Pressure Limiting Station, Whitewater Pressure Limiting Station, Shaver Summit Pressure Limiting Station, or Desert Center Compressor Station sites.

**Table 5.7-2
Schools within 1/4 Mile of the Proposed Project**

School	Address	Approximate Distance from Pipeline (feet)	Nearest Mile Post
Baldy Mesa Elementary School	10376 Baldy Mesa Rd., Phelan, CA 92371	50	AM-8
Quail Valley Middle School	10058 Arrowhead Rd., Phelan, CA 92371	1,320	AM-9
Kendall Elementary	951 N State Street, San Bernardino, CA 92407	915	AM-33
Harmon Elementary School	4865 N State Street, San Bernardino, CA 92407	725	AM-33
Shandin Hills Middle School	4301 Little Mountain Drive, San Bernardino, CA 92407	400	AM-34
Arrowhead Elementary School	3825 North Mountain View Avenue, San Bernardino, CA 92405	990	AM-35
Del Rosa Elementary School	3395 N Mountain Ave, San Bernardino, CA 92404	1,320	AM-38
Jefferson Hunt Elementary School	1342 E Pumalo St, CA 92404	930	AM-39
Fairfax Elementary School	1362 Pacific St, San Bernardino, CA 92404	1,100	AM-40
Bing Wong Elementary	1250 E 9th St, San Bernardino, CA 92410	550	AM-41

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**Table 5.7-2
Schools within 1/4 Mile of the Proposed Project**

School	Address	Approximate Distance from Pipeline (feet)	Nearest Mile Post
Loma Linda Academy Elementary School	10656 Anderson Street, Loma Linda, CA 92354	655	AM-45
Cooley Ranch Elementary School	1000 S Cooley Drive, Colton, CA 92324	780	AM-47
Childhelp School	14700 Manzanita Park Rd, Beaumont, CA 92223	400	MW-9
Banning High School	100 W Westward Ave, Banning, CA 92220	1,320	MW-16
Cabazon Elementary School	50575 Carmen Ave, Cabazon, CA 92230	700	MW-22

Source: CalAtlas 2014; Riverside County 2014; Google Earth 2014

Wildland Fire Zones

As shown on Figure 5.7-1, the pipeline alignment traverses three different wildfire hazard severity zones, as mapped by the California Department of Forestry and Fire Protection (FRAP 2010) and including both state, federal and local responsibility areas (SRA, FRA, and LRA, respectively). The very high fire hazard severity zone (VHFHSZ), which includes terrain, vegetative fuels, and climate extremes that facilitate fire spread accounts for approximately 44 linear miles. The high fire hazard severity zone (HFHSZ) includes many of the same fire risk components as VHFHSZs, but is deemed to include a relatively reduced hazard, accounts for approximately 18 miles of the pipeline alignment. The moderate fire hazard severity zone (MFHSZ), as its name suggests, includes less risk of catastrophic fires than VHFHSZs or HFHSZs, but may still support fire ignitions and spread. It accounts for approximately 20 linear miles. The urban or unzoned fire hazard severity zone, which generally indicates that the area is developed and topography, fuels, and weather for the area would not typically support fire ignitions and spread. This fire hazard category accounts for approximately 6.5 miles of the pipeline alignment.

5.7.2 Regulatory Setting

Hazards/Hazardous Materials

Federal Toxic Substances Control Act and Resource Conservation and Recovery Act

The Federal Toxic Substances Control Act of 1976 (15 U.S.C. 2601–2697) and the Resource Conservation and Recovery Act (RCRA) of 1976 (42 U.S.C. 6901–6992) established a program administered by the EPA for regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act (PL 98-616), which affirmed and extended the “cradle-to-grave” system of regulating hazardous wastes. The use of certain techniques for the disposal of some hazardous wastes was specifically prohibited by the Hazardous and Solid Waste

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Act. Under the authority of RCRA, the regulatory framework for managing hazardous waste, including requirements for entities that generate, store, transport, treat, and dispose of hazardous waste is found in 40 CFR, Parts 260–299.

Hazardous Materials Transportation Act

The U.S. Department of Transportation regulates hazardous materials transportation under Title 49 of the United States Code (U.S.C.). State agencies with primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol and the California Department of Transportation. These agencies also govern permitting for hazardous materials transportation. Title 49 CFR reflects laws passed by Congress as of January 2, 2006.

The hazardous materials transportation regulations require carriers transporting hazardous materials to receive training in the handling and transportation of hazardous materials. Training requirements include pre-trip safety inspections; use of vehicle controls and equipment, including emergency equipment; procedures for safe operation of the transport vehicle; training on the properties of the hazardous material being transported; and loading and unloading procedures. All drivers must possess a commercial driver's license (49 CFR 383). Vehicles transporting hazardous materials must be properly placarded. In addition, the carrier is responsible for the safe unloading of hazardous materials at the site, and operators must follow specific procedures during unloading to minimize the potential for an accidental release of hazardous materials.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA; 42 U.S.C. 9601–9675), commonly known as “Superfund,” was enacted by Congress on December 11, 1980. This law provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA established requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. CERCLA also enabled the revision of the National Contingency Plan. The National Contingency Plan provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants.

International Fire Code

The International Fire Code (IFC; ICC 2012), created by the International Code Council (ICC), is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The IFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The IFC and the

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International Building Code use a hazard classification system to determine what protective measures are required to protect life safety in relation to fire. These measures may include construction standards, separations from property lines, and specialized equipment. To ensure that these safety measures are met, the IFC employs a permit system based on hazard classification. The IFC is updated every 3 years.

Federal Aviation Administration Functions

The Federal Aviation Administration has primary responsibility for the safety of civil aviation. The Federal Aviation Administration's major functions regarding hazards include the following: (1) developing and operating a common system of air traffic control and navigation for both civil and military aircraft, (2) developing and implementing programs to control aircraft noise and other environmental effects of civil aviation, (3) regulating U.S. commercial space transportation, and (4) conducting reviews to determine that the safety of persons and property on the ground are protected.

Federal Response Plan

The Federal Response Plan of 1999 (FEMA 1999) is a signed agreement among 27 federal departments and agencies, including the American Red Cross, that (1) provides the mechanism for coordinating delivery of federal assistance and resources to augment efforts of state and local governments overwhelmed by a major disaster or emergency; (2) supports implementation of the Robert T. Stafford Disaster Relief and Emergency Act, as well as individual agency statutory authorities; and (3) supplements other federal emergency operations plans developed to address specific hazards. The Federal Response Plan is implemented in anticipation of a significant event likely to result in a need for federal assistance or in response to an actual event requiring federal assistance under a presidential declaration of a major disaster or emergency.

California Occupational Safety and Health Administration

The California Occupational Safety and Health Administration (Cal/OSHA) is the primary agency responsible for worker safety in the handling and use of chemicals in the workplace. Cal/OSHA standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR 330 et seq.). The regulations specify requirements for employee training, availability of safety equipment, accident prevention programs, and hazardous substance exposure warnings.

California Hazardous Waste Control Act

The Department of Toxic Substances Control is responsible for the enforcement of the Hazardous Waste Control Act (California Health and Safety Code, Section 25100 et seq.), which creates the framework under which hazardous wastes are managed in California. The law provides for the development of a state

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hazardous waste program that administers and implements the provisions of the federal RCRA cradle-to-grave waste management system in California. It also provides for the designation of California-only hazardous waste and development of standards that are equal to or, in some cases, more stringent than federal requirements. While the Hazardous Waste Control Act is generally more stringent than RCRA, until the EPA approves the California hazardous waste control program (which is charged with regulating the generation, treatment, storage, and disposal of hazardous waste), both the state and federal laws apply in California. The Hazardous Waste Control Act lists 791 chemicals and approximately 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal, and transportation; and identifies some wastes that cannot be disposed of in landfills.

According to 22 CCR 66001 et seq., substances having a characteristic of toxicity, ignitability, corrosivity, or reactivity are considered hazardous waste. Hazardous wastes are hazardous substances that no longer have a practical use, such as material that has been abandoned, discarded, spilled, contaminated, or are being stored prior to proper disposal.

Toxic substances may cause short-term or long-lasting health effects ranging from temporary effects to permanent disability or death. For example, toxic substances can cause eye or skin irritation, disorientation, headache, nausea, allergic reactions, acute poisoning, chronic illness, or other adverse health effects if human exposure exceeds certain levels (the level depends on the substance involved). Carcinogens (substances known to cause cancer) are a special class of toxic substances. Examples of toxic substances include most heavy metals, pesticides, and benzene (a carcinogenic component of gasoline). Ignitable substances (e.g., gasoline, hexane, and natural gas) are hazardous because of their flammable properties. Corrosive substances (e.g., strong acids and bases such as sulfuric (battery) acid or lye) are chemically active and can damage other materials or cause severe burns upon contact. Reactive substances (e.g., explosives, pressurized canisters, and pure sodium metal, which react violently with water) may cause explosions or generate gases or fumes.

Other types of hazardous materials include radioactive and biohazardous materials. Radioactive materials and wastes contain radioisotopes, which are atoms with unstable nuclei that emit ionizing radiation to increase their stability. Radioactive waste mixed with chemical hazardous waste is referred to as “mixed wastes.” Biohazardous materials and wastes include anything derived from living organisms. They may be contaminated with disease-causing agents, such as bacteria or viruses (22 CCR 66261.1 et seq.).

California Accidental Release Prevention Program

Similar to the EPA Risk Management Program, the California Accidental Release Prevention (CalARP) Program (19 CCR 2735.1 et seq.) regulates facilities that use or store regulated substances, such as toxic or flammable chemicals, in quantities that exceed established thresholds. The overall purpose of CalARP

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is to prevent accidental releases of regulated substances and reduce the severity of releases that may occur. The CalARP Program meets the requirements of the EPA Risk Management Program, which was established pursuant to the Clean Air Act Amendments.

California Health and Safety Code

In California, the handling and storage of hazardous materials is regulated by Division 20, Chapter 6.95, of the California Health and Safety Code (Section 25500 et seq.). Under Sections 25500–25543.3, facilities handling hazardous materials are required to prepare a hazardous materials business plan. Hazardous materials business plans contain basic information about the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of in the state.

Chapter 6.95 of the Health and Safety Code establishes minimum statewide standards for Hazardous Materials Business Plans. Each business shall prepare a Hazardous Materials Business Plan if that business uses, handles, or stores a hazardous material (including hazardous waste) or an extremely hazardous material in disclosable quantities greater than or equal to the following:

- 500 pounds of a solid substance
- 55 gallons of a liquid
- 200 cubic feet of compressed gas
- A hazardous compressed gas in any amount (highly toxic with a Threshold Limit Value of 10 parts per million or less)
- Extremely hazardous substances in threshold planning quantities (California Health and Safety Code, Section 25503.5).

In addition, in the event that a facility stores quantities of specific acutely hazardous materials above the thresholds set forth by California code, facilities are also required to prepare a risk management plan and California accidental release prevention plan. The risk management plan and accidental release prevention plan provide information about the potential impact zone of a worst-case release and require plans and programs designed to minimize the probability of a release and mitigate potential impacts.

California Fire Code

The California Fire Code (CFC) is Chapter 9 of Title 24 of the CCR. It was created by the California Building Standards Commission, and it is based on the IFC created by the ICC. It is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The CFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The CFC and the California Building Code use a hazard classification system to determine what protective measures are required to protect fire

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and life safety. These measures may include construction standards, separations from property lines, and specialized equipment. To ensure that these safety measures are met, the CFC employs a permit system based on hazard classification. The CFC is updated every 3 years.

On September 20, 2005, the California Building Standards Commission approved the Office of the State Fire Marshal's emergency regulations amending the California Code of Regulations, Title 24, Part 2, to address new building construction within any Fire Hazard Severity Zone within State Responsibility Areas, any Local Agency Very-High Fire Hazard Severity Zone, or any Wildland-Urban Interface Fire Area designated by the enforcing agency for which an application for a building permit is submitted.

California Emergency Services Act

Under the Emergency Services Act (California Government Code, Section 8550 et seq.), the State of California developed an emergency response plan to coordinate emergency services provided by federal, state, and local agencies. Rapid response to incidents involving hazardous materials or hazardous waste is an integral part of the plan, which is administered by the Governor's Office of Emergency Services. The Office of Emergency Services coordinates the responses of other agencies, including the EPA, California Highway Patrol, RWQCBs, air quality management districts, and county disaster response offices.

Regional Water Quality Control Board

The RWQCB implements the California Water Code which regulates waste discharges to land. If a discharge of waste threatens a water of the state, a report waste discharge or an application for a waiver of a report of waste discharge must be filed with the RWQCB. The RWQCB accomplishes its permitting responsibility by issuing either a general or site-specific permit (Waste Discharge Permit) or a waiver of a permit.

Local General Plans

The proposed alignment crosses multiple jurisdictions, as shown in Table 3-1. The Safety Elements of the respective General Plan include goals and policies related to risk reduction for natural and human-induced hazards, including earthquakes, slope and foundation stability, flooding/inundation, and fire.

Pipeline Safety

Natural gas transmission pipelines such as the proposed 36-inch diameter pipeline are constructed, operated, and maintained in accordance with Federal and State regulations set forth in Code of Federal Regulations (CFR) Title 49 Parts 190, 191, and 192; CPUC General Order No. 112-E; and the California Pipeline Safety Act of 1981 (California Government Code). Requirements and procedures established in these regulations to safeguard health, property, and public welfare include the following:

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- Procedural manuals for operation, maintenance, and emergencies, including an emergency contingency plan, are maintained
- Public information outreach programs, including public awareness education and pipeline marking that includes emergency telephone numbers, are implemented
- Pressure tests are performed for all new installations and specified spacing for main-line valves is adhered to
- Corrosion protection measures, i.e. cathodic protection, pipeline coating, and annual reads on corrosion potentials, are implemented on all pipelines
- Annual, semi-annual, and/or quarterly pipelines inspections are performed, including annual valve maintenance
- Patrolling for evidence of pipeline damage or any condition which may impact continued safe operation is periodically conducted
- Pipelines are installed with a minimum 30- to 36-inch cover and are constructed using modern weld design techniques (a minimum 48-inch cover is required for river and stream crossings)
- Any excavation activities near pipelines may only be conducted 48 hours after USA has been notified.

Federal Regulations

CFR Title 49, Part 192 prescribes federal safety standards for transportation of natural gas by pipeline. One of the key pipeline design factors is the class location. Class locations representing more populated areas require higher safety factors in pipeline design, testing, and operation. The class location unit is defined by the number of dwelling units or high occupancy buildings or open areas within 220 yards (660 feet) of the pipeline centerline on a continuous mile of pipeline. Based on this definition, natural gas pipelines are classified as one of the four classes, relative to dwelling units, high occupancy buildings, or open occupied areas as listed below.

- A Class 1 location has 10 or fewer dwelling units per mile intended for human occupancy.
- A Class 2 location has more than 10 but less than 46 dwelling units per mile intended for human occupancy.
- A Class 3 location has (a) 46 or more dwelling units per mile intended for human occupancy, or (b) is located within 100 yards of either a building, such as a school, restaurant or other business, or a small, well-defined outside area, such as a playground, recreation area, outdoor theater, or other place of public assembly, that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. The days and weeks need not be consecutive.
- A Class 4 location is in any class location unit where buildings with 4 or more stories above ground are prevalent.

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In 2002, Congress passed an act to strengthen the nation's pipeline safety laws. The Pipeline Safety Improvement Act of 2002 requires gas transmission operators to develop and follow a written integrity management program to address risks on each covered transmission pipeline segment within high consequence areas (HCAs). The U.S. Department of Transportation (68 FR 69778, 69 FR 18228, and 69 FR 29903) defines HCAs as they relate to the different classes or potential impact circles containing an identified site as defined in Part 192.903 of the U.S. Department of Transportation regulations or 20 or more buildings intended for human occupancy. An identified site is an outside area or open structure that is occupied by 20 or more persons on at least 50 days in any 12-month period; a building that is occupied by 20 or more persons on at least 5 days a week for any 10 weeks in any 12-month period; or a facility that is occupied by persons who are confined, are of impaired mobility, or would be difficult to evacuate.

The HCAs may be defined in one of two ways. In the first method (Method 1), an HCA includes:

- Current Class 3 and 4 locations;
- Any area in Class 1 or 2 locations where the potential impact radius is greater than 660 feet and there are 20 or more buildings intended for human occupancy within the potential impact circle; or
- Any area in Class 1 or 2 locations where the potential impact circle includes an identified site (note: see previous paragraph for definition of "an identified site").

In the second method (Method 2), an HCA includes any area within a potential impact circle that contains:

- 20 or more buildings intended for human occupancy; or
- An identified site (note: see previous paragraph for definition of "an identified site").

The pipeline operator must apply the elements of its integrity management program to those segments of the pipeline within HCAs. The pipeline integrity management rule requires an assessment of HCAs a minimum of every 7 years.

State Regulations

Intrastate natural gas pipelines such as the proposed 36-inch diameter pipeline are regulated under the jurisdiction of the CPUC. General Order (GO) 112-E of the California Public Utility Commission governs design, construction, testing, operation and maintenance of gas gathering, transmission and distribution piping systems in the State of California. These rules are supplements to these Federal regulations and do not supersede the Federal Pipeline Safety Regulations.

State of California regulations also provide specific safety requirements that are more stringent than the Federal rules. Areas covered include: (a) exemptions, (b) hazardous pipeline safety technical standards, (c) intrastate pipeline operators, (d) leak detection and cathodic protection, (e) periodic hydrostatic testing, (f)

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hydrostatic test results, (g) maps, records procedures, inspections, (h) contingency plans, (i) notification of break, explosion or fire, (j) local enforcement, and (k) regulations for enforcement proceedings.

In response to the 2010 natural gas pipeline incident in San Bruno, California SB 216 was signed into law on October 10, 2010. In part, the new California Natural Gas Pipeline Safety Act of 2011 reads:

“957. (a) (1) Unless the commission determines that it is prohibited from doing so by subdivision (c) of Section 60104 of Title 49 of the United States Code, the commission shall require the installation of automatic shut-off or remote controlled sectionalized block valves on both of the following facilities, if it determines those valves are necessary for the protection of the public:

- (A) Intrastate transmission lines that are located in a high consequence area.
- (B) Intrastate transmission lines that traverse an active seismic earthquake fault.
- (2) Each owner or operator of a commission-regulated gas pipeline facility that is an intrastate transmission line shall provide the commission with a valve location plan, along with any recommendations for valve locations. The commission may make modifications to the valve location plan or provide for variations from any location requirements adopted by the commission pursuant to this section that it deems necessary or appropriate and consistent with protection of the public.
- (3) The commission shall additionally establish action timelines, adopt standards for how to prioritize installation of automatic shut-off or remote controlled sectionalized block valves pursuant to paragraph (1), ensure that remote and automatic shut-off valves are installed as quickly as is reasonably possible, and establish ongoing procedures for monitoring progress in achieving the requirements of this section.
- (b) The commission shall authorize recovery in rates for all reasonably incurred costs incurred for implementation of the requirements of this section.
- (c) The commission, in consultation with the Pipeline and Hazardous Materials Safety Administration of the United States Department of Transportation, shall adopt and enforce compatible safety standards for commission-regulated gas pipeline facilities that the commission determines should be adopted to implement the requirements of this section.”

5.7.3 Significance Criteria

The significance criteria used to evaluate impacts involving hazards and hazardous materials are based on criteria listed in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.). A significant impact would occur if the project would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials

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- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school
- Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment
- For a project located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
- Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

5.7.4 Impact Analysis

The boxes in the chart below have been checked accordingly to characterize the level of significance for each CEQA criterion. The rationale for the anticipated significance levels is provided below the chart in each of the corresponding sections.

Would the project:	Potentially Significant Impact	Less Than Significant with APMs Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Would the project:	Potentially Significant Impact	Less Than Significant with APMs Incorporated	Less Than Significant Impact	No Impact
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Less than Significant Impact with APMs Incorporated. The Proposed Project would involve the construction of new natural gas turbine-driven compressors at the Adelanto Compressor Station in the City of Adelanto and construction of 95 miles of new 36-inch natural gas pipeline through multiple jurisdictions as shown in Table 3-1. Construction activities would involve the transport, use, storage, and disposal of hazardous materials, including fuels (gasoline, diesel, and propane), lubricants, solvents, hydraulic fluids, and other toxic or flammable materials. These materials would be used and stored in designated construction staging areas within the Proposed Project site boundaries at various work locations. These materials would be transported and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. Consequently, the materials alone, and use of these materials for their intended purpose, would not pose a significant risk to the public or environment. To minimize the potential for accidental spills of hazardous construction-related materials during transport and use, **APM-HAZ-1**, **APM-HAZ-2**, **APM-HAZ-3**, and **APM-HAZ-4** would be implemented.

As shown in Table 3-5, construction of the new natural gas pipeline would require multiple HDD crossings, including the Santa Ana River, Whitewater River, and East Twin Creek. HDD bores require

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drilling mud to lubricate the drill bit and to maintain the down-hole pressure while drilling. Although the drilling mud may be nontoxic, it would likely come in contact with lubricants, solvents, oils, heavy metals, and chemicals during drilling activities. Additionally, the drilling would produce cuttings (earth and rock material from the drill hole) that would be mixed with the drilling mud and brought to the surface. The drilling mud and cuttings would become contaminated, resulting in a potentially significant impact related to hazardous waste disposal. This impact would be reduced to a less than significant level through implementation of **APM-HAZ-5**.

There would be no change in use at the Adelanto Compressor Station, Moreno Pressure Limiting Station, Whitewater Pressure Limiting Station, Shaver Summit Pressure Limiting Station, or Desert Center Compressor Station as a result of the Proposed Project. Deliveries of supplies, including fuels, lubricants, and other chemicals, would continue to occur on a routine basis at these locations in accordance with all federal, state, and local laws. Supplies would be stored within the site boundaries at each of these facilities and no new impacts related to routine transport, use, or disposal of hazardous materials would be expected to occur. **APM-HAZ-5** would be implemented to ensure that hazardous materials are stored and managed properly during ongoing operations and maintenance activities. To ensure that the appropriate methods for preventing, containing, and controlling potential releases are in place, **APM-HAZ-6** would be implemented.

b) *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Hazardous Materials

Less than Significant Impact with APMs Incorporated. As discussed in Section 5.7.1, there are seven sites that may have impacted the environmental conditions within the Proposed Project area (Landfill Cajon, Former M&M Smog and Muffler, Bear Oil Company/Former Texaco, Eric Realty Property/Former above ground solvent storage, Perfection Plating, Banning Rifle Range, and Union Pacific Railroad-Palm Springs at the Yuma Main Line). For six of these seven sites, the extent of the impacts appears to be limited to contaminated soil. If contaminated soil is encountered during construction of the Proposed Project, the hazardous conditions would be limited to the construction zone provided a Hazardous Materials Contingency Plan is in place and followed, as well as a worker Health and Safety Plan, as outlined in **APM-HAZ-7**. One of the seven sites was a landfill. Potential hazards include landfill gas and VOCs. During construction activities in this area continuous air monitoring would be necessary, as outlined in **APM-HAZ-8**.

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Pipeline Safety

Less than Significant Impact with APMs Incorporated. The Proposed Project involves construction of a new 36-inch natural gas pipeline through multiple jurisdictions and communities, including rural desert areas in the north and east and denser urban communities along the central portion of the alignment through the San Bernardino Valley. The pipeline parallels existing natural gas pipelines and/or liquid petroleum pipelines for approximately half of the alignment, including between Mile Posts AM-1 through AM-21, Mile Posts AM-25 to AM-26, MW-1 to MW-10, MW-15 to MW-16, and MW-18 to the Whitewater Pressure Limiting Station.

Transportation of natural gas by pipeline involves some risk to the public in the event of an accident and subsequent release of natural gas. The greatest hazard is a fire or explosion following a major pipeline rupture.

Four types of events are generally recognized as the main causes of pipeline leak and/or rupture:

- **Third Party Dig-ins.** Third party dig-ins can result from activities that are not associated with pipeline construction and maintenance. Third party dig-ins are generally associated with development or reconstruction projects (i.e., subsurface digging with a backhoe or exploratory soil borings). The potential for third party dig-ins to occur is related to the amount of construction being performed in the immediate vicinity of a pipeline.
- **Corrosion.** Pipeline corrosion can occur both internally and externally and can lead to an accidental release. There are a number of possible causes of corrosion. The presence of CO₂ and water in natural gas is generally the main reason for internal corrosion of natural gas pipelines. External corrosion of natural gas pipelines is generally the result of direct contact of the pipeline material with soils, water, and/or air. The potential for pipeline corrosion to occur is related to pipeline material type, the age of the pipeline, and corrosion preventative measures (i.e., cathodic protection and/or protective coatings).
- **Weld or Material Defects.** Weld or material defects can weaken pipeline structures and result in leaks and/or ruptures. Improper material selection, pipeline design and construction, or quality control can lead to potential weld and material defects that can compromise the pipeline integrity. The potential for weld or material defects to occur is related to the use of insufficiently qualified operators (welders) and/or defectively manufactured materials.
- **Ground Movement.** Ground movement can compromise the structural integrity of a pipeline, resulting in leaks or ruptures. Underground pipelines are most sensitive to ground movement associated with fault rupture, liquefaction, and landslides.

In order to help identify appropriate measures to address the types of risks to pipeline leaks and/or ruptures described above, the Applicant would prepare a System Safety and Risk of

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Upset Report for the Proposed Project as outlined in **APM-HAZ-9**. The report would evaluate the potential for a fire or explosion due to an accidental release of flammable natural gas from the pipeline; identify the HCAs along the proposed alignment and the class location designation for the pipeline; and identify any recommended risk avoidance, risk management, and emergency planning measures for the pipeline.

In accordance with state and federal regulations, including 49 CFR 192, Health and Safety Code (Chapter 6.95), and Titles 19, 22, and 27 of the CCR, an emergency response plan would be prepared by the Applicant, as described in **APM-HAZ-10**.

c) *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Less than Significant Impact with APMs Incorporated. As discussed in Section 3.5, the existing Adelanto Compressor Station would be replaced with new natural gas turbine-driven compressors. Operation of the new compressor station equipment would require a major facility permit modification with the MDAQMD under Title V of the Federal Clean Air Act (40 CFR Part 70-71). As discussed in Section 5.3, a Health Risk Assessment was prepared for operation of the new compressor station turbines and it was determined that TAC emissions associated with the proposed gas turbines, which would incorporate oxidation catalysts for VOC control, would be considerably lower than the TAC emissions of the existing compressor station, resulting in a net decrease in operational TAC emissions. Operational impacts of the compressor station related to health risks at nearby schools would therefore be less than significant.

As shown on Table 5.7-2, there are 15 schools located within 1/4 mile of the proposed pipeline alignment, including 12 schools along the Adelanto to Moreno pipeline and 3 schools along the Moreno to Whitewater pipeline. As discussed above, the pipeline would be designed in accordance with state and federal standards, which include such factors as population density and underlying land uses. In areas where schools are present, the pipeline would be designed to include measures recommended in the System Safety and Risk of Upset Report (see **APM-HAZ-9**) and otherwise in accordance with state and federal design criteria. Potential safety impacts associated with pipeline design requirements in close proximity to existing schools would be addressed through implementation of **APM-HAZ-9** and through adherence to all applicable pipeline design requirements.

There are no schools located within ¼ mile of the Moreno Pressure Limiting Station, Whitewater Pressure Limiting Station, Shaver Summit Pressure Limiting Station, or Desert Center Compressor Station locations. No impacts to schools would be expected to occur at these facilities during construction or operation of the Proposed Project.

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- d) ***Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?***

Less than Significant Impact with APMs Incorporated. As discussed in Section 5.7.1, 137 sites within the Proposed Project are listed in regulatory databases. All but 10 of these sites are listed in databases related to permitting or initial assessment or they are closed because corrective action was achieved. Three of the 10 sites that are open/active are unlikely to have impacted the Proposed Project area as they are downgradient or the contamination was limited to a small area. Of the 10 sites, 6 are impacted by soil contaminated with fuel, chemicals or metals, and 1 of the 10 sites was a landfill, which may contain landfill gases and VOCs.

In the event that grading, construction, or operation of the Proposed Project encounters evidence of contamination, USTs, or other environmental concerns, a Hazardous Materials Contingency Plan as detailed in **APM-HAZ-7** would be followed.

In the event that grading, construction, or operation of the Proposed Project encounters landfill gas, chlorinated compounds, or other environmental concerns, a Construction Management Plan as detailed in **APM-HAZ-8** would be followed.

In addition, several areas within the Proposed Project may have been used for agriculture (row crops and orchards). Thus, shallow soils in these areas may be impacted with pesticides and metals. In accordance with **APM-HAZ-11**, further studies would be performed to determine the extent and type of the agriculture and determine the need for sampling and remediation, if needed, prior to construction activities.

- e) ***For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?***

Less than Significant Impact with APMs Incorporated. As discussed in Section 5.7.1, there are two public airports located within two miles of the Proposed Project:

- The San Bernardino International Airport is located immediately east of the Adelanto to Moreno pipeline alignment at Mile Post AM-43.
- The Banning Municipal Airport is located approximately 0.25 miles north of the Moreno to Whitewater alignment between Mile Posts MW-17 and MW-18.

Along the western edge of the San Bernardino International Airport, construction activities would take place on Tippecanoe Avenue using standard in-road pipeline construction techniques. Prior to commencement, construction-related permits required by the City of San

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Bernardino would be obtained, including traffic control plan approval, excavation permits, third-party crossing permits, etc. During construction, traffic control measures would be implemented as discussed in **APM-TRF-1**. Upon completion, the roadway would be restored and reopened. Construction activities within Lincoln Street, Hargrave Street, Barbour Street, and Westward Avenue in the vicinity of the Banning Airport would implement similar roadway construction measures. No airport-related safety hazards would occur as a result of Proposed Project construction.

The buried pipelines would be designed using the required safety class designations in the vicinity of both airports and no operational safety hazards are anticipated to occur as a result of Proposed Project operations.

f) *For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?*

Less than Significant Impact with APMs Incorporated. As discussed in Section 5.7.1, the Adelanto Airport, a private airstrip, is located approximately 1.5 miles southwest of the compressor station and 0.5 miles west of the Adelanto to Moreno alignment between Mile Posts AM-1 and AM-2. Similar to the public airports discussed above and with implementation of **APM-TRF-1**, construction and operation of the Proposed Project would not result in any safety hazards for people residing or working in the Proposed Project area.

g) *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Less than Significant Impact with APMs Incorporated. As discussed in **APM-HAZ-10**, the Applicant would prepare an emergency response plan for the Proposed Project for use in response to a pipeline-related emergency (e.g., gas leak, earthquake, accidental release of hazardous materials or waste, fire, and/or pipeline or facility damage). Included in this plan would be measures for fire prevention. The plan would be designed in accordance with state and federal regulations, including 49 CFR 192, Health and Safety Code (Chapter 6.95), and Titles 19, 22, and 27 of the CCR. Implementation of this plan (**APM-HAZ-10**) would ensure that the Proposed Project would not impair implementation or physically interfere with any adopted emergency response or evacuation plans.

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- h) Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

Less than Significant Impact with APMs Incorporated. As shown on Figure 5.7-1, a relatively large portion of the overall pipeline alignment occurs within areas considered to have a very high, high, or moderate potential for fire ignition and spread. These areas would all be considered capable of significant wildfires under the right conditions. However, they typically include defined periods of the year where the potential for fire ignition is higher, such as during Red Flag Warning weather periods when humidity is low and winds are high. The remainder of the year, the potential for fire ignition and spread would be significantly reduced.

Project-related construction and maintenance activities in the designated fire hazard zones have the potential to result in accidental fires. The highest potential for wildfire related to the pipeline is expected to be during construction and during pipeline maintenance activities. There are many types of construction and maintenance related ignition sources, including:

- Earth-moving equipment – create sparks, heat sources, fuel or hydraulic leaks, etc.
- Chainsaws – may result in vegetation ignition from overheating, spark, fuel leak, etc.
- Vehicles – heated exhausts/catalytic converters in contact with vegetation may result in ignition
- Welders – open heat source may result in metallic spark coming into contact with vegetation
- Wood chippers – include flammable fuels and hydraulic fluid that may overheat and spray onto vegetation with a hose failure
- Compost piles – large piles that are allowed to dry and are left on-site for extended periods may result in combustion and potential for embers landing in adjacent vegetation
- Grinders – sparks from grinding metal components may land on a receptive fuel bed
- Torches – heat source, open flame, and resulting heated metal shards may come in contact with vegetation
- Hot Works Equipment – all small hand tools either gas or electric powered that may result in sparks, flames, or excessive heat may result in vegetation ignition.
- Dynamite/blasting – if necessary, blasting may cause vegetation ignition from open flame, excessive heat or contact of heated material on dry vegetation
- Other accidental ignitions – ignitions related to discarded cigarettes, matches, temporary electrical connections, inappropriately placed generators, poor maintenance of equipment, and others.

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This potentially significant impact would be reduced to less than significant levels through implementation of **APM-HAZ-12**.

The risk of fire and explosion associated with the operation of the Proposed Project is discussed above. Implementation of **APM-HAZ-9** and adherence to state and federal regulations for design, construction, and operated of the pipeline would reduce these impacts to a less than significant level.

5.7.5 Applicant Proposed Measures

APM-HAZ-1 Hazardous Materials and Hazardous Waste Handling. A project-specific hazardous materials management and hazardous waste management program will be developed prior to initiation of the Proposed Project. The program will outline proper hazardous materials use, storage, and disposal requirements as well as hazardous waste management procedures. The program will identify the types of hazardous materials to be used during the Project and the types of wastes that will be generated. All Project personnel will be provided with Project-specific training. This program will be developed such that hazardous materials and wastes will be handled in a safe and environmentally sound manner. Hazardous materials will not be disposed of or released onto the ground, the underlying groundwater, or any surface water. Totally enclosed containment will be provided for all trash. All construction waste, including trash and litter, garbage, other solid waste, petroleum products and other potentially hazardous materials, will be removed to a waste facility permitted to treat, store, or dispose of such materials. Hazardous wastes will be handled and disposed of according to applicable rules and regulations. Employees handling hazardous materials and wastes will receive hazardous materials training and will be trained in hazardous waste procedures, spill contingencies, and waste minimization procedures in accordance with Occupational Safety and Health Administration (OSHA) Hazard Communication Standards and Title 22 of the California Code of Regulations (CCR)..

APM-HAZ-2 Transport of Hazardous Materials. Hazardous materials that will be transported by truck include fuel (diesel fuel and gasoline) and oil and lubricants for equipment. Containers used to store hazardous materials will be properly labeled and kept in good condition. Written procedures for the transport of hazardous materials used will be established in accordance with U.S. Department of Transportation and California Department of Transportation (Caltrans) regulations. A qualified transporter will be selected to comply with U.S. Department of Transportation and Caltrans regulations.

APM-HAZ-3 Fueling and Maintenance of Construction Equipment. Written procedures for fueling and maintenance of construction equipment will be prepared prior to construction.

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Vehicles and equipment will be refueled on site or by tanker trucks. Procedures will include the use of drop cloths made of plastic, drip pans, and trays to be placed under refilling areas to prevent chemicals from coming into contact with the ground. Refueling stations will be located in designated areas where absorbent pad and trays will be available. Fuel storage tanks will be placed in secondary containment to prevent accidental spillage from occurring. Drip pans or other collection devices will be placed under the equipment at night to capture drips or spills. Equipment will be inspected daily for potential leakage or failures. Hazardous materials such as paints, solvents, and penetrants will be kept in an approved locker or storage cabinet.

- APM-HAZ-4 Emergency Release Response Procedures.** An Emergency Response Plan detailing responses to releases of hazardous materials will be developed prior to construction activities. It will prescribe hazardous materials handling procedures for reducing the potential for a spill during construction and will include an emergency response program to ensure quick and safe cleanup of accidental spills. All hazardous materials spills or threatened releases, including petroleum products such as gasoline, diesel, and hydraulic fluid, regardless of the quantity spilled, will be immediately reported if the spill entered a navigable water, stream, lake, wetland, or storm drain; affected any sensitive area, including conservation areas and wildlife preserves; or caused injury to a person or threatened injury to public health. All construction personnel, including environmental monitors, shall be aware of state and federal emergency response reporting guidelines.
- APM-HAZ-5 Containment and Disposal of HDD Drilling Waste.** Drilling mud and cuttings from HDD drilling activities will be contained in portable tanks. Samples will be analyzed as necessary (to determine waste classification) and waste will be disposed of at an approved disposal facility.
- APM-HAZ-6 Spill Prevention, Countermeasure, and Control Plan and Hazardous Materials Business Plan.** In accordance with Title 40 of the CFR, Part 112, the Applicant will prepare a Spill Prevention, Countermeasure, and Control Plan and Hazardous Materials Business Plan for the Adelanto Compressor Station. The plans will include engineered and operational methods for preventing, containing, and controlling potential releases and provisions for quick and safe cleanup.
- APM-HAZ-7 Hazardous Materials Contingency Plan.** In the event that grading, construction, or operation of the Proposed Project will encounter evidence of contamination, USTs, or other environmental concerns, a Hazardous Materials Contingency Plan should be followed. The plan should 1) specify measures to be taken to protect worker and public health and safety and 2) specify measures to be taken to manage and remediate wastes. Although there is potential for soil contamination elsewhere within the Proposed

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Project area, the plan should highlight the areas of known soil contamination. The plan should include the following:

- Identification of known areas of soil contamination.
- Procedures for temporary cessation of construction activity and evaluation of the level of environmental concern.
- Procedures for limiting access to the contaminated area to properly trained personnel.
- Procedures for notification and reporting, including internal management and local agencies (fire department, DEH, APCD, etc), as needed.
- A worker health and safety plan for excavation of contaminated soil.
- Procedures for characterizing and managing excavated soils.
- Procedures for certification of completion of remediation.

In addition to awareness of the Contingency Plan, grading and excavation staff should undergo training on how to identify suspected contaminated soil and USTs.

APM-HAZ-8 Construction Management Plan. A Construction Management Plan will be developed for the Proposed Project to provide air monitoring for excavation activities occurring near landfills. The plan will be prepared in accordance with the Cal/OSHA standards, which will be used to establish air monitoring action levels, as well as standard processes in the event that impacted areas are encountered during construction.

APM-HAZ-9 Safety and Reliability Study. The Applicant will complete a pipeline safety and reliability study for the Proposed Project. The study will include a summary of nationwide natural gas pipeline accident statistics to provide an indication of potential impacts on public safety as a result of the Proposed Project. Risk management measures that would be incorporated into the Proposed Project will be described. Class location designations to be used as a design basis for the Proposed Project will be presented in the study. Information regarding the Applicant's proposed design standards (e.g., pipe material selection, depth of burial, corrosion protection measures, leak detection measures, pipeline segment isolation), operational parameters (e.g., design pressure, Maximum Allowable Operating Pressure), and monitoring procedures (e.g., inspection and testing methods and frequency, SCADA monitoring capability, in-line inspection tool capability) will be described as related to the class location designations associated with the pipeline segments.

APM-HAZ-10 Emergency Response Plan, Pipeline Safety. The Applicant will prepare an Emergency Response Plan, for use in response to a pipeline-related emergency (e.g., gas leak,

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earthquake, accidental release of hazardous materials or waste, fire, and/or pipeline or facility damage). Included in this plan would be measures for fire prevention. The plan would be designed in accordance with state and federal regulations, including 49 CFR 192, Health and Safety Code (Chapter 6.95), and Titles 19, 22, and 27 of the CCR.

APM-HAZ-11 Additional Hazardous Materials Research. The Applicant will determine if additional research of potential hazardous waste sites more than 0.50 miles from the Proposed Project area is necessary and/or if there are additional regulatory databases that should be searched. The local Certified Unified Program Agency (e.g. county environment health department) shall be contacted to obtain further details regarding the seven sites of concern identified in Section 5.7.1. In addition, historical aerial photographs that have more detail should be reviewed to verify or eliminate the Proposed Project areas identified as potentially being used for agriculture, and thereby potentially containing pesticides and metals in shallow soils.

APM-HAZ-12 Fire Protection Plan, Construction. Pipeline segments within VHFHSZs, HFHSZs, and MFHSZs will incorporate fire safety precautions during any active construction or maintenance that includes hot works (any construction or maintenance activities that may lead to a heat source). A Fire Protection Plan will address fire prevention measures that will be employed during construction. The plan will identify potential sources of ignition and detail the measures, equipment, and training that will be provided to all site construction contractors. Copies of this plan will be given to all construction contractors.

5.7.6 References

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URS Corporation. 2007. *California Department of Education Guidance Protocol for School Site Pipeline Risk Analysis*. Prepared for The California Department of Education School Facilities Planning Division. February 2007.

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5.8 Hydrology and Water Quality

This section describes the existing hydrology and water quality conditions that may be affected by the Proposed Project and provides regulatory background. It also identifies potential impacts from construction, operation, and maintenance of the Proposed Project on hydrology and water quality in the Proposed Project area.

5.8.1 Environmental Setting

Climate and Precipitation

The Proposed Project spans several climatic regions, with the majority of the proposed alignment traveling through high desert, subalpine, and low desert environments. The proposed alignment begins at the existing Adelanto Compressor Station in the southern Mojave Desert, which is classified as high desert. The Mojave Desert experiences high aridity and low precipitation and a wide variation in temperature, with very hot summer months and cold winters. The average annual precipitation for the region is 5.52 inches as measured at the Victorville Pump Point NOAA weather station in Victorville (WRCC 2014).

The proposed alignment then travels south into the San Bernardino National Forest, where it encounters subalpine, mountainous terrain. This area is characterized by relatively wet conditions compared to the surrounding arid regions, with an average annual precipitation of 36.48 inches at the Lytle Creek Ranger Station NOAA weather station (WRCC 2014). The majority of precipitation in this area falls during the winter months as rain or snow at higher elevations.

Continuing in a southerly direction, the proposed alignment exits the San Bernardino National Forest and enters the San Bernardino Valley. This area is generally characterized by a Mediterranean climate with cool, wet winters and hot, dry summers. The annual average precipitation at the San Bernardino National Forest NOAA weather station in the city of San Bernardino is 16.12 inches (WRCC 2014). Shortly before crossing from San Bernardino to Riverside county, the proposed alignment travels southeast through the Box Spring Mountains into Moreno Valley where it meets the Moreno Valley Pressure Limiting Station. Moreno Valley is a semi-arid region also characterized by a Mediterranean climate.

From the Moreno Valley Pressure Limiting Station, the proposed Moreno to Whitewater pipeline travels east towards the Whitewater Pressure Limiting Station through a low desert environment characterized by hot, dry conditions with low levels of precipitation. The annual average precipitation in Palm Springs, located just south of the Whitewater Pressure Limiting Station, is 5.53 inches (WRCC 2014). Unlike the other regions crossed by the proposed alignment, which generally receive the majority of their precipitation in the winter months, there is no defined rainy season in this low desert region.

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Precipitation can fall during large-scale winter storms or local summer thunderstorms and rare larger summer storms (RWQCB 2008).

The Shaver Summit Pressure Limiting Station and the Desert Center Compressor Station are located further east of the Whitewater Pressure Limiting Station in Riverside County. Like the Whitewater Pressure Limiting Station, these facilities are located in a hot, arid, low desert environment.

Surface Water Hydrology

Major Watersheds and Streams

The SWRCB has divided the State of California into nine hydrologic regions. These regions are subdivided into Hydrologic Units (HUs). Each HU consists of an entire watershed or one or more major streams. HUs are further subdivided into hydrologic areas (HAs), which are subdivided into hydrologic subareas (HSAs).

The proposed alignment would cross four watersheds or hydrologic units in three hydrologic regions: the Mojave Watershed (HU 802.00) in the Lahontan hydrologic region (RWQCB Region 6), the Santa Ana River Watershed (HU 801.00) and the San Jacinto Valley Watershed (HU 802.00) in the Santa Ana hydrologic region (RWQCB Region 8) and the Whitewater River Watershed (HU) in the Colorado River Basin hydrologic region (RWQCB Region 7).

The northernmost portion of the proposed alignment is located in the Mojave River Watershed, which encompasses approximately 4,500 square miles (San Bernardino County, 2014). The Mojave River, which travels approximately 110 miles northeast from its headwaters in the San Bernardino Mountains to its terminus near Soda Lake (San Bernardino County, 2014), is the dominant surface hydrologic feature in the watershed. Winter precipitation in the San Bernardino Mountains provides spring recharge that feeds the Mojave River system (SWRCB 2002). The Mojave River Watershed sits in an arid region with limited water resources. Groundwater is the primary source of water to the watershed (SWRCB 2002). The Mojave river channel is typically dry outside of intense storm events except in locations where geologic morphology results in groundwater discharge (SWRCB 2002). The Mojave River hydrologic unit is under the jurisdiction of the Lahontan RWQCB, Region 6. The 1995 Water Quality Control Plan for the Lahontan region designates beneficial uses and water quality objectives within the Mojave River hydrologic unit.

South of the Mojave Watershed, the proposed alignment travels through the Santa Ana River Watershed. The Santa Ana River Watershed is approximately 1,946 square miles and is drained by the Santa Ana River and its tributaries. The Santa Ana River begins in the San Bernardino Mountains and travels approximately 75 miles southwest to the Pacific Ocean (OCWD 2014). During the winter and spring months, the Santa Ana River is fed by winter storm and mountain snowmelt runoff from the San Bernardino Mountains. At other times of the year, base flow to the Santa Ana River is primarily derived

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from recycled water and groundwater discharge. There is little year-round natural perennial flow in the Santa Ana River. South of the City of San Bernardino, parts of the river are operated as a flood control facility. The Santa Ana River hydrologic unit is under the jurisdiction of the Santa Ana RWQCB, Region 8. The 2008 Water Quality Control Plan for the Santa Ana Region designates beneficial uses and water quality objectives within the Santa Ana River hydrologic unit.

South of the Santa Ana River Watershed, the proposed alignment crosses the northern portion of the San Jacinto Valley Watershed, which encompasses an area of approximately 766 square miles. This watershed is drained by the San Jacinto River and its tributaries, with drainage ultimately arriving at Lake Elsinore. Although hydrologically isolated from the Santa Ana River, the San Jacinto Valley Watershed is also under the jurisdiction of the Santa Ana RWQCB, Region 8. The 2008 Water Quality Control Plan for the Santa Ana Region designates beneficial uses and water quality objectives within the San Jacinto Valley hydrologic unit.

The easternmost portion of the proposed alignment crosses the Whitewater Watershed, which covers an area of approximately 1,854 square miles. The Whitewater and Shave Summit Pressure Limiting Stations would also be located in the Whitewater Watershed. The proposed alignment travels over San Gorgonio Pass, which divides the San Jacinto Valley Watershed to the west and the Whitewater River Watershed to the east. The Whitewater River is a major hydrologic feature of this watershed. The river has its headwaters in the San Gorgonio Mountains and terminates in the Salton Sea. The Whitewater Watershed is a closed drainage basin that only loses water through infiltration or evaporation. The Colorado River Basin RWQCB, Region 7, has jurisdiction over the Whitewater River hydrologic unit. The 2006 Water Quality Control Plan for the Colorado River Basin designates beneficial uses and water quality objectives within the Whitewater River hydrologic unit.

The Shaver Summer Pressure Limiting Station and Desert Center Compressor Station are located in the Chuckwalla Watershed, located northeast of the Salton Sea. The Chuckwalla Watershed covers an area of approximately 1,982 square miles. There are no perennial streams in the Chuckwalla Valley (DWR 2004). The 2006 Water Quality Control Plan for the Colorado River Basin designates beneficial uses and water quality objectives within the Chuckwalla hydrologic unit.

Waterbody Crossings

Examination of USGS topographic maps and satellite imagery of the land crossed by the Proposed Project indicates that the pipeline would cross three major rivers: the Santa Ana River, the San Gorgonio River and the Whitewater River. The proposed pipeline also crosses the California Aqueduct, Cajon Wash, City Creek, San Timoteo Creek, several perennial streams, and at least 32 intermittent drainage features such as ephemeral streams, creeks, washes and ditches. The proposed pipeline crosses just north of a percolation basin but does not cross any lakes or dry lake beds. The major waterbodies crossed by the proposed pipeline are listed in Table 5.8-1.

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**Table 5.8-1
Major Waterbodies Crossed by the Proposed Project**

County / Hydrologic Region	Waterbody Name	Waterbody Type	State Water Quality Classification	Alignment, Approximate Mile Post
San Bernardino / Lahontan (Region 6)	California Aqueduct	Perennial, controlled	Beneficial uses established; Impaired	AM-6 to AM-7
San Bernardino / Santa Ana (Region 8)	Cajon Wash	Perennial	Beneficial uses established	AM-22
San Bernardino / Santa Ana (Region 8)	City Creek	Perennial, upper reaches; Intermittent, lower reaches at location of proposed pipeline crossing	Beneficial uses established; not all beneficial uses supported	AM-41 to AM-42
San Bernardino / Santa Ana (Region 8)	Santa Ana River	Intermittent at location of proposed pipeline crossing	Beneficial uses established; reaches downstream of proposed pipeline crossing are impaired	AM-42 to AM-43
San Bernardino / Santa Ana (Region 8)	San Timoteo Creek	Perennial, upper reaches; Intermittent at location of proposed pipeline crossing	Beneficial uses established	AM-45 to AM-46
Riverside / Colorado River Basin (Region 7)	San Gorgonio River	Wide Wash	Beneficial uses established	MW-20
Riverside / Colorado River Basin (Region 7)	Whitewater River	Wide Wash	Beneficial uses established	MW-30 to MW-32

The proposed alignment would cross the California Aqueduct between Mile Posts AM-6 and AM-7 just south of Adelanto, California. The California Aqueduct is a concrete channel that conveys water from northern California in the San Joaquin River-Sacramento River Delta south to Southern California.

The alignment crosses Cajon Wash just past Mile Post AM-22. Cajon Wash is a tributary to Lytle Creek, which flows between the San Gabriel and San Bernardino Mountains. Cajon Wash (also known as Cajon Creek) is in the Santa Ana River hydrologic unit, Upper Santa Ana River hydrologic area (HA 801.50), Bunker Hill hydrologic subarea (HAS 801.52). The proposed pipeline crosses Cajon Wash near Mile Post AM-22. The wash is a perennial creek characterized by braided bed morphology typical of alluvial channels and is bordered by riparian vegetation.

City Creek is a stream that originates in the San Bernardino Mountains and flows southwest into the Santa Ana River. City Creek is in the Santa Ana River hydrologic unit, Upper Santa Ana River hydrologic area, Bunker Hill hydrologic subarea. Perennial flow is present over the majority of the stream channel. The proposed pipeline crosses City Creek between Mile Post AM-41 and AM-42 in the city of San

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Bernardino. Warm Creek also originates in the San Bernardino Mountains and joins City Creek just upstream of its confluence with the Santa Ana River.

The proposed pipeline crosses the Reach 5 of the Santa Ana River between Mile Posts AM-43 and AM-44 in the Upper Santa Ana River hydrologic area, Bunker Hill hydrologic subarea. In addition to stormwater and tributary flow, Reach 5 of the Santa Ana River also receives recycled water inflows from the City of San Bernardino Water Reclamation facility (SAWPA 2012). However, Reach 5 tends to be dry outside of storm flow events. The Reach 5 channel is primarily operated as a flood control facility (RWQCB 2008).

The proposed pipeline crosses Reach 1 of San Timoteo Creek near Mile Post AM-45 just south of I-10. San Timoteo Creek is in the Santa Ana River hydrologic unit, Upper Santa Ana River hydrologic area, Bunker Hill hydrologic subarea. San Timoteo Creek experiences intermittent flow at the location of the proposed pipeline crossing. The creek flows west northwest from the San Bernardino Mountain foothills to the Santa Ana River.

The San Gorgonio River is a tributary to the Whitewater River, which flows to the Salton Sea in Southern California. These rivers are in the Whitewater hydrologic unit (HU 719.00). Both rivers are characterized by braided bed morphology. In the sections crossed by the proposed pipeline, these rivers have little riparian vegetation due to flooding and channel shifting. The proposed pipeline crosses the San Gorgonio River at approximately Mile Post MW-22 and crosses the Whitewater River at between Mile Posts MW-30 and MW-32.

Portions of the proposed pipeline are located within valleys surrounded by mountain ranges including the San Bernardino and San Jacinto Mountains. These valleys can contain alluvial outwash fans that drain the surrounding mountain area. These features can become washes during seasonal precipitation events through which fast flowing water can temporarily travel.

The proposed pipeline crosses the 100-year flood plains of the Santa Ana River, San Gorgonio River and Whitewater River. The proposed pipeline also crosses the 100-year and 500-year flood plains of several smaller rivers and streams, including some that are tributary to the Santa Ana River. 100-year and 500-year floods are defined as the flood levels that have a 1% chance and 0.2% chance, respectively, of being equaled or exceeded in any single year. Although the proposed pipeline would be located within the 100-year flood zone, the pipeline would typically be buried at depths of 7 to 8 feet (or deeper where directional drilling would occur).

Water Quality

Water quality in the Proposed Project area is variable, as the proposed alignment travels through both remote mountain terrain and populated areas. Water quality within the watersheds crossed by the proposed alignment is influenced by natural and artificial sources including soil erosion, discharges from

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wastewater treatment plants, stormwater runoff, groundwater discharge, agriculture, recreation activities and in the upper portions of the watersheds, flora and fauna. None of the major bodies crossed by the proposed alignment are listed on the EPA-approved 2010 303(d) List of impaired waterbodies as listed by the SWRCB in the 2010 Integrated Report. However, each of the four hydrologic regions crossed by the proposed alignment contains 303(d) listed impaired waterbodies. The water quality of waterbodies located downstream of the Proposed Project area may be impacted by the Proposed Project. The water quality of the major waterbodies that would be crossed by the proposed alignment is discussed below.

The northernmost major waterbody crossed by the proposed alignment is the California Aqueduct. The California Aqueduct is considered an impaired waterbody as not all of its beneficial uses are supported.

Beneficial uses for Cajon Wash include wildlife habitat, cold freshwater habitat, groundwater recharge, water contact recreation, non-contact water recreation and support of rare, threatened or endangered species (RWQCB 1995). City Creek is not listed on the 303(d) List but is considered to be a Category 2 waterbody by the 2010 Integrated Report, meaning it supports some but not all of its California beneficial uses and has other uses that are not assessed or lack of sufficient information to be assessed. Beneficial uses for City Creek include wildlife habitat, cold freshwater habitat, groundwater recharge, water contact recreation, non-contact water recreation, spawning, reproduction and development and support of rare, threatened or endangered species (RWQCB 2008). Pollutants in City Creek include metals, selenium and chloride (SWRCB 2010a).

Water quality data for Reach 5 of the Santa Ana River is limited due to lack of flow. Reach 5 is considered a Category 2 waterbody due the presence of pesticides interfering with the core beneficial use of Aquatic Life Support (SWRCB 2010a). The Santa Ana region Basin Plan lists the following beneficial uses for Reach 5 of the Santa Ana River: municipal and domestic supply, agricultural supply, wildlife habitat, water-contact recreation, non-water-contact recreation, groundwater recharge, warm freshwater habitat and support of rare, threatened or endangered species (Santa Ana RWQCB, 1995). Reach 4 of the Santa Ana River, immediately downstream of Reach 5, is listed on the 303(d) list as containing pathogens from nonpoint sources (SWRCB 2010b), with a TMDL scheduled completion date of 2019 for this pollutant. Portions of the Santa Ana River further downstream are also listed on the 303(d) list with pollutants including pathogens, metals and indicator bacteria (SWRCB 2010b). A TMDL for pathogens derived from dairies was established in Reach 3 of the Santa Ana River in 2007. San Timoteo Creek has not been assessed for 303(d) listing under the CWA. Beneficial uses for this portion of San Timoteo Creek are intermittent and include wildlife habitat, warm freshwater habitat, water contact recreation, non-contact water recreation and agricultural supply (RWQCB 2008).

Neither the San Gorgonio nor Whitewater Rivers have been assessed for 303(d) listing under the CWA. Beneficial uses for the San Gorgonio River include agricultural supply, groundwater recharge, water-contact recreation, non-water-contact recreation, cold freshwater habitat and wildlife habitat (Colorado

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River Basin RWQCB 2006). Beneficial uses for the Whitewater River include municipal and domestic supply, agricultural supply, groundwater recharge, water-contact recreation, non-water-contact recreation, intermittent warm freshwater habitat, cold freshwater habitat, wildlife habitat and hydropower generation.

5.8.2 Regulatory Setting

Federal

Water Pollution Control Act (Clean Water Act)

Increasing public awareness and concern for controlling water pollution led to enactment of the Federal Water Pollution Control Act Amendments of 1972. As amended in 1977, this law became commonly known as the Clean Water Act (CWA). The Act established basic guidelines for regulating discharges of pollutants into the waters of the United States. The CWA requires that states adopt water quality standards to protect public health, enhance the quality of water resources, and ensure implementation of the CWA.

- **Section 401.** Section 401 of the CWA requires an applicant for a federal permit, such as the construction or operation of a facility that may result in the discharge of a pollutant, to obtain certification of those activities from the state in which the discharge originates. This process is known as the Water Quality Certification for the Proposed Project. For projects in southeastern San Bernardino County, The Santa Ana RWQCB issues Section 401 permits. For projects in eastern Riverside County, the Colorado River RWQCB issues Section 401 permits.
- **Section 402.** Section 402 of the CWA established the National Pollution Discharge Elimination System (NPDES) to control water pollution by regulating point sources that discharge pollutants into waters of the United States. In the State of California, the EPA has authorized the SWRCB permitting authority to implement the NPDES program. In general, the SWRCB issues two baseline general permits: one for industrial discharges and one for construction activities. The Phase II Rule, which became final on December 8, 1999, expanded the existing NPDES program to address stormwater discharges from construction sites that disturb land equal to or greater than one acre.
- **Section 404.** Section 404 of the CWA established a permitting program to regulate the discharge of dredged or filled material into waters of the United States. The definition of waters of the United States includes wetlands adjacent to national waters. This permitting program is administered by the Army Corp of Engineers (ACOE) and is enforced by the (EPA). See Chapter 3.3, Biological Resources – Vegetation for further discussion of this regulation.
- **Section 303(d).** Under Section 303(d) of the CWA, the SWRQB is required to develop a list of water quality limited segments for jurisdictional waters of the United States. The RWQCBs are

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responsible for establishing priority rankings and developing action plans, referred to as total maximum daily loads (TMDL), to improve water quality of waterbodies included in the 303(d) list. The most recent 303(d) List of Water Quality Limited Segments approved by the EPA is from the 2010 Integrated Report. This document references the 2010 list. The list includes pollutants causing impairment to receiving waters or, in some cases, the condition leading to impairment. The 303(d) List status and receiving water impairments for major waterbodies crossed by the Proposed Project are discussed in Section 5.8.1.

Safe Drinking Water Act

Under the Safe Drinking Water Act (Public Law 93-523) of 1974, the EPA regulates contaminants of concern to domestic water supply. Contaminants of concern relevant to domestic water supply are defined as those that pose a public health threat or that alter the aesthetic acceptability of the water. These types of contaminants are regulated by EPA primary and secondary Maximum Contaminant Levels (MCLs) that are applicable to treated water supplies delivered to the distribution system. MCLs and the process for setting these standards are reviewed triennially. Amendments to the Safe Drinking Water Act enacted in 1986 established an accelerated schedule for setting MCLs for drinking water. The EPA has delegated to the California Department of Public Health the responsibility for administering California's drinking-water program. The California Department of Public Health is accountable to the EPA for program implementation and for adopting standards and regulations that are at least as stringent as those developed by the EPA. The applicable state primary and secondary MCLs are set forth in Title 22, Division 4, Chapter 15, Article 4 of the California Code of Regulations.

Executive Order 11988 and the Federal Emergency Management Agency

Under Executive Order 11988, the Federal Emergency Management Agency (FEMA) is responsible for management of floodplain areas. FEMA administers the National Flood Insurance Program to provide subsidized flood insurance to communities that comply with FEMA regulations limiting development in floodplains. FEMA issues Flood Insurance Rate Maps (FIRMs) that identify which land areas are subject to flooding. The design standard for flood protection is established by FEMA, with the minimum level of flood protection for new development determined to be the 1-in-100 annual exceedance probability (i.e., the 100-year flood event).

State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Act of 1967 (Water Code Section 13000 et seq.) is directed primarily towards the control of water quality. The Porter-Cologne Act provides for protection of the quality of all waters of the state of California for use and enjoyment by the people of California. It further provides that all

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activities that may affect the quality of waters of the state shall be regulated to obtain the highest water quality that is reasonable, considering all demands being made and to be made on those waters. The Porter-Cologne Act also establishes provisions for a statewide program for the control of water quality, recognizing that waters of the state are increasingly influenced by interbasin water development projects and other statewide considerations, and that factors such as precipitation, topography, population, recreation, agriculture, industry, and economic development vary regionally within the state. The Porter-Cologne Act establishes the State Board and its nine regional boards as the principal state agencies responsible for control of water quality. As such, each regional board is required to formulate and adopt a Basin Plan, which designates beneficial uses and establishes water quality objectives to protect these beneficial uses. The Proposed Project travels through areas under the jurisdiction of the Lahontan, Santa Ana and Colorado River Basin regional boards. Beneficial uses and water quality objectives for these areas are established by the 1995 Water Quality Control Plan for the Lahontan Region, the 2008 Water Quality Control Plan (Basin Plan) for the Santa Ana River Basin and the 2006 Water Quality Control Plan for the Colorado River Basin-Region 7, respectively.

Construction General Stormwater Permit

Under Section 402 of the CWA, construction-related stormwater discharges to surface waters are regulated through the NPDES program. The California SWRCB has been delegated the authority by the EPA to oversee the NPDES program through the RWQCBs. Under this authority, the SWRCB has developed a general permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ, Construction General Permit). Construction of the proposed pipeline would disturb an area greater than one acre. Therefore, the Proposed Project must receive coverage under the Construction General Permit. The Proposed Project area is under the jurisdiction of the Lahontan, Santa Ana, and Colorado River Basin RWQCBs. These three boards will therefore require notification of the Proposed Project's intention to carry out activities under the Construction General Permit. Operation under the Construction General Permit would require preparation of the SWPPP.

Dewatering and Other Low Threat Discharges Permit

The California RWQCBs have developed general permits and waste discharge requirements of dewatering water and other low threat discharges to surface waters (e.g., NPDES General Permit CAG998001 for the Santa Ana Region). These permits are relevant to any project that involves dewatering of a construction trench. Under these permits, pollutant concentrations of dewatering discharge must not cause or threaten to cause pollution, contamination or nuisance. Effluent limitations set forth by the permits include local (Basin Plan) and federal requirements pursuant to the CWA. To obtain coverage under this permit, a notice of intent would need to be submitted to the Lahontan, Santa Ana, and Colorado River Basin RWQCBs.

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California Fish and Game Code, Sections 1600–1603

Under this statute, the CDFW must be notified in the event that the Proposed Project would conduct any activities that may

- Substantially divert or obstruct the natural flow of any river, stream or lake
- Substantially change or use any material from the bed, channel or bank of, any river, stream, or lake
- Deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream or lake.

Streams are defined under this statute as any body of water that flows at least periodically and supports fish or other aquatic life, including past and present support of riparian vegetation. Any project that would result in adverse impacts to rivers, streams or lakes must obtain a Streambed Alteration Agreement from the CDFW.

Local

The proposed pipeline would cross several regional and local water districts. Among the mandates of entities is to ensure long-term public water supply through protection of surface water and groundwater resources. During implementation of the Proposed Project, these entities would be coordinated with to ensure compliance with established groundwater management plans and, if necessary, obtain permits for encroachment on water district easements.

County of Riverside

Riverside County Floodplain Management Ordinance 458

Riverside County is a participating community in the National Flood Insurance Program and is therefore required by FEMA to adopt a floodplain management ordinance in order to make the purchase of flood insurance available to citizens of the county. The intent of this ordinance is to ensure that any new construction and/or substantial improvement within a mapped floodplain is done in a manner that reduces damage to the public and property, as well as to discourage new development within floodways. The Floodplain Management Section of the District is responsible for the implementation of the County's Floodplain Management regulation and portions of the NFEP regulations.

In accordance with Ordinance 458, Section 4 (Administration), no structure shall be constructed, located, or substantially improved and no land shall be graded, filled, or developed, and no permit or approval shall be granted therefore, unless it complies with all applicable requirements of the ordinance. As relevant to the Project, per Section 6 (Construction Standards) of Ordinance 458, proposed developments within a mapped floodplain area must meet the following criteria: be designed

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or modified and adequately anchored to prevent flotation, collapse, or lateral movement of the structure; be constructed with materials resistant to flood damage; be constructed by methods and practices that minimize flood damages; and be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

Riverside County Drainage Area Management Plan, Santa Ana Region

Discharges from the municipal separate sewer system under the jurisdiction of the County of Riverside are covered under NPDES Permit No. CAS 618003. As part of this permit, the County of Riverside, together with co-permittees, submitted a Drainage Area Management Plan to the Santa Ana RWQCB. The Drainage Area Management Plan outlines programs and policies, including BMPs, aimed at achieving Water Quality Standards for Receiving Waters. The Drainage Area Management Plan contains policies and BMPs that apply to new developments that create 10,000 square feet or more of impervious surface collectively over the entire project site. These new developments are required to develop project-specific Water Quality Management Plans. The primary objective of the Water Quality Management Plan is to ensure that the land use approval process conducted by the co-permittees will minimize pollutant loads in urban runoff.

County of San Bernardino

San Bernardino County Flood Control District

The San Bernardino County Flood Control District (District) was enacted under California State legislation in 1939. This legislation was the direct outcome of disastrous floods in 1938. The District developed an extensive network of flood control facilities, including dams, conservation basins, channels and storm drains. These facilities are designed to intercept and convey flood flows through and away from major developed areas of the County. The primary functions of the District are flood protection on major streams, water conservation, and storm drain construction. If necessary, encroachment permits for flood channel crossings or any work within the District's right-of-way will need to be obtained from the District.

NPDES Permit No. CAS618036

Together with co-permittees, San Bernardino County partakes in an area-wide urban stormwater runoff management program covered under NPDES Permit No. CAS618036. This permit regulates the discharge of pollutants in urban runoff from non-agricultural human source from the municipal separate storm sewer systems (MS4s) under the jurisdiction or responsibility of the co-permittees. The county supports watershed protection principles aimed at improving water quality and adhering to the requirements of the permit. These principles include incorporation of structural and non-structural BMPs to mitigate projected increases to pollutant loads, prevention of post-development site runoff rates from adversely

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impacting downstream erosion and habitat, minimization of stormwater directed to impermeable surfaces, preservation of wetlands and establishment of reasonable limits on the clearing of vegetation from project sites. This permit requires that co-permittees ensure that all non-co-permittee construction sites of greater than one acre file a Notice of Intent with the SWRCB for coverage under the State's Construction General Permit. Co-permittees must also ensure that the erosion and sediment control plans it approves incorporate appropriate erosion and sediment control BMPs and that the runoff from new development projects it approves do not cause nuisance to adjoining or downstream properties in stream channels to the maximum extent practicable. The permit also outlines potential water quality impacts that should be considered as part of CEQA evaluation. New developments that create 10,000 square feet or more of impervious surface collectively over the entire project site are required to develop project-specific Water Quality Management Plans. The Water Quality Management Plans must include BMPs for source control, pollution prevention, site design, Low Impact Design (LID) implementation, where feasible, structural treatment control BMPs and control measures for any listed pollutant to an impaired waterbody on the 303(d) list that will prevent discharge from causing or contributing to an exceedance of receiving water quality objectives.

County of San Bernardino 2007 General Plan

In accordance with the County of San Bernardino 2007 General Plan, the potential impact of a project's construction on stormwater runoff should be considered during CEQA review. This review should consider the potential for discharge of stormwater pollutants from areas of material storage, vehicle or equipment fueling or maintenance, waste handling, hazardous materials storage and other outdoor work areas. The review should also consider the potential for the discharge of stormwater to affect beneficial uses of receiving waters and/or change flow velocity or volume of stormwater runoff in such a way as to cause environmental harm or significant increases in erosion of the project site or surrounding areas.

5.8.3 Significance Criteria

The significance criteria used to evaluate impacts involving hydrology and water quality are based on criteria listed in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.). A significant impact would occur if the project would:

- Violate any water quality standards or waste discharge requirements
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)

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- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff
- Otherwise substantially degrade water quality
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam
- Expose people or structures to inundation by seiche, tsunami, or mudflow.

5.8.4 Impact Analysis

The boxes in the chart below have been checked accordingly to characterize the level of significance for each CEQA criterion. The rationale for the anticipated significance levels is provided below the chart in each of the corresponding sections.

Would the project:	Potentially Significant Impact	Less Than Significant with APMs Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Would the project:	Potentially Significant Impact	Less Than Significant with APMs Incorporated	Less Than Significant Impact	No Impact
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) *Would the project violate any water quality standards or waste discharge requirements?*

Less than Significant Impact with APMs Incorporated. Construction activities for the Proposed Project that could potentially have adverse effects on water quality include excavation and trenching activities, cleanup and vegetation maintenance activities that utilize cleaners, solvents, pesticides and/or herbicides (if improperly applied), grading activities associated with establishment of access roads, trenching (or trenchless crossings), release of drilling fluids and discharge of dewatered groundwater or hydrostatic testing water. Due to the proximity of the Proposed Project to waterbodies at certain points, construction could result in excess levels of sediment or other pollutants in stormwater runoff from the construction sites. Because it would disturb an area greater than one acre, the Proposed Project would have to obtain coverage under the Construction General Permit issued by the RWQCBs with jurisdiction over the various Proposed Project areas. As a requirement of this permit, a project-specific SWPPP would be developed from the Proposed Project. The SWPPP would outline measures that would be taken to either prevent pollutants and authorized non-stormwater discharges from contaminating stormwater, or to reduce the pollutants to levels that do not exceed the numeric action levels

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established in the Construction General Permit or the water quality objectives of the applicable Basin Plan. BMPs that would be implemented as part of the SWPPP are identified in Section 3.8. Additionally, **APM-HYDRO-1** would be implemented to minimize potential impacts related to water quality during construction.

A primary water quality concern is the release of excess sediment loads to receiving waterbodies, particularly if construction activities within or adjacent to surface waters and ephemeral washed occur during rain events. Various construction techniques would be utilized when the proposed pipeline is required to cross under riparian areas, including case boring, slick boring, and directional drilling. These techniques, which are outlined in Section 3.8, would be implemented in such a way as to minimize or prevent release of excess sediment or pollutants to waterbodies. Additionally, **APM-HYDRO-2** would be implemented to reduce the potential of contamination by spills, no refueling, storage, servicing, or maintenance of equipment within 100 feet of any waterbodies, wetlands, or other sensitive environmental areas.

Construction related discharges including those from dewatering activities could impact water quality if released directly into receiving waters. High volume, high velocity discharges have the potential to increase soil erosion and scour and therefore result in release of sediment into waterbodies. Erosion and sediment control measures would be implemented as outlined in **APM-HYDRO-3** to address potential impacts related to erosion and scour resulting from dewatering activities.

Directional drilling may be used when construction of the proposed pipeline requires crossing certain waterbodies. This technique is often chosen to minimize impacts to surface waterbodies. However, operation of directional drilling equipment could result in the accidental release of non-hazardous bentonite drilling fluid (i.e. a mixture of clay and water) to the ground surface through porous media or fractures (referred to as a “frac out”). Typically, if drilling fluid finds its way to the ground surface, it would be contained (for example using sand bags or straw bales) and would be pumped into a tank or back to the drill site. After the bore is completed, any excess material would be removed from the site and either reused by the drilling contractor as backfill or disposed at an appropriate facility. In cases where surface water is present, release of drilling fluid can cause short-term yet significant increases in surface water turbidity and impacts to aquatic organisms. This potentially significant impact to water quality would be mitigated to a less than significant level through implementation of **APM-HYDRO-4**.

Additionally, spills or releases of petroleum products used to fuel construction vehicles or equipment or other hazardous materials such as used during construction could have an adverse impact on water quality. When construction activities occur near waterbodies and/or groundwater, there is also the risk that hazardous materials could leak into surface water or shallow groundwater. All hazardous materials would be containerized, handled, transported

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and disposed in accordance with state and Federal regulations. Additionally, implementation of the SWPPP would require the construction contractor to implement hazardous waste containment and management measures (e.g., drip pans under vehicles, installation of containment berms around refueling areas, proper labeling/packaging and transport of fuels/lubricants, and housekeeping measures). In addition to **APM-HYDRO-2**, additional APMs are provided in Chapter 5.8, Hazards and Hazardous Materials, to address spill prevention and containment (**APM-HAZ-6**).

The Proposed Project could also result in the spread of contaminated water, particularly if construction activities take place in close proximity to known contaminated sites and contaminated surface water and/or groundwater from these sites is encountered. Dewatering discharge may require testing if dewatering occurs in proximity to sites with known groundwater contamination. Implementation of **APM-HYDRO-3** would reduce potential impacts related to contaminated groundwater from dewatering activities to a less than significant level.

Discharge of waters used for hydrostatic testing would also be required. If released directly into receiving waters, this discharge could alter chemical or biological properties of the water, thereby resulting in an adverse impact. Impacts are not likely if discharge is released to dry stream beds or dry ground surface where the water would have time to percolate and evaporate. Where possible, water used for testing in one pipeline segment would be reused for the next section of pipe. Hydrostatic testing water would be discharged in accordance with applicable NPDES permits and federal, state and local regulations and in a manner designed to minimize erosion.

Operation and maintenance of the proposed pipeline is not associated with the risk of release of sediment or pollutants to receiving waters. Storm water runoff from impervious surfaces that would be created at the existing compressor stations and pressor limiting stations have to potential cause increased volume and velocity of stormwater flows that could enhance erosion, scour and downstream sediment transport; however, these effects would be highly localized and minor, as they would occur in arid settings characterized by episodic/ephemeral flows and would affect a negligible fraction of the watersheds. Additionally, BMPs outlined in the project-specific SWPPP would be implemented to contain stormwater flows from these sites.

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- b) *Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?***

Less than Significant Impact with APMs Incorporated. There is the potential for groundwater to be encountered during trenching and excavation activities associating with Proposed Project construction. If necessary, groundwater would be pumped out and discharged to land in accordance with applicable NPDES permits and/or local ordinances. The amount of groundwater discharged would have minimal effects on local aquifers because any effects would be temporary and localized in nature and the groundwater would most likely consists of perched groundwater or throughflow. Operation and maintenance of the Proposed Project is not anticipated to require water from groundwater sources.

Erosion and sediment control during construction of the Proposed Project would require the use of water to stabilize soil and dust control. Hydrostatic testing of pipeline segments prior to operation would also require water from local sources. Approximately 29,000 gallons of water would be used per day during pipeline construction for dust control, grading operations, trenching and street washing. Water would also be required to conduct hydrostatic testing of the pipeline prior to operation. Hydrostatic testing of the Adelanto to Moreno pipeline would require approximately 7,000,000 to 10,500,000 gallons of water and testing of the Moreno the Whitewater pipeline would require approximately 3,500,000 to 5,000,000 gallons of water. Although much of the water is anticipated to be obtained from surface water sources such as hydrants and aqueducts, some groundwater may also be used, especially in locations where surface water sources are not available or feasible. Assuming that 10% of the total water used during construction would be obtained from groundwater sources, the Proposed Project would deplete local groundwater resources by up to 6.6 million gallons. Although this only represents a small fraction of local groundwater supplies, **APM-HYDRO-5** would be implemented to reduce this potentially significant impact to a less than significant level.

- c) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?***

Less than Significant with APMs Incorporated. Surface disturbances associated with pipeline construction could temporarily alter existing drainage patterns, particularly where open cut and waterbody crossings are necessary. In these areas, drainage courses would be returned to their original configuration, substrate would be replaced, and banks would be stabilized and re-vegetated as necessary; however, potentially significant short-term drainage-related impacts

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would occur at these locations. As discussed in Section 5.4, jurisdictional waters permits would be obtained from the ACOE (Section 404 of the CWA), RWQCB (Section 401 of the CWA), and CDFW Streambed Alteration Agreement (Section 1602 of the Fish and Game Code). APMs (**APM-BIO-1**, **APM-BIO-4**, **APM-BIO-7**, **APM-BIO-8**, and **APM-BIO-27**) are provided in Section 5.4 to reduce potentially significant impacts at waterbody crossings to a less than significant level.

Construction of the Proposed Project components at the compressor stations and pressure limiting stations would slightly increase the amount of impervious surfaces in the Proposed Project areas; however, the amount of new construction in these areas would be minor and would result in negligible expansions beyond the existing site boundaries. No drainage features would be impacted at these locations.

Operational conditions of the Proposed Project would consist of subsurface natural gas transmission via the proposed pipeline, unstaffed operation of several aboveground appurtenant structures, and routine maintenance and repair activities. Operational activities would not alter drainage patterns in the Proposed Project area.

- d) ***Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?***

Less than Significant Impact with APMs Incorporated. Construction of the Proposed Project would not result in increased runoff, as there are no impervious surfaces associated with installation of the pipelines. During construction, there could be a minor alteration of drainage patterns due to the spoils adjacent to the trenches; however, due to the temporary nature of the areas being exposed, this is considered less than significant. Additionally, implementation of **APM-AES-1** would ensure that the right-of-way would be restored upon completion of the Proposed Project.

At the Adelanto Compressor Station, a minor increase in impervious surfaces would occur as a result of the new compressor station turbines and appurtenant facilities; however, this increase would be minor and would not increase runoff from the otherwise unpaved site.

- e) ***Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?***

Less than Significant Impact. As discussed above, the Proposed Project is not anticipated to generate significant quantities of increased runoff. During construction local drainage patterns would be altered in the vicinity of the various construction sites; however, no long-term impacts related to increased runoff are anticipated.

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f) *Would the project otherwise substantially degrade water quality?*

Less than Significant Impact with APMs Incorporated. As discussed above, a number of APMs (APM-HYDRO-1, APM-HYDRO-2, APM-HYDRO-4, APM-HAZ-8, APM-BIO-1, APM-BIO-4, APM-BIO-7, APM-BIO-8, APM-BIO-27, and APM-AES-1) have been developed to address potentially significant impacts related to stormwater quality, accidental spills during construction, dewatering, surface water contamination during directional boring, and alteration of drainage patterns during pipeline construction. Implementation of these measures and adherence to biological permitting requirements and revegetation measures would reduce water quality impacts associated with the Proposed Project to a less than significant level.

g) *Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?*

No impact. The Proposed Project would not include the placement of housing within a 100-year flood hazard area. No impacts would occur.

h) *Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?*

No impact. The Proposed Project would not result in the placement of any above-ground structures within a 100-year flood hazard area. No impacts would occur.

i) *Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?*

Less than Significant Impact. The Proposed Project would not be located near existing levees or dams. As discussed in Section 5.8(h), the Proposed Project would not impede or redirect flood flows. Discharges of water used during construction and hydrostatic testing would not be of sufficient volume to cause flooding that could result in significant injury or death of people or loss of structures. As such, impacts would be less than significant.

j) *Inundation by seiche, tsunami, or mudflow?*

Less than Significant Impact. The Proposed Project would not be located in an area at risk of seiches or tsunamis. Because of the proximity to waterbodies and floodplains, construction equipment could be exposed to inundation in the event of the mudflow. However, safe work practices outlined by a project-specific health and safety plan would require that workers leave the construction site if conditions appeared conducive to floods or mudflows. Impacts would be less than significant.

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5.8.5 Applicant Proposed Measures

APM-HYDRO-1 Construction SWPPP. A Project-specific construction SWPPP will be prepared and implemented prior to the start of construction of the Proposed Project. The SWPPP shall use BMPs to address the storage and handling of hazardous materials and sediment runoff during construction activities (California Stormwater Quality Association 2004). BMPs may also be selected from the California Stormwater BMP Handbook (CASQA 2011).

APM-HYDRO-2 Equipment Maintenance and Refueling Near Sensitive Areas. To reduce the potential of contamination by spills, no refueling, storage, servicing, or maintenance of equipment (including washdown activities) will be performed within 100 feet of any waterbodies, wetlands, or other sensitive environmental areas. Additionally, all refueling or servicing will be done with absorbent material or drip pans underneath equipment to contain spilled fuel or fluids. Any fluids drained from the machinery during servicing will be collected in leak-proof containers and taken to an appropriate disposal or recycling facility. If such activities result in spillage or accumulation of a product on the soil, the contaminated soil will be assessed and disposed of properly. Under no circumstances would contaminated soils be added to a spoils pile.

APM-HYDRO-3 Dewatering. Prior to construction, the Applicant will consult with the RWQCB to determine if an individual discharge permit is required for dewatering at any of the Proposed Project sites anticipated to encounter groundwater. The Applicant will submit a typical dewatering drawing that will be implemented during dewatering activities. The drawing shall include the location of pumps within secondary containment; fuel storage areas; anticipated discharge point; scour protection measures; intake hose screening; and monitoring procedures to ensure that hazardous materials spills are addressed in a timely manner and discharge hoses are frequently inspected for leaks.

APM-HYDRO-4 Frac-Out Contingency Plan. The Applicant will prepare Frac-Out Contingency Plan that would both reduce the potential for a frac-out to occur and minimize any negative impact should a frac-out occur during directional drilling activities. The plan will include specific measures for monitoring frac-out, containing drilling mud, and notifying agency personnel.

APM-HYDRO-5 Water Reuse Plan. The Applicant will develop a water reuse plan to minimize the use of potable water during hydrostatic testing of the newly constructed pipeline. Water will be reused during the testing process to the extent practicable.

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5.8.6 References

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5.9 Land Use and Planning

This section describes the impacts related to land use and planning resulting from the Proposed Project.

5.9.1 Environmental Setting

The Proposed Project traverses multiple jurisdictions, including cities, counties, and federal lands with various land use and zoning designations. A description of the pipeline segments and the jurisdictions that crossed by each are provided below:

- Segment 1 – Adelanto Compressor Station to the San Bernardino National Forest Boundary (City of Adelanto, City of Victorville)
- Segment 2 – San Bernardino National Forest (USFS)
- Segment 3 – Swarthout Canyon Road along U.S. Route 66 to Reche Canyon Road (Unincorporated San Bernardino County, City of San Bernardino, City of Colton, City of Loma Linda)
- Segment 4 – Reche Canyon Road to Moreno Pressure Limiting Station (City of Loma Linda, City of Moreno Valley, Unincorporated Riverside County)
- Segment 5 – Moreno Pressure Limiting Station to State Highway 79 (City of Moreno Valley, Unincorporated Riverside County)
- Segment 6 – State Highway 79 to Sunset Avenue (City of Beaumont, City of Banning)
- Segment 7 – Sunset Avenue to Whitewater Pressure Limiting Station (BLM, City of Palm Springs).

The pipeline would be largely located within existing SoCalGas right-of-way or public right-of-way; however, Proposed Project construction would require temporary access roads, staging areas, and work areas that may extend beyond the existing right-of-way. Additionally, right-of-way acquisition would be required in limited areas as discussed in Section 3.7.

In addition to the proposed pipeline, the Proposed Project includes infrastructure modifications at the existing Adelanto Compressor Station facility in the City of Adelanto, and improvements to the Moreno Pressure Limiting Station, Whitewater Pressure Limiting Station, Shaver Summit Pressure Limiting Station, and Desert Center Compressor Station.

The relevant land use plans, including the General Plans of each city jurisdiction listed above, are described in Section 5.9.2.

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5.9.2 Regulatory Setting

Federal

Federal Land Policy and Management Act of 1976

The Federal Land Policy and Management Act provides the BLM with an overarching mandate to manage the public lands and resources under its stewardship under the principles of multiple use and sustained yield. Multiple use is a concept that directs management of public lands and their resource values in a way that best meets the present and future needs of Americans, and is defined as: a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources (Federal Land Policy Management Act §103(c)). A total of 25 acres of BLM Lands are within the 500-foot buffer of the proposed alignment.

San Bernardino National Forest Land *Management Plan*

The San Bernardino National Forest Land Management Plan describes the vision for the future of the national forest, describes land use zones and suitable uses for areas of the national forest, addresses monitoring of implementation of the plan, and includes design criteria for future projects and activities. The Land Use Zones include Developed Areas Interface, Back Country, Back Country Motorized Use Restricted, Back County Non-Motorized, Critical Biological, and Wilderness. Major Utility Corridors are considered suitable uses in designated areas within the Developed Areas Interface zone, Back Country zone, and Back Country Motorized Use Restricted zone. I-15 is a Designated Utility Corridor in the San Bernardino National Forest (USFS 2005). A total of 1,224 acres within the 500-foot buffer of the proposed alignment are within the San Bernardino National Forest.

Energy Policy Act of 2005 Section 368

Section 368 of the Energy Policy Act of 2005 (Public Law 108-58) directs the Secretaries of Agriculture, Commerce, Defense, Energy, and the Interior to designate corridors for oil, natural gas, hydrogen, and electricity facilities on federal land in the 11 contiguous Western States, and incorporate the designated corridors into applicable land use and Land Management Plans. On January 14, 2009, the Secretary of Agriculture approved energy corridors per Section 368 on National Forest System lands located in 10 western states, including California. Designation of these energy corridors does not however authorize projects and future right-of-way proposals are required to comply with existing laws, policies, and regulations (USFS 2009). The Section 368 Federal Energy Corridor Map, as applicable to the Proposed Project, is shown in Figure 5.9-1.

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State

California Public Utilities Commission

The CPUC has jurisdiction over the siting and design of the Proposed Project because the CPUC authorizes the construction and maintenance of investor-owned public utility facilities.

Local

The CPUC has primary jurisdiction over the Proposed Project because it authorizes the construction, operation, and maintenance of public utility facilities. Although the CPUC has the authority to preempt local agency permitting of the Proposed Project, they have not issued any decision broadly preempting such permitting. Therefore, the Proposed Project will have to meet local permitting requirements.

General Plan Policies

The following General Plan goals and policies found in each jurisdiction's general plan, are applicable to the Proposed Project.

County of San Bernardino General Plan (2007)

POLICY CO 8.1: Maximize the beneficial effects and minimize the adverse effects associated with the siting of major energy facilities. The County will site energy facilities equitably in order to minimize net energy use and consumption of natural resources, and avoid inappropriately burdening certain communities. Energy planning should conserve energy and reduce peak load demands, reduce natural resource consumption, minimize environmental impacts, and treat local communities fairly in providing energy efficiency programs and locating energy facilities.

County of Riverside General Plan (2008)

LU 5.4 Ensure that development and conservation land uses do not infringe upon existing public utility corridors, including fee owned rights-of-way and permanent easements, whose true land use is that of "public facilities." This policy will ensure that the "public facilities" designation governs over what otherwise may be inferred by the large scale general plan maps.

LU 6.2 Direct public, educational, religious, and utility uses established to serve the surrounding community toward those areas designated for Community Development and Rural Community uses on the applicable Area Plan land use maps. These uses may be found consistent with any of the Community Development, Rural Community, or Rural foundation designations, including the Rural Village Overlay, as well as the Open Space B Rural and Agriculture designations, under the following conditions: (AI 1,3)

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- a The facility is compatible in scale and design with surrounding land uses, and does not generate excessive noise, traffic, light, fumes, or odors that might have a negative impact on adjacent neighborhoods.
- b The location of the proposed use will not jeopardize public health, safety, and welfare, or the facility is necessary to ensure the continual public safety and welfare.

LU 25.1 Accommodate the development of public facilities in areas appropriately designated by the General Plan and area plan land use maps.

LU 25.3 Require that new public facilities protect sensitive uses, such as schools and residences, from the impacts of noise, light, fumes, odors, vehicular traffic, parking, and operational hazards.

OS 20.2 Prevent unnecessary extension of public facilities, services, and utilities, for urban uses, into Open Space-Conservation designated areas.

City of Adelanto General Plan (1994)

NR 1.2 The City shall support the underground placement of existing and future utility lines to reduce visual impact.

City of Banning General Plan (2006)

Economic Development Policy 8: In order to maintain existing economic activities and attract new commercial and industrial development, the City shall assure the provision of adequate utilities, infrastructure, and other capital facilities.

Water, Wastewater, and Utilities Policy 4: The City shall make every effort to assure and assist in facilitating the timely and cost-effective extension and expansion of services that support community development and improved quality of life.

Water, Wastewater, and Utilities Program 4.A: The City shall coordinate its Capital Improvement Program with those of local utility and service providers to assure cost-effective and adequate capacity of services and facilities for future growth and development.

Water, Wastewater, and Utilities Program 4.B: The City shall coordinate with appropriate public and quasi-public agencies and utilities in conducting on-going assessments of infrastructure capacity and evaluating expansion and improvements needed to carry out responsible growth management.

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Water, Wastewater, and Utilities Policy 5: To ensure the timely expansion of facilities in a manner that minimizes environmental impacts and disturbance of existing improvements, the City shall confer and coordinate with service and utility providers in planning, designing and siting of supporting and distribution facilities.

Water, Wastewater, and Utilities Program 5.A: The City shall encourage the consolidation of underground utility lines and other subsurface transmission facilities to limit the impacts of these facilities on the disruption of traffic and roadways.

Water, Wastewater, and Utilities Policy 9: Utility lines on scenic roadways, major streets and in the downtown shall have primary consideration for undergrounding.

Water, Wastewater, and Utilities Policy 10: Major utility facilities, including power and other transmission towers, cellular communication towers and other viewshed intrusions shall be designed and sited to ensure minimal environmental and viewsheds impacts and environmental hazards.

Public Buildings and Facilities Policy 3: Coordinate with public utility providers and other public/quasi-public agencies to assure that utility buildings and facilities are compatible with the surrounding landscape.

Public Buildings and Facilities Program 3.A: The City shall establish and maintain close working relationships with utility purveyors and other public and quasi-public agencies serving the City to assure the least intrusive integration of related buildings and facilities into the community.

Public Buildings and Facilities Program 3.B: All new maintenance and utility facilities (and their signage) shall be integrated into the surrounding environment using landscape treatments, architectural elements, and/or other appropriate design mechanisms. Whether as a regulatory or advisory function, design plans shall be reviewed by the Community Development Department.

City of Beaumont General Plan (2007)

Goal 7 (Community Development). The City of Beaumont will continue to provide for the development and maintenance of critical public facilities and services to ensure that existing needs and future demands can be met.

Resource Management Element Policy 18. The City of Beaumont will evaluate the feasibility of expanded joint-use of the open space lands used for flood control and utility easements.

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City of Colton General Plan (2013)

To create a land use pattern that provides a safe, harmonious and attractive living environment: a balance hierarchy of commercial land uses which will service the consumer and economic needs of the City and region; a strong industrial base highly competitive within the area's labor force pool and industrial growth market ; and adequate open space and recreational areas.

To provide a compatible mix and arrangement of land uses and to promote future development in a manner that is consistent with the availability of infrastructure.

City of Loma Linda General Plan (2009)

8.10.7.1g: Develop appropriate siting regulations for the installation of utilities and telecommunication facilities to minimize potential impacts to the community.

City of Moreno Valley General Plan (2006)

There are no applicable goals or policies in the Moreno Valley General Plan.

City of Palm Springs General Plan (2007)

LU1.11: Sensitively integrate into the community required land uses such as transportation corridors, flood control systems, utility corridors, and recreational corridors.

City of San Bernardino General Plan (2005)

Goal 2.11.4: All services and utilities should be screened from view either with fencing or landscaping or placed underground.

Policy 9.7.1: Work with the Southern California Gas Company to ensure that adequate natural gas facilities are available to meet the demands of existing and new developments.

Policy 9.10.4: Provide public funding support for expansion and upgrading of public utilities and infrastructure when improvements will provide substantial public benefit to the City.

City of Victorville General Plan

Objective 4.2: Permanent Conservation of Mojave River Corridor Ecological Values

Policy 4.2.1: Generally prohibit private or public development projects or major infrastructure facilities on land within the Mojave River Corridor, where biological

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surveys have determined there is habitat that supports rare, threatened and/or endangered plants or wildlife. Allow minor encroachments into such habitat, for critical public facilities and recreational trails, where reliable assurances are provided that no loss of sensitive species would occur.

General Plan Land Use Designations

The existing land use designations that apply to the Proposed Project are listed in Table 5.9-1 and are shown graphically on Figure 5.9-2.

**Table 5.9-1
General Plan Land Use Designations within 500 feet of Proposed Alignment**

Riverside County		San Bernardino County	
<i>General Plan Land Use Designation</i>	<i>Acres within 500 feet of Proposed Alignment</i>	<i>General Plan Land Use Designation</i>	<i>Acres within 500 feet of Proposed Alignment</i>
City	2,184	Agriculture	5
Commercial Retail	14	Commercial and Services	626
Conservation Habitat	5	General Office	16
Freeway	303	Heavy Industrial	118
Indian Lands	158	Light Industrial	179
Light Industrial	81	Military	2
Low Density Residential	157	Mixed Commercial and Industrial	88
Medium Density Residential	80	Mixed Urban	428
Mineral Resources	6	Open Space and Recreation	1,328
Open Space Rural	941	Other Residential	9575
RC-EDR	236	Single Family Residential	1,014
RC-LDR	40	Special Use Facilities	46
RC-VLDR	14	Transportation, Communication, and Utilities	173
Rural Desert	298	Unknown	11
Rural Mountainous	579	--	--
Rural Residential	432	--	--
Water	49	--	--
Rural Mountainous	579	--	--

Source: Riverside County Land Information System 2014; SCAG 2008.

Habitat Conservation Plans

Coachella Valley Multiple Species Habitat Conservation Plan

The CVMSHCP was prepared for the entire Coachella Valley and surrounding mountains to address state and federal Endangered Species Act issues, while balancing economic development and environmental protection (CVAG 2007).

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The Permits issued for the CVMSHCP will provide Take Authorization for Covered Activities outside Conservation Areas. Any public service provider, such as a utility company or public district, may request Take Authorization for its activities pursuant to the permits as a Participating Special Entity. Covered Activities include the construction, operations, and maintenance of on-site and off-site facilities including, but are not limited to, publicly maintained roads and rights-of-way; materials pits; maintenance yards; flood control facilities; landfills, transfer stations, and other solid waste related facilities, including those for the processing of organic materials; public buildings; water development, production, storage, treatment, and transmission facilities; sewage treatment and transmission facilities; reclaimed water storage and transmission facilities; public parks; substances and electric transmission facilities; and other public utility facilities providing services essential to the health, safety, and welfare of the public.

The proposed alignment crosses approximately 71,449 linear feet within the CVMSHCP.

Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside MSHCP is a multi-jurisdictional HCP that is designed to give Riverside County and its cities the ability to address the requirements of the state and federal Endangered Species Acts and maintain the biological and ecological diversity of the region, while maintaining a strong economic climate (WRCRCA 2003).

Future facilities, such as water, sewer, electrical, natural gas and solid waste facilities necessary to support planned development have been preliminarily identified by the agencies responsible for their construction, operation and maintenance, while others have not been or cannot be identified and/or located at present. Public agencies and regional service providers that were not part of the original agreement to construct projects within the area covered by the MSHCP may become Participating Special Entities on a project-by-project basis. Future facilities that are carried out by a Participating Special Entities will be considered Covered Activities, and the Permits issued for the Western Riverside MSHCP would provide Take Authorization for Covered Activities. The process for mitigation and/or contribution to Reserve Assembly for future facilities is described in MSHCP Section 6.1.6.

Future facilities may need to be located within either the Criteria Area, due to the fact that such facilities are linear, or involve engineering constraints that make avoidance of Criteria Areas not feasible. Such constraints may also require location of these facilities within Public/Quasi-Public Lands. If such is the case, all of the conditions described in the MSHCP for coverage of future facilities apply, with the additional requirement that impacts to habitats within existing Public/Quasi-Public Lands shall be compensated by purchase and dedication into the MSHCP Conservation Area of land that is in addition to the Additional Reserve Lands.

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The proposed alignment crosses approximately 172,637 linear feet within the Western Riverside County MSHCP.

Stephens' Kangaroo Rat Habitat Conservation Plan

The Riverside County Habitat Conservation Agency (RCHCA) prepared an HCP that describes the conservation, mitigation, and monitoring measures to minimize impacts of incidental take on the Stephens' kangaroo rat (RCHCA 2014).

The SKR HCP is intended to allow RCHCA member agencies, MWD and other water agencies, flood control districts, utility companies, and other public entities to conduct those activities necessary to operate and maintain public facilities located throughout the plan area. Note that if an applicant for a proposed project is not a public agency, is not a permittee in the SKR HCP, and is not obtaining a permit through a local jurisdiction that is a permittee in the SKR HCP, there is no Participating Special Entity provision available under these conditions. If incidental take for Stephens' kangaroo rat is needed, a separate project-specific agreement with RCHCA would be required.

The proposed alignment crosses approximately 97,402 linear feet within the SKR HCP.

Figure 5.9-3 shows the lands within the 1,000-foot corridor surrounding the proposed alignment falling within one or more of the above HCPs.

5.9.3 Significance Criteria

The significance criteria used to evaluate impacts involving land use and planning are based on criteria listed in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.). A significant impact would occur if the project would:

- Physically divide an established community
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

5.9.4 Impact Analysis

The boxes in the chart below have been checked accordingly to characterize the level of significance for each CEQA criterion. The rationale for the anticipated significance levels is provided below the chart in each of the corresponding sections.

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Would the project:	Potentially Significant Impact	Less Than Significant with APMs Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) *Would the project physically divide an established community?*

No Impact. Construction of the Proposed Project would have temporary impacts to land uses related to construction activities. However, the lands that would be disturbed would also be restored post construction and the Proposed Project would not result in any permanent changes to the existing land use patterns. Access roads and maintenance roads would also be utilized during construction of the Proposed Project. As discussed in Section 3.7, a limited number of privately owned properties would be acquired for pipeline construction; however, the Proposed Project would not divide the physical arrangement of a neighborhood or area, and no impact would occur.

b) *Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?*

Less than Significant Impact. The CPUC has primary jurisdiction over the Proposed Project because it authorizes construction, operation, and maintenance of public utility facilities. However, since the CPUC has not issued a decision to preempt local agency permitting, the Proposed Project would be subject to local permitting requirements, including compliance with applicable general plans and zoning ordinances.

The Proposed Project would run through the San Bernardino National Forest (USFS jurisdiction); however the alignment in this area would generally fall within the I-15 corridor and would also fall within Federal Energy Corridor 368, an area designated for utility alignments. The areas through which the Project would run within USFS lands are predominantly existing developed, disturbed areas traversed by motorized roadways and multiple utility alignments. Although forest land may occur in the lands adjacent to the I-15 corridor, the Proposed Project would not

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conflict with existing zoning and would not result in rezoning of those lands. The area through which the Project would cross BLM lands is minor and use of this land for an underground pipeline would be consistent with the multiple use designation of BLM lands. After the pipeline is installed, the construction area would be returned to its original condition.

The portion of the Proposed Project that crosses local jurisdictions would be located primarily in existing SoCalGas public right-of-way and would be consistent with each of the land use plans, policies, and regulations of the respective jurisdiction. The Proposed Project is designed to minimize impacts to the community. As described above, construction of the Proposed Project would have temporary impacts to existing land uses related to construction activities. Lands that would be disturbed would be restored post construction and the Proposed Project would not result in any permanent changes to land use.

For the reasons described above, the Proposed Project would not conflict with applicable land use plans, policies, or regulations, and impacts would be less than significant.

c) *Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?*

Less than Significant Impact with APMs Incorporated. The Proposed Project crosses the coverage area of three large-scale HCPs: the CVMSHCP, the WRCMSHCP, and the SKR HCP. Given that biological survey results are not yet available, impacts to species, habitats and conserved lands covered by these HCPs cannot be determined at this time. However, the portions of the alignment and associated roads and other facilities located within these HCPs would be required to demonstrate that the goals and objectives of these HCPs have not been compromised. This includes demonstrating that the functions and values of existing and future conserved lands and protected habitats for covered species would not be affected by the Proposed Project. Potential impacts relating to habitat and species covered under these HCPs are further discussed in Section 5.4, Biological Resources, of this PEA. An analysis of the Proposed Project's consistency with the multiple species and habitats covered by the Coachella Valley and Western Riverside HCPs, as well as an analysis of impacts to Stephens' kangaroo rat pursuant to the SKR HCP, would be prepared as proposed in **APM-BIO-30**. Because the Proposed Project would not be permitted to be in conflict with any of the HCPs and mitigation would be developed and implemented accordingly, impacts would be considered less than significant.

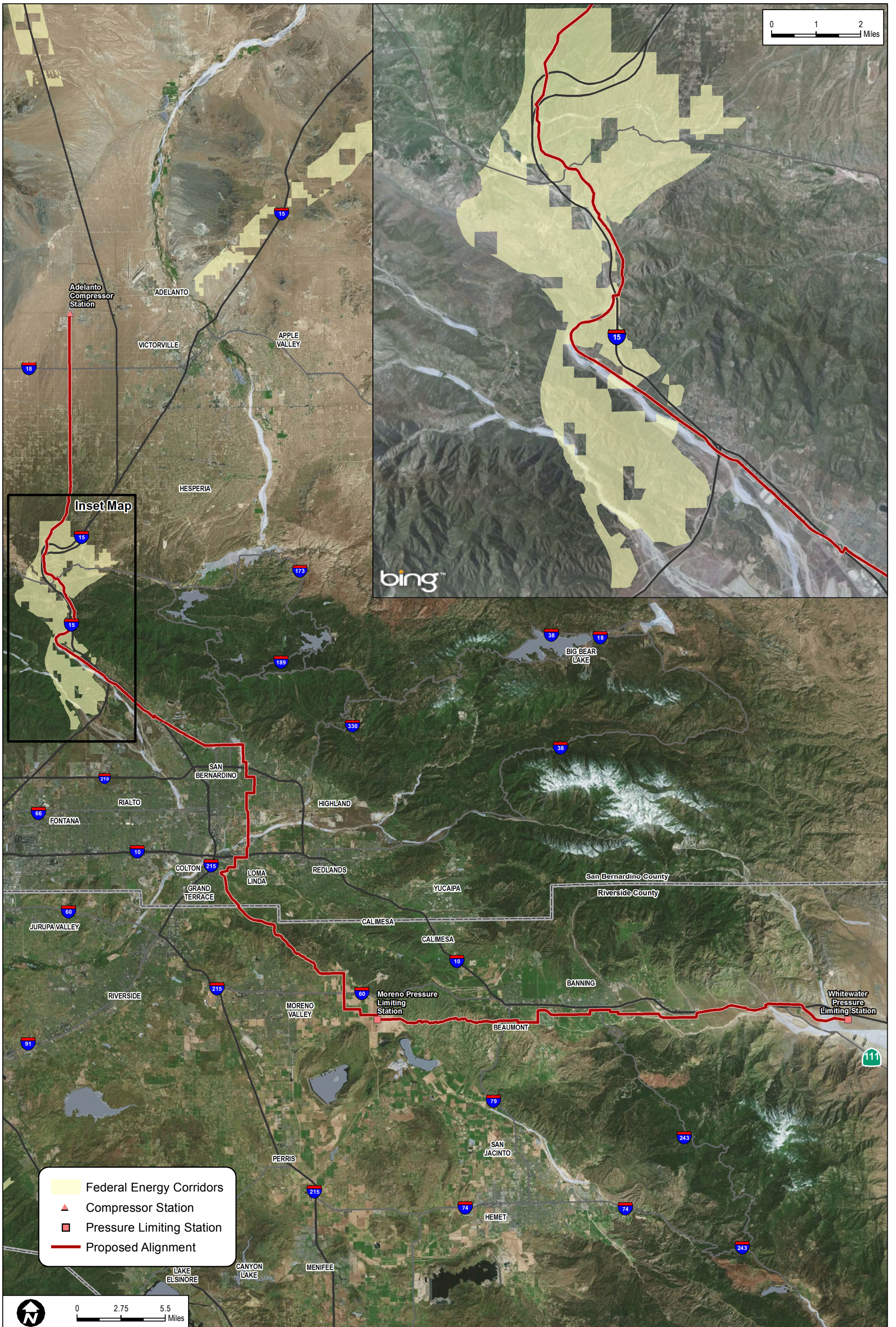
5.9.5 Applicant Proposed Measures

Implementation of **APM-BIO-30**, Consistency with Habitat Conservation Plans, would reduce impacts related to HCPs to a less than significant level.

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5.9.6 References

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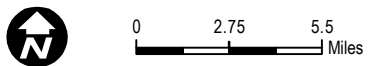
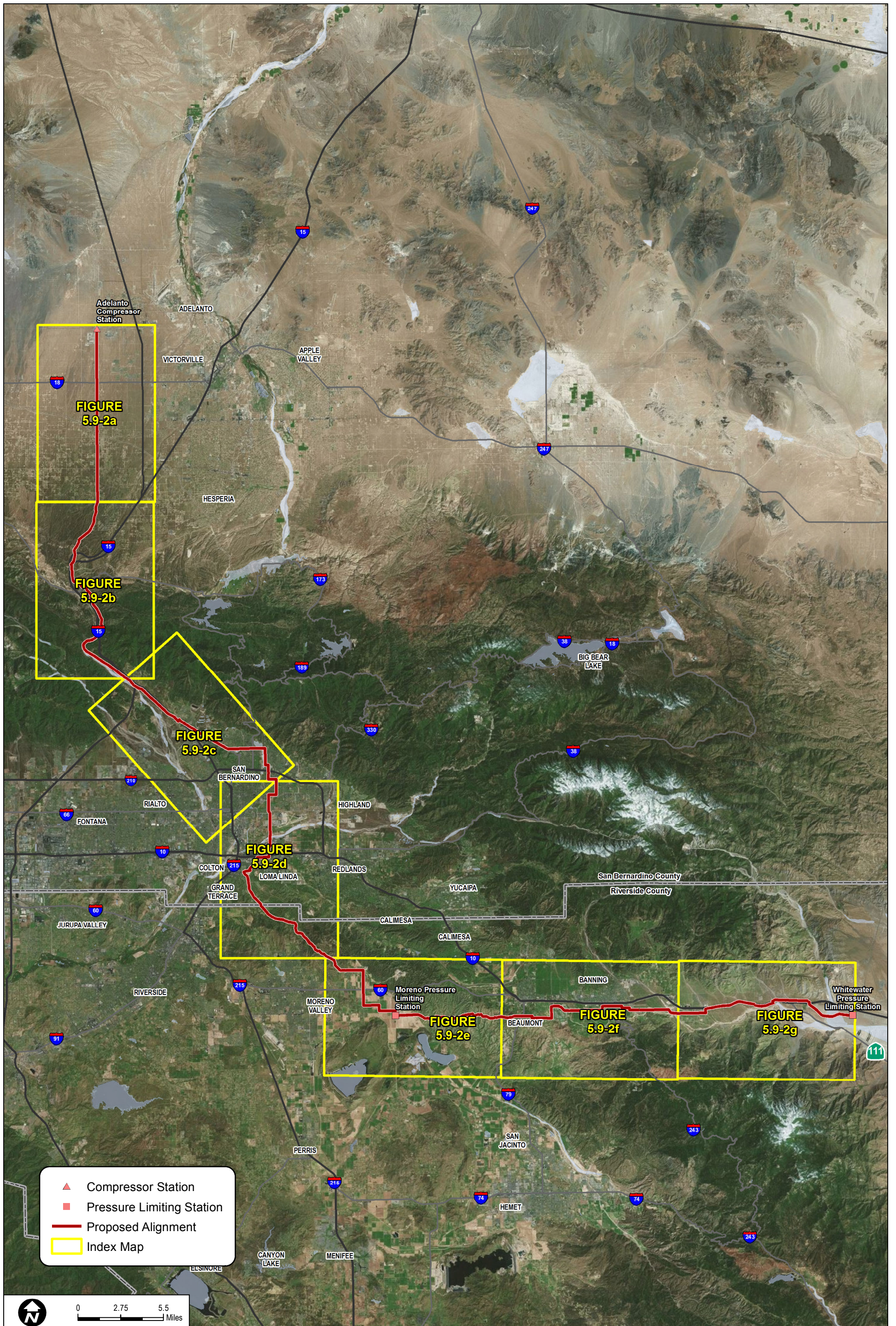
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CEC 2007

FIGURE 5.9-1
Federal Energy Corridors



North South Project

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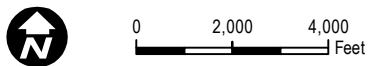
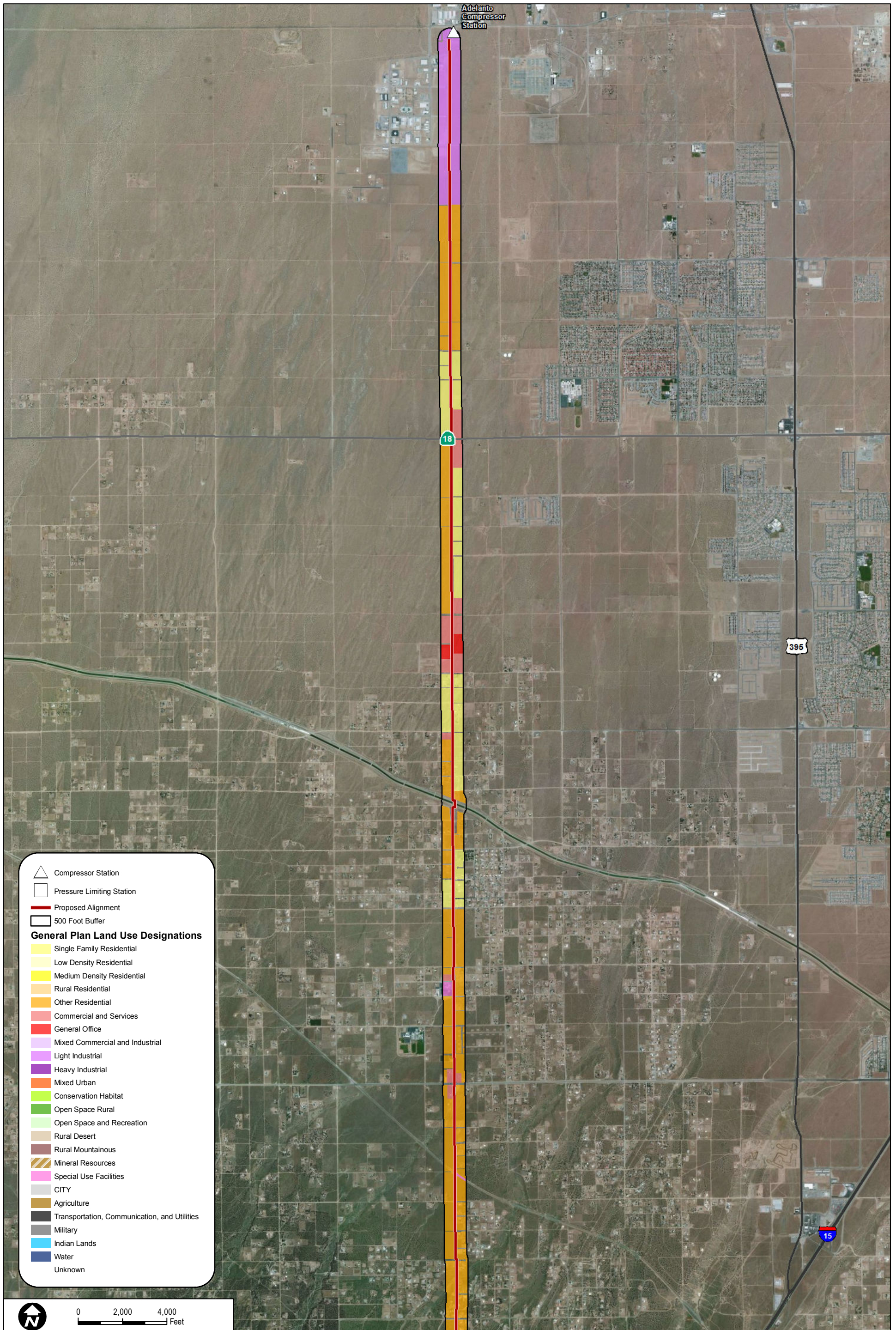


SOURCE: BING Maps 2014; Southern California Gas Company 2014

North South Project

FIGURE 5.9-2
General Plan Land Use Designations - Index Map

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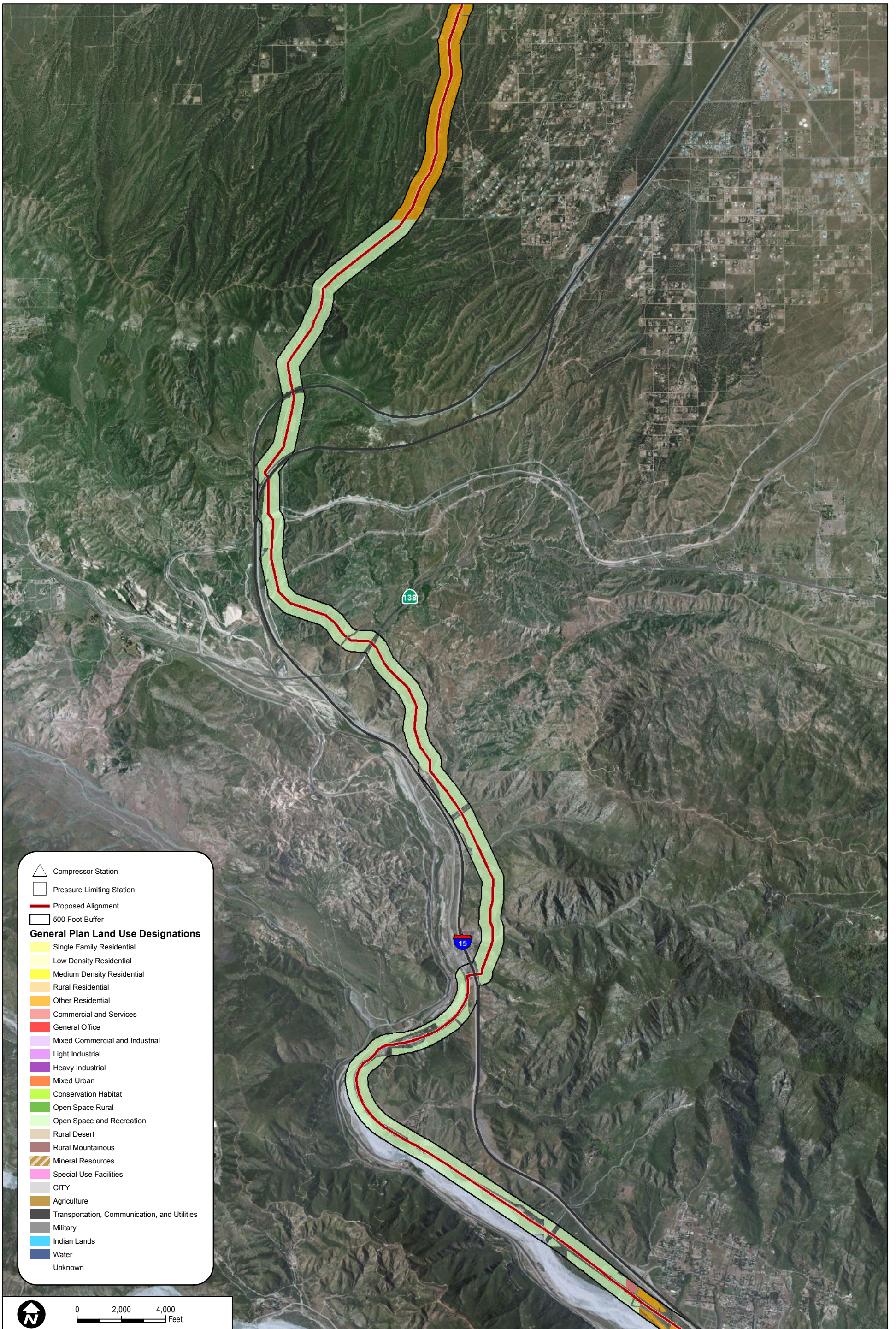
SOURCE: BING Maps 2014; Southern California Gas Company 2014; SCAG 2008; Riverside County 2014



North South Project

FIGURE 5.9-2a
General Plan Land Use Designations

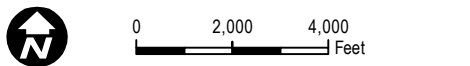
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△ Compressor Station
 □ Pressure Limiting Station
 — Proposed Alignment
 □ 500 Foot Buffer

General Plan Land Use Designations

- Single Family Residential
- Low Density Residential
- Medium Density Residential
- Rural Residential
- Other Residential
- Commercial and Services
- General Office
- Mixed Commercial and Industrial
- Light Industrial
- Heavy Industrial
- Mixed Urban
- Conservation Habitat
- Open Space Rural
- Open Space and Recreation
- Rural Desert
- Rural Mountainous
- Mineral Resources
- Special Use Facilities
- CITY
- Agriculture
- Transportation, Communication, and Utilities
- Military
- Indian Lands
- Water
- Unknown



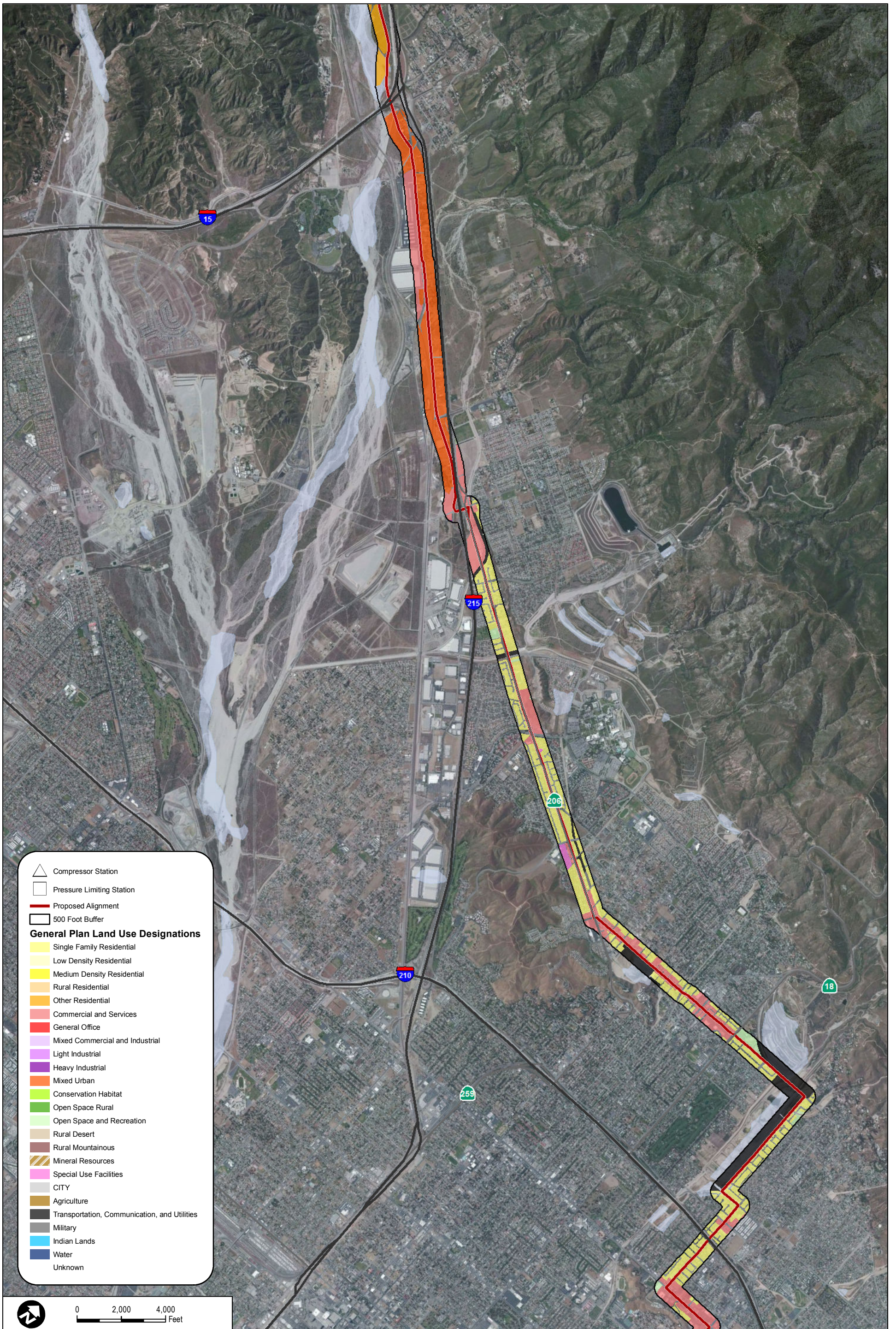
SOURCE: BING Maps 2014; Southern California Gas Company 2014; SCAG 2008; Riverside County 2014



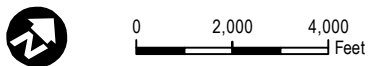
North South Project

FIGURE 5.9-2b
General Plan Land Use Designations

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-  Compressor Station
-  Pressure Limiting Station
-  Proposed Alignment
-  500 Foot Buffer
- General Plan Land Use Designations**
-  Single Family Residential
-  Low Density Residential
-  Medium Density Residential
-  Rural Residential
-  Other Residential
-  Commercial and Services
-  General Office
-  Mixed Commercial and Industrial
-  Light Industrial
-  Heavy Industrial
-  Mixed Urban
-  Conservation Habitat
-  Open Space Rural
-  Open Space and Recreation
-  Rural Desert
-  Rural Mountainous
-  Mineral Resources
-  Special Use Facilities
-  CITY
-  Agriculture
-  Transportation, Communication, and Utilities
-  Military
-  Indian Lands
-  Water
-  Unknown



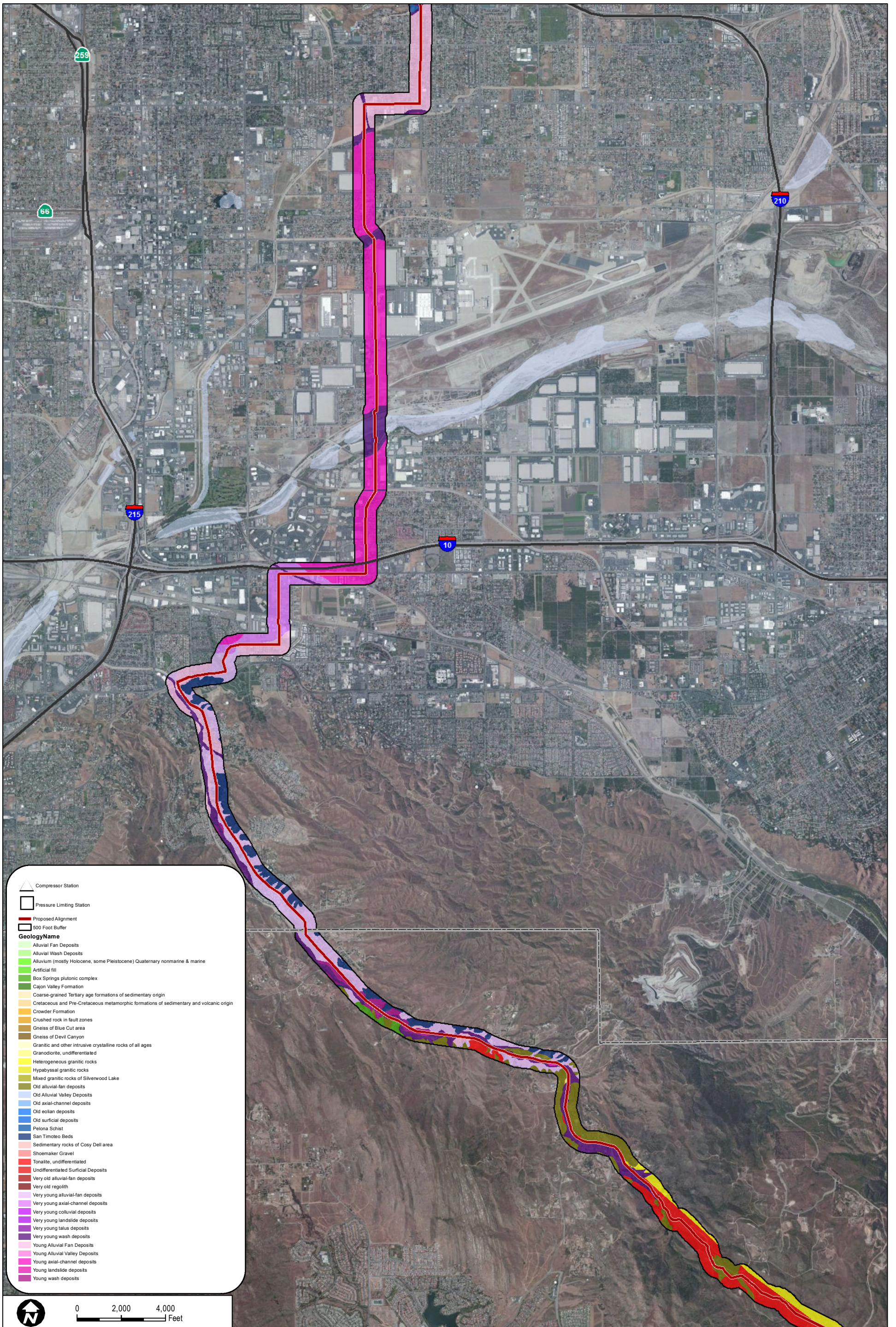
SOURCE: BING Maps 2014; Southern California Gas Company 2014; SCAG 2008; Riverside County 2014

FIGURE 5.9-2c
General Plan Land Use Designations



North South Project

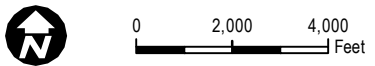
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▲ Compressor Station
 □ Pressure Limiting Station
 — Proposed Alignment
 — 500 Foot Buffer

GeologyName

- Aluvial Fan Deposits
- Aluvial Wash Deposits
- Alluvium (mostly Holocene, some Pleistocene) Quaternary nonmarine & marine
- Artificial fill
- Box Springs plutonic complex
- Cajon Valley Formation
- Coarse-grained Tertiary age formations of sedimentary origin
- Cretaceous and Pre-Cretaceous metamorphic formations of sedimentary and volcanic origin
- Crowder Formation
- Crushed rock in fault zones
- Gneiss of Blue Cut area
- Gneiss of Devil Canyon
- Granitic and other intrusive crystalline rocks of all ages
- Granodiorite, undifferentiated
- Heterogeneous granitic rocks
- Hypabyssal granitic rocks
- Mixed granitic rocks of Silverwood Lake
- Old alluvial-fan deposits
- Old Alluvial Valley Deposits
- Old axial-channel deposits
- Old eolian deposits
- Old surficial deposits
- Pelona Schist
- San Timoteo Beds
- Sedimentary rocks of Cosy Dell area
- Shoemaker Gravel
- Tonalite, undifferentiated
- Undifferentiated Surficial Deposits
- Very old alluvial-fan deposits
- Very old regolith
- Very young alluvial-fan deposits
- Very young axial-channel deposits
- Very young colluvial deposits
- Very young landslide deposits
- Very young talus deposits
- Very young wash deposits
- Young Alluvial Fan Deposits
- Young Alluvial Valley Deposits
- Young axial-channel deposits
- Young landslide deposits
- Young wash deposits



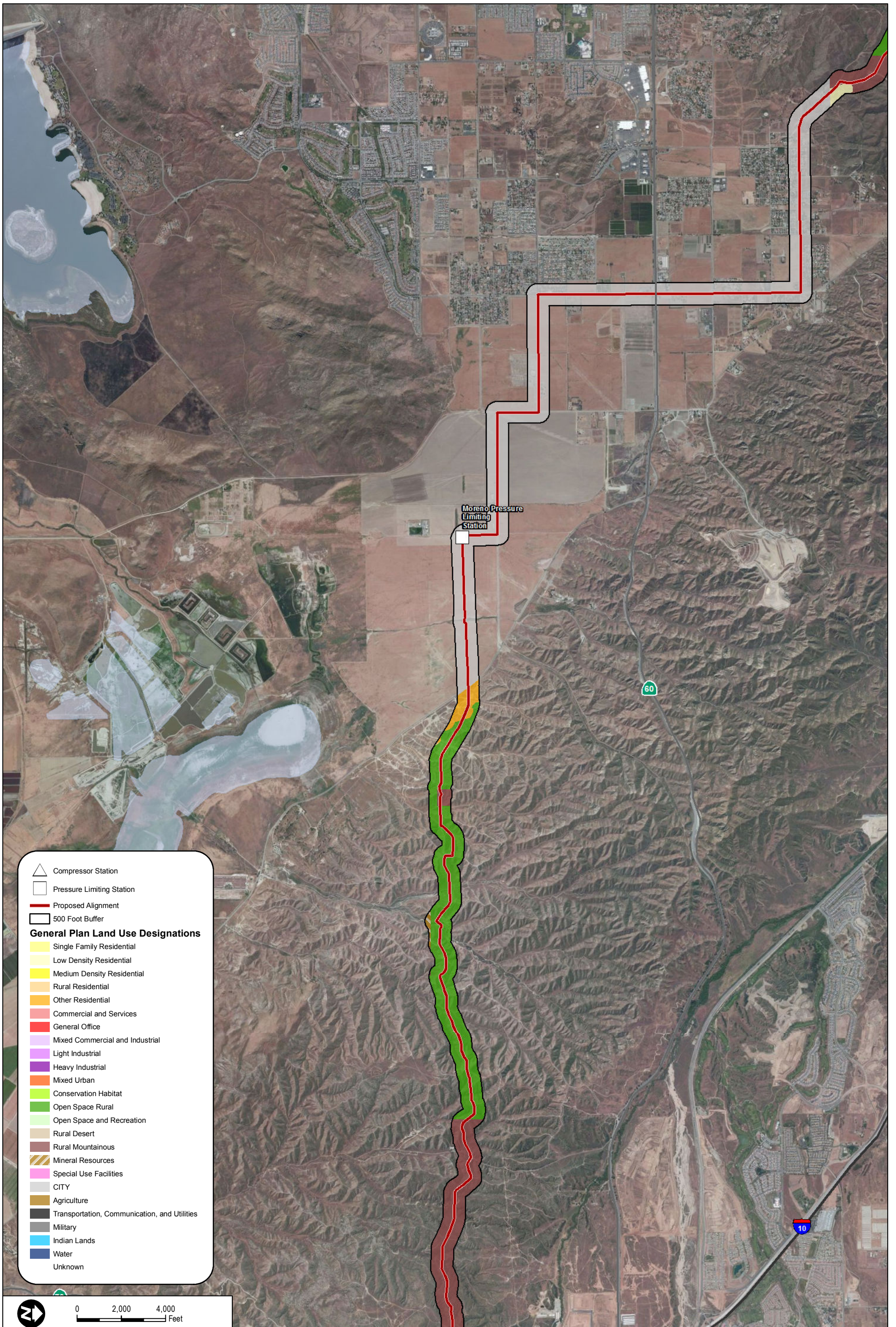
SOURCE: BING Maps 2014; Southern California Gas Company 2014; CA Department of Conservation 2010; USGS 2006

FIGURE 5.6-2d
Geologic Formations

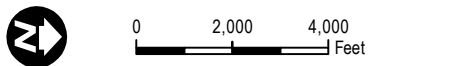


North South Project

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- Compressor Station
- Pressure Limiting Station
- Proposed Alignment
- 500 Foot Buffer
- General Plan Land Use Designations**
- Single Family Residential
- Low Density Residential
- Medium Density Residential
- Rural Residential
- Other Residential
- Commercial and Services
- General Office
- Mixed Commercial and Industrial
- Light Industrial
- Heavy Industrial
- Mixed Urban
- Conservation Habitat
- Open Space Rural
- Open Space and Recreation
- Rural Desert
- Rural Mountainous
- Mineral Resources
- Special Use Facilities
- CITY
- Agriculture
- Transportation, Communication, and Utilities
- Military
- Indian Lands
- Water
- Unknown



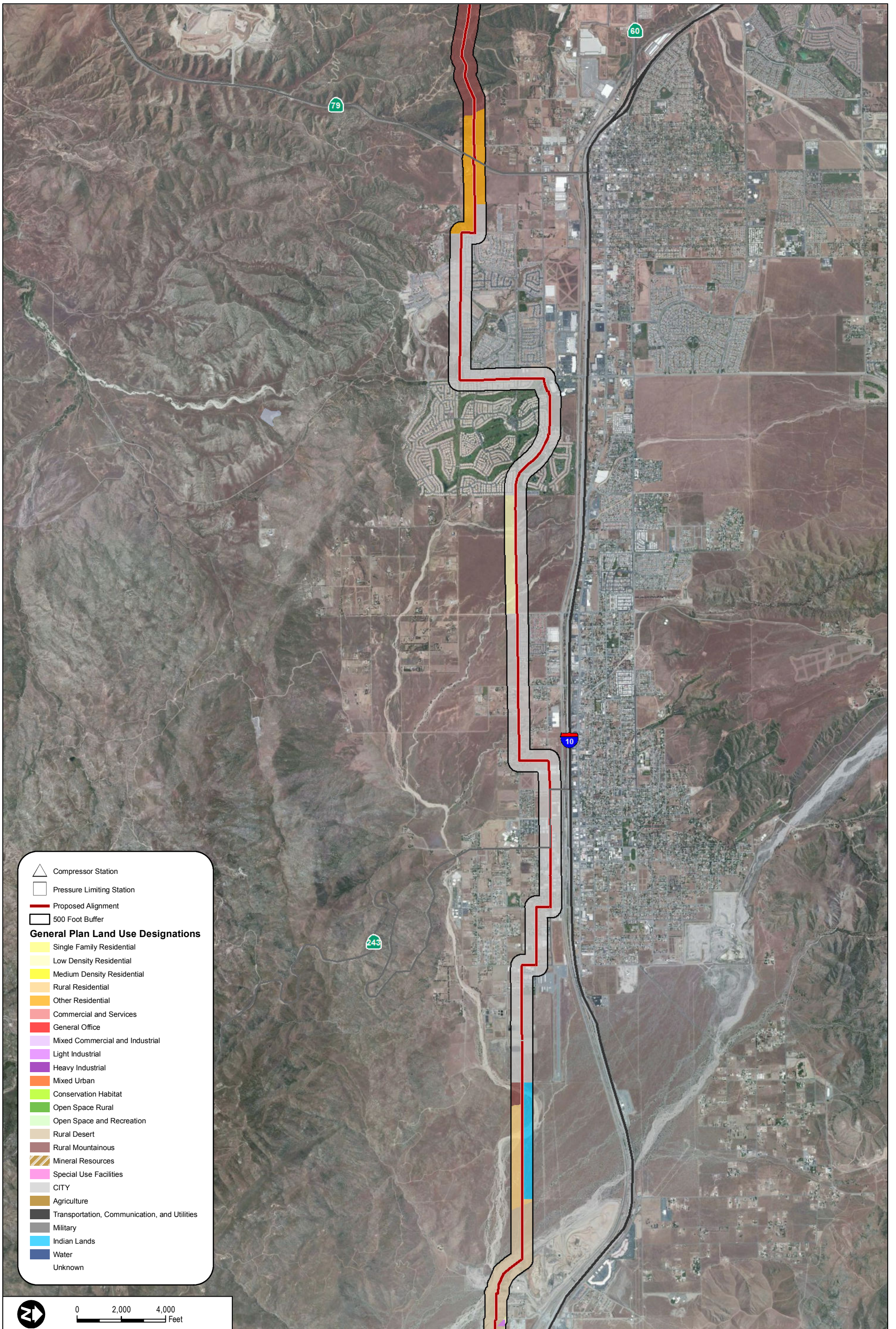
SOURCE: BING Maps 2014; Southern California Gas Company 2014; SCAG 2008; Riverside County 2014



North South Project

FIGURE 5.9-2e
General Plan Land Use Designations

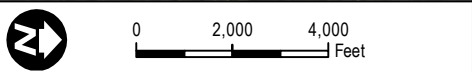
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▲ Compressor Station
 □ Pressure Limiting Station
 — Proposed Alignment
 □ 500 Foot Buffer

General Plan Land Use Designations

- Single Family Residential
- Low Density Residential
- Medium Density Residential
- Rural Residential
- Other Residential
- Commercial and Services
- General Office
- Mixed Commercial and Industrial
- Light Industrial
- Heavy Industrial
- Mixed Urban
- Conservation Habitat
- Open Space Rural
- Open Space and Recreation
- Rural Desert
- Rural Mountainous
- Mineral Resources
- Special Use Facilities
- CITY
- Agriculture
- Transportation, Communication, and Utilities
- Military
- Indian Lands
- Water
- Unknown



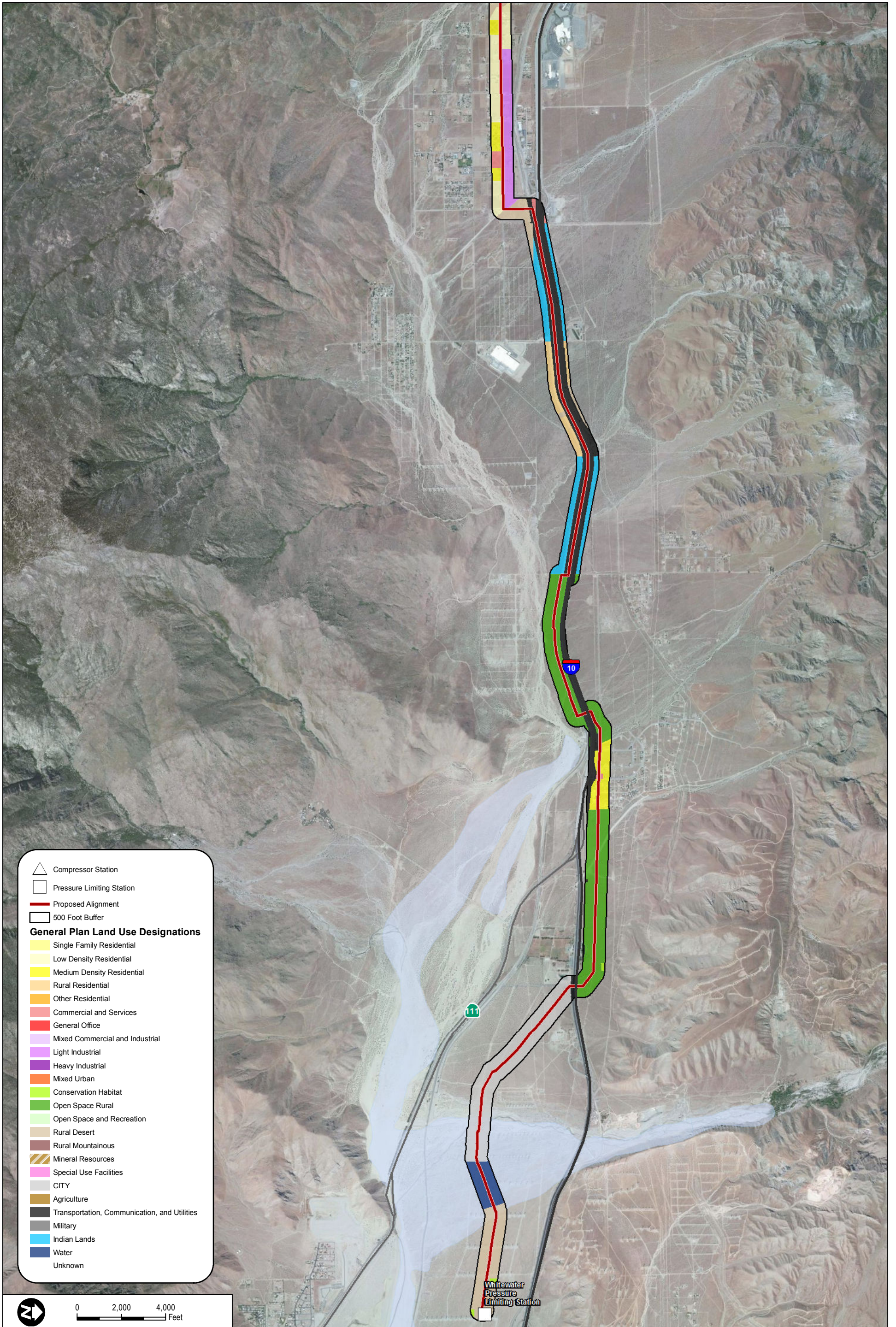
SOURCE: BING Maps 2014; Southern California Gas Company 2014; SCAG 2008; Riverside County 2014

FIGURE 5.9-2f
General Plan Land Use Designations



North South Project

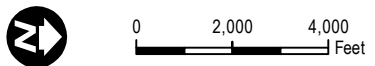
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△ Compressor Station
 □ Pressure Limiting Station
 — Proposed Alignment
 □ 500 Foot Buffer

General Plan Land Use Designations

- Single Family Residential
- Low Density Residential
- Medium Density Residential
- Rural Residential
- Other Residential
- Commercial and Services
- General Office
- Mixed Commercial and Industrial
- Light Industrial
- Heavy Industrial
- Mixed Urban
- Conservation Habitat
- Open Space Rural
- Open Space and Recreation
- Rural Desert
- Rural Mountainous
- Mineral Resources
- Special Use Facilities
- CITY
- Agriculture
- Transportation, Communication, and Utilities
- Military
- Indian Lands
- Water
- Unknown



Whitewater
Pressure
Limiting Station

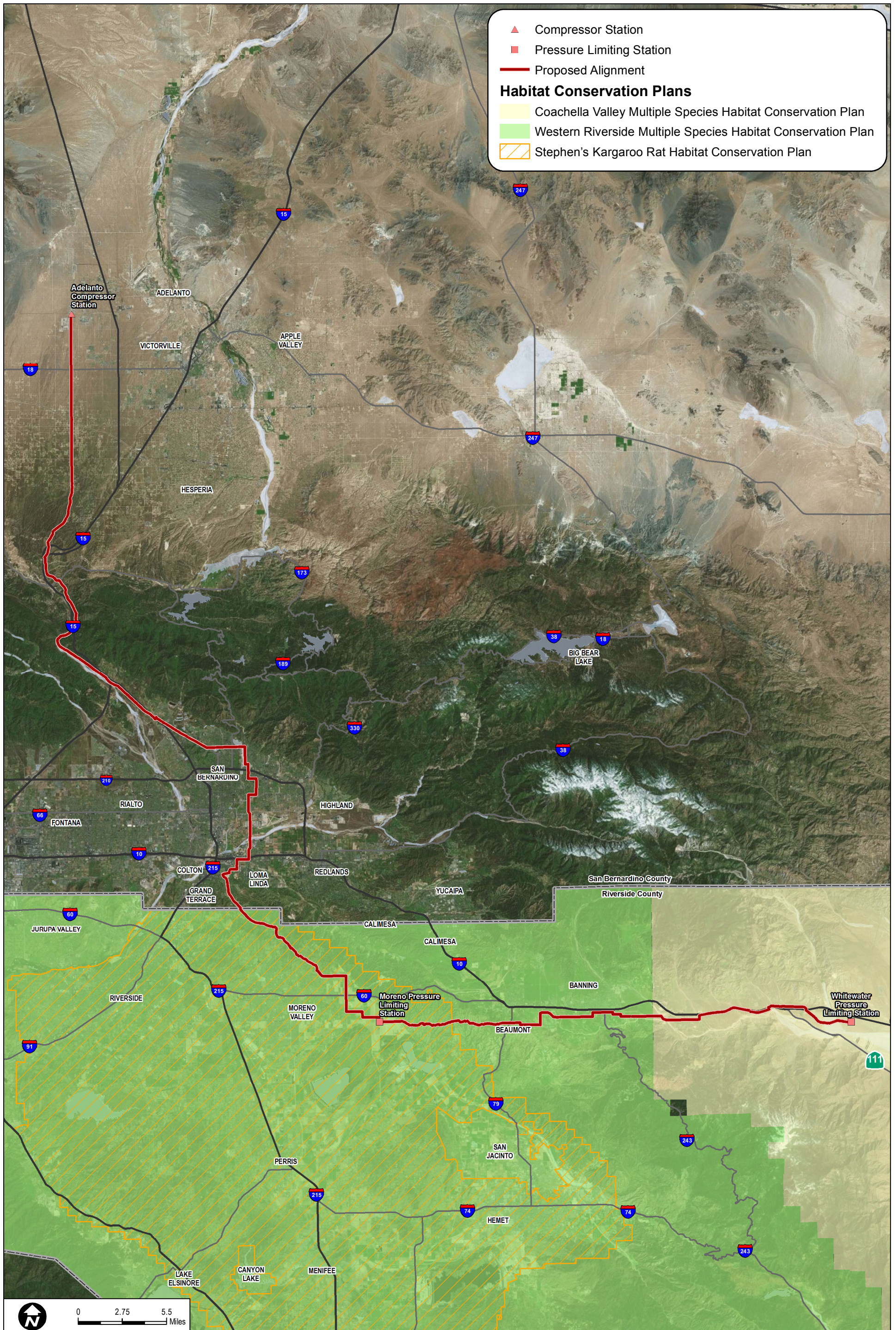
SOURCE: BING Maps 2014; Southern California Gas Company 2014; SCAG 2008; Riverside County 2014

FIGURE 5.9-2g
General Plan Land Use Designations

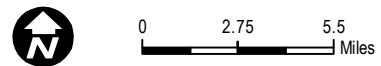


North South Project

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▲ Compressor Station
 ■ Pressure Limiting Station
 — Proposed Alignment
Habitat Conservation Plans
 ■ Coachella Valley Multiple Species Habitat Conservation Plan
 ■ Western Riverside Multiple Species Habitat Conservation Plan
 ▨ Stephen's Kargaroo Rat Habitat Conservation Plan



SOURCE: BING Maps 2014; Southern California Gas Company 2014; Riverside County 2003; CVMShCP 2008



North South Project

FIGURE 5.9-3
Habitat Conservation Plans

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5.10 Mineral Resources

This section describes the environmental setting, regulatory setting, and potential impacts related to mineral resources resulting from the Proposed Project.

5.10.1 Environmental Setting

A 500-foot buffer on either side of the proposed alignment was evaluated to determine the presence of designated mineral resources within the vicinity of the Proposed Project. Based on a 500-foot buffer analysis, the Proposed Project traverses 276 acres within Mineral Resource Zone 1 (MRZ-1), 1,431 acres within MRZ-2, and 5,786 acres within MRZ-3. Specifically, Table 5.10-1, breaks down the Proposed Project into 7 segments, and depicts what MRZ and acreages each segment falls within in the 500-foot buffer (on either side of the proposed alignment). These MRZs are shown on Figure 5.10-1.

**Table 5.10-1
Mineral Resources Zone**

Segment	MRZ-1	MRZ-2	MRZ-3	MRZ-4
Segment 1 – Adelanto Compressor Station to USFS Northern Boundary	N/A	N/A	N/A	N/A
Segment 2 – USFS Northern Boundary to USFW Southern Boundary	0	19	27	0
Segment 3 – Swarthout Canyon Road to Reche Canyon Road	276	1,124	1,584	0
Segment 4 – Reche Canyon Road to Moreno Pressure Limiting Station (i.e., terminus of Adelanto to Moreno pipeline)	0	0	1,717	0
Segment 5 – Moreno Pressure Limiting Station to Highway 79	0	0	1,201	0
Segment 6 – Highway 79 to Sunset Avenue	0	0	671	0
Segment 7 – Sunset Avenue to White Water Pressure Limiting Station (i.e., terminus of Moreno to Whitewater pipeline)	0	288	586	0

Notes: Acreages rounded to the nearest whole number.

Acreages within Mineral Resource Zone is based off a 500-foot buffer analysis.

MRZ = Mineral Resource Zone

N/A = Not available. The database (collection of mineral land classification maps and reports produced by staff of the California Geologic Survey's Surface Mining and Reclamation Act (SMARA) Mineral Land Classification Project) maintained by the State Mining and Geology Board does not include MRZ information for this segment of the Proposed Project study area. To date, San Bernardino County has not prepared an electronic Mineral Resources Overlay Map. Because information pertaining to Segment 1 of the Proposed Project was not available, the San Bernardino County General Plan was utilized to identify mineral resources.

5.10.2 Regulatory Setting

Federal

Mining and Mineral Policy Act of 1970

The Mining and Mineral Policy Act of 1970 is intended to foster and encourage private enterprise in the development of a stable domestic minerals industry and the orderly and economic development of

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domestic mineral resources. This statute established modern Federal policy regarding mineral resources in the United States, and it encompasses both hard rock mining and oil and natural gas production and established modern Federal policy regarding mineral resources in the United States. The Mining and Mineral Policy Act of 1970 applies to all minerals, including sand and gravel, geothermal, coal, and oil and natural gas that are subject to Department of Interior jurisdiction, including BLM lands.

California Desert Conservation Area Plan

In 1976, Congress required the preparation of a comprehensive long-range plan for the California Desert Conservation Area (CDCA). The purpose of the plan is to establish guidance for the management of the public lands of the California desert by the BLM. The CDCA Plan includes a Geology, Energy, and Mineral Resources Element, which includes the goals of assuring the availability of known mineral resource lands for exploration and development, and encouraging the development of mineral resources in a manner which satisfies national and local needs and provides for economically and environmentally sound exploration, extraction, and reclamation processes (BLM 1980).

State

California Surface Mining and Reclamation Act

Under the California Surface Mining and Reclamation Act (SMARA) of 1975, Mineral Resource Zones (MRZs) are defined by the State Geologist to classify land according to its level of significance as a mineral resource. MRZs are used to help identify and protect state mineral resources from urban expansion or other irreversible land uses that might preclude mineral extraction. The areas are categorized into four MRZs:

- **MRZ-1:** Areas where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- **MRZ-2:** Areas where adequate information indicates significant measured or indicated mineral resources are present, and of prime importance because it contains known economic mineral deposits.
- **MRZ-3:** Areas containing mineral deposits that may qualify as mineral resources, but the significance cannot be evaluated from available data.
- **MRZ-4:** Areas where geologic information does not rule out either the presence or absence of mineral resources.

See Table 5.10-1 depicting the seven segments of the Proposed Project and which MRZ the segment lies within.

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Local

The following General Plan goals, policies, and programs found in each jurisdiction's general plan, are applicable to the Proposed Project.

County of San Bernardino General Plan (2007)

LU 7.1 Ensure that land use developments within the state-delineated MRZs are in accordance with the adopted mineral resources management policies of the County.

Goal CO 7 The County will protect the current and future extraction of mineral resources that are important to the County's economy while minimizing impacts of this use on the public and the environment.

CO 7.1 In areas containing valuable mineral resources, establish and implement conditions, criteria, and standards that are designed to protect the access to, and economic use of, these resources, provide that the mineral extraction does not result in significant adverse environmental effects and that open space uses have been considered for the area once mining operations cease.

Programs

1. Solicit, coordinate, and acknowledge lands designated by the State Mining and Geology Board and classified by the state Geologist.
2. Incorporated the mineral classification or designation information, including the maps, when they are completed by the State Mining and Geology Board and the Division of Mines and Geology, including new and updated information.
3. Recognize and protect areas within San Bernardino County that show or have proven to have significant mineral resources and protect their access.
4. Maintain and coordinate files and records to be kept with the Land Use Services Department.

CO 7.2 Implement the state MRZ designations to establish a system that identifies mineral potential and economically viable reserves.

- a **MRZ-1:** Adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence. This designation will be applied where well-developed lines of reasoning, based upon economic geologic principles and adequate data, demonstrate that the likelihood for occurrence of significant mineral deposits is nil or slight.

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- b **MRZ-2:** Adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists. This designation will be applied to known mineral deposits or where well-developed lines of reasoning, based upon economic geologic principles and adequate data, demonstrate that the likelihood for occurrence of significant mineral deposits is high.
- c **MRZ-3:** Contains deposits whose significance cannot be evaluated from available data.
- d **MRZ-4:** Available information is inadequate for assignment to any other MRZ zone.
- e **SZ:** Areas containing unique or rare occurrences of rocks, minerals, or fossils that are of outstanding scientific significance will be classified in this zone.
- f **IRA:** San Bernardino County or State Division of Mines and Geology Identified Areas where adequate production and information indicates that significant materials are present.

County of Riverside General Plan (2008)

- OS 14.2** Restrict incompatible land uses within the impact area of existing or potential surface mining areas.
- OS 14.3** Restrict land uses incompatible with mineral resource recovery within areas designated Open Space-Mineral Resources.
- OS 14.6** Accept California Land Conservation (Williamson Act) contracts on land identified by the state as containing significant mineral deposits subject to the use and acreage limitations established by the County,

5.10.3 Significance Criteria

The significance criteria used to evaluate impacts to mineral resources are based on criteria listed in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.). A significant impact would occur if the project would:

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state
- Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

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5.10.4 Impact Analysis

The boxes in the chart below have been checked accordingly to characterize the level of significance for each CEQA criterion. The rationale for the anticipated significance levels is provided below the chart in each of the corresponding sections.

Would the project:	Potentially Significant Impact	Less Than Significant with APMs Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*

Less than Significant Impact. The new turbines and associated facilities at the Adelanto Compressor Station would be located within the existing compressor station property in a previously disturbed area. The majority of the pipeline alignment would be located within existing SoCalGas right-of-way, along other existing utility corridors, and/or along existing paved roads along its 95-mile route. The Proposed Project construction would require temporary access roads, staging areas, and work areas that would extend beyond the exiting right-of-way in some areas. The Proposed Project would mostly be underground; typically, a 7- to 8-foot-deep ditch would be excavated and a typical trench would be 5 feet wide.

As depicted in Table 5.10-1, Segment 2 of the proposed pipeline is located within MRZ-2 and MRZ-3 zones, Segment 3 is located within MRZ-1, MRZ-2, and MRZ-3 zones, Segments 4, 5, and 6 are located within MRZ-3 zones, and Segment 7 is located within MRZ-2 and MRZ-3 zones. No MRZ information pertaining to Segment 1 is available at this time. MRZ-1 denotes no significant mineral deposits and therefore Segment 3 within the MRZ-1 zone would not have a significant impact on mineral resources. MRZ-2 denotes significant mineral deposits are present or a strong likelihood for mineral deposits to be present. Accordingly, Segments 2, 3, and 7 within the MRZ-2 zone have a potential impact to mineral resources. MRZ-3 denotes mineral deposits are likely to exist; however, the significance of the deposit is undetermined. It is not known whether the mineral deposits within Segments 2 through 7 in the MRZ-3 zone are of any significance and would not affect known mineral resources.

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Approximately 2,990 feet of the pipeline within Segment 2 would be within MRZ-3 zone; approximately 9,370 feet of Segment 3 would be located within MRZ-1 zone, approximately 51,360 feet of Segment 3 would be located within MRZ-2 zone, approximately 71,650 feet of Segment 3 would be located within MRZ-3 zone; approximately 75,080 feet of Segment 4 would be located within MRZ-3 zone; approximately 52,760 feet of Segment 5 would be located within MRZ-3 zone, approximately 29,520 feet of Segment 6 would be located within MRZ-3 zone; approximately 12,010 feet of Segment 7 would be located within MRZ-2 zone, and approximately 26,360 feet of Segment 7 would be located within MRZ-3 zone. Based on the approximate length of each segment and a 5-foot wide trench width, the Proposed Project would excavate approximately 5.38 acres within the MRZ-1 zone, 36.36 acres within the MRZ-2 zone, and 148.22 acres within the MRZ-3 zone. The area of excavation is minimal given the size of the overall Proposed Project. When possible, excavated soils would be backfilled. Although the pipeline alignment is located within MRZ-2 and MRZ-3 zones which have or may have mineral deposit significance, given that the area of work would be mostly within existing right-of-way, existing utility corridors, existing paved roads, and future easements likely near disturbed/developed areas, the Proposed Project would not preclude use of such mineral resources in the future. The Proposed Project would not result in the loss of availability of known mineral resources that would be of value to the region and the residents of the state. Impacts to mineral resources are considered to be less than significant.

b) *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

Less than Significant Impact. Refer to Response 5.10.4a above. The Proposed Project would not affect known mineral resources that would result in the loss of availability of a locally important mineral resource recovery site. Impacts to mineral resources are considered to be less than significant.

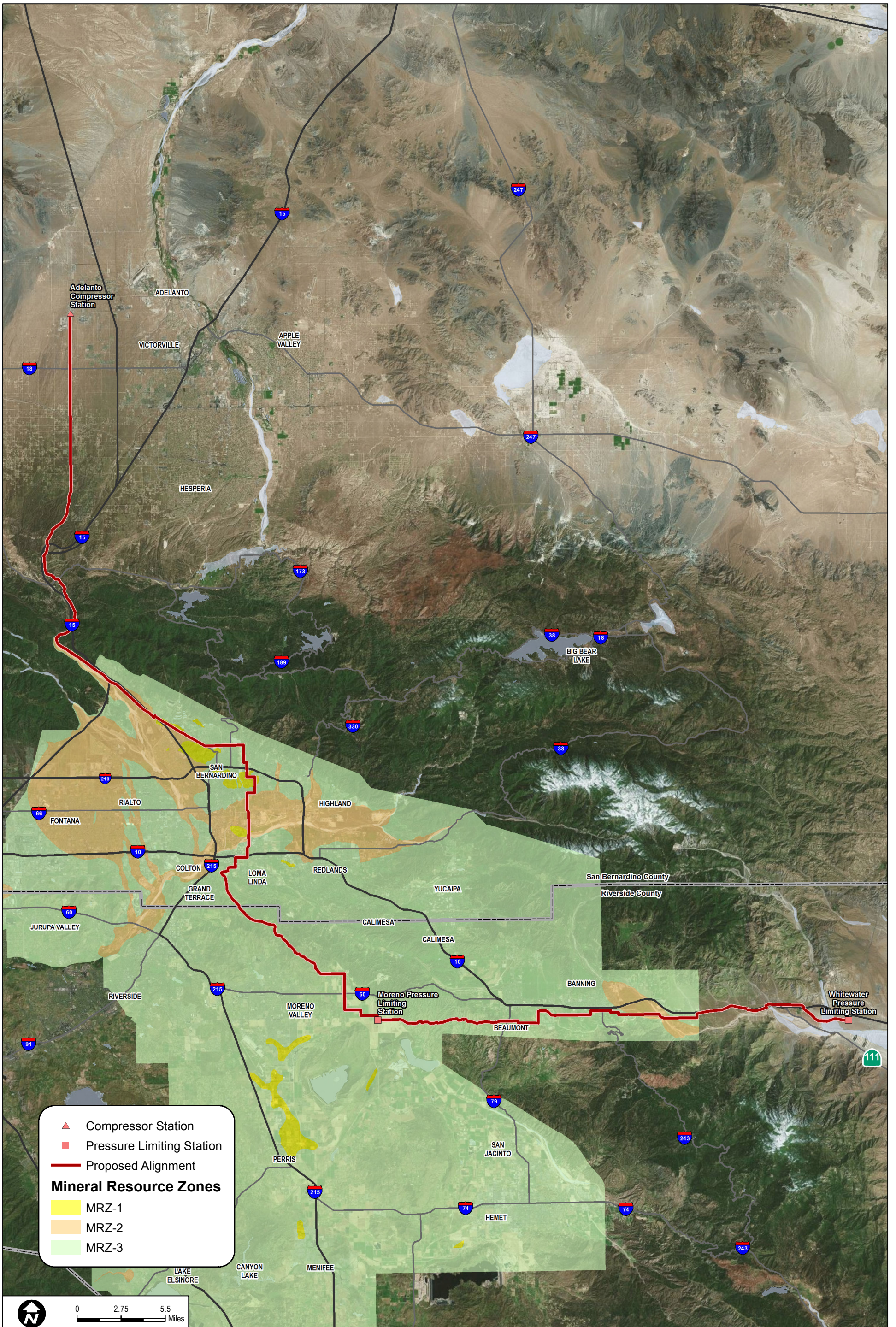
5.10.5 Applicant Proposed Measures

No impacts to mineral resources would occur; therefore, no APMs are proposed.

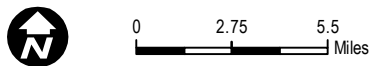
5.10.6 References

County of Riverside. 2008. *County of Riverside General Plan*.

County of San Bernardino. 2007. *County of San Bernardino 2007 General Plan*. Adopted March 13, 2007. Amended July 18, 2013.



▲ Compressor Station
 ■ Pressure Limiting Station
 — Proposed Alignment
Mineral Resource Zones
 ■ MRZ-1
 ■ MRZ-2
 ■ MRZ-3



SOURCE: BING Maps 2014; Southern California Gas Company 2014; San Bernardino County 2008



North South Project

FIGURE 5.10-1
Mineral Resource Zones

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5.11 Noise

The following section describes the potential noise effects resulting from the Proposed Project.

5.11.1 Environmental Setting

Noise Terminology

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected, or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a millionfold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels, expressed as dBA, unless otherwise noted.

The decibel scale is logarithmic, not linear. In other words, two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10 dB is generally perceived as a doubling in loudness. For example, a 70 dBA sound is half as loud as an 80 dBA sound and twice as loud as a 60 dBA sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A-weighted sound level containing

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the same total energy as a time varying signal over a given time period (usually 1 hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn} , and shows very good correlation with community response to noise.

The day/night average level (L_{dn}) is based upon the average noise level over a 24-hour day, with a +10 decibel weighting applied to noise occurring during nighttime (10:00 PM to 7:00 AM) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Table 5.11-1 lists several examples of the noise levels associated with common situations.

Table 5.11-1
Typical A-Weighted Sound Levels of Common Noise Sources

Decibels	Description
120	Jet aircraft at 100 feet/threshold of pain
110	Riveting machine at operator's position
100	Shotgun at 200 feet
90	Bulldozer at 50 feet
80	Diesel locomotive at 300 feet
70	Commercial jet aircraft interior during flight
60	Normal conversation speech at 5–10 feet
50	Open office background level
40	Background level within a residence
30	Soft whisper at 2 feet
20	Interior of recording studio

Effects of Noise on People

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction
- Interference with activities such as speech, sleep, and learning
- Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists, and different tolerances to noise tend to develop based on an individual's past experiences with noise.

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Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived.
- Outside of the laboratory, a 3 dBA change is considered a just-perceivable difference.
- A change in level of at least 5 dBA is required before any noticeable change in human response would be expected.
- A 10 dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise, including mechanical equipment at commercial or industrial sites or a group of construction equipment, attenuate (lessen) at a rate of approximately 6 dB per doubling of distance from the source; at greater distances from the source, environmental conditions (i.e., atmospheric conditions) can increase the attenuation, as can either vegetative or manufactured noise barriers at any distance between source and receiver. Moving point sources, typically represented by traffic along a roadway or train operations along a rail corridor, attenuate at a rate of approximately 4.5 dB per doubling of distance from the source, with the same considerations as point sources regarding atmospheric and barrier effects. Line sources, typically represented by extremely busy highways, attenuate at a rate of approximately 3 dB per doubling of distance from the source.

Noise Sensitive Land Uses

Noise-sensitive receptors are typically considered to be places in which people have a reasonable expectation of quiet, such as residences, hospitals, schools, libraries and places of worship. The Proposed Project site encompasses a large area that includes noise-sensitive land uses, as well as existing noise sources including freeways and major arterial roadways, rail use, industrial sources, and airports.

The proposed alignment traverses multiple jurisdictions and the Proposed Project area thus comprises a wide variety of land uses. The proposed alignment begins at the Adelanto Compressor Station in the City of Adelanto and extends through the City of Victorville to the San Bernardino National Forest. After traversing the San Bernardino National Forest along the Cajon Pass, the proposed alignment extends through multiple cities and unincorporated areas within San Bernardino and Riverside counties. A small stretch of the southeastern portion of the alignment also traverses land that is managed by the BLM.

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The proposed pipeline would be largely located within existing SoCalGas right-of-way or public right-of-way; however, Proposed Project construction would also involve temporary access roads, staging areas, and work areas that may extend beyond the existing SoCalGas or public right-of-way. In addition to the proposed pipeline, the Proposed Project includes infrastructure replacement at the existing Adelanto Compressor Station facility in the City of Adelanto, improvements to three pressure limiting stations (Moreno, Whitewater, Shaver Summit), modifications at the Desert Center Compressor Station, and installation of 19 blowdown valves along the pipeline. Blowdown valves allow for venting of the high pressure gas within portions of the pipeline for maintenance activities or emergency shutdown. A blowdown valve would be located every 5 to 8 miles of pipeline throughout the Project alignment.

The nearest noise-sensitive land use to the existing Adelanto Compressor Station is the Adelanto Detention Facility, located approximately 0.5 mile east of the compressor station. Along the 95-mile route, some residences and other noise-sensitive land uses are located immediately adjacent to the construction area for the proposed pipeline, although receivers are typically located 50 to 100 feet away or further from the alignment. The highest concentration of sensitive receptors lies within the San Bernardino Valley, where the proposed pipeline would traverse the highly urbanized cities of San Bernardino, Colton, and Loma Linda.

5.11.2 Regulatory Setting

Federal, state, and local governments and agencies establish laws and regulations to control excessive noise and reduce noise exposure to levels deemed acceptable. While federal and state laws regulate transportation noise, establish “normally” and “conditionally” acceptable noise limits based on land use type, and establish maximum acceptable interior noise limits of residences, no federal or state provisions regulate noise levels relating to temporary construction activities¹³.

Local

General Plans

California Government Code Section 65300 et seq. requires cities and counties to prepare and adopt a comprehensive, long-term general plan for the physical development of the county or the city. Section 65302 of this code requires cities and counties to include a variety of elements in their general plan, each of which must describe policies to guide development relative to the issue area characterized in the element. One of the required elements is the “noise element.” Section 65302 requires this element

¹³ With the exception of regulations for occupational noise exposure promulgated by the federal Occupational Safety and Health Administration (OSHA) and Cal/OSHA in the state of California.

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to recognize noise guidelines established by the Office of Noise Control and to analyze the current and projected noise levels from a variety of sources (Government Code Section 65302(f)(1)). As comprehensive planning documents, the general plans recognize construction noise and noise between property boundaries as important planning issues; however, these general plans refer to their respective City or County Municipal Code Noise Ordinance as the relevant source for specific noise standards or limitations.

Municipal Codes

Each jurisdiction within the proposed alignment has an adopted municipal code containing specified ordinances related to noise sources, the amount of noise that is permitted for various sources, and the amount and types of noise that are permitted to occur during particular hours of the day. For example, city noise ordinances generally limit the times at which construction can occur. Noise ordinances relevant to the Proposed Project that are set forth in the municipal codes of the local jurisdictions within the proposed alignment are listed below.

City of Adelanto

Operation

Generally, "loud noises and annoying vibrations" are declared a public nuisance and are prohibited (Section 8.25.020, Unlawful Public Nuisances) in the City of Adelanto's municipal code. Additionally, Section 17.90.020 of the city's zoning code states that the noise standards contained in Table VIII-2, "Land Use Compatibility Guidelines Related to Noise Exposure" in the Noise Element of the General Plan shall apply to land uses city-wide and shall be used to define acceptable and unacceptable noise levels. The applicable noise standard for the Proposed Project's Adelanto Compressor Station component is 70 dBA CNEL (i.e., industrial land use).

Construction

Section 17.90.020 of the City of Adelanto's municipal code states: to reduce potential noise the following items shall be listed as "General Notes" on the construction drawings:

1. Construction activity and equipment maintenance is limited to the hours between 7:00 AM to dusk on weekdays. Construction may not occur on weekends or State holidays, without prior consent of the Building Official. Non-noise generating activities (e.g. interior painting) are not subject to these restrictions. City and State construction projects, such as road re-building or resurfacing, and any construction activity that is in response to an emergency, shall be exempt from this requirement.
2. Stationary construction equipment that generates noise in excess of sixty-five (65) dBA at the project boundaries must be acoustically shielded and located at least one hundred feet (100') from occupied residences. The equipment area with appropriate acoustic shielding shall be

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designated on building and grading plans. Equipment and shielding shall remain in the designated location throughout construction activities.

3. Construction routes are limited to City of Adelanto designated truck routes.

City of Colton

Section 18.42.040 of the Colton municipal code states:

The maximum sound level radiated by any Use of Facility, when measured at the boundary line of the Property on which the sound is generated, shall not be obnoxious by reason of its intensity, pitch or dynamic characteristics as determined by the City, and Shall not exceed 65 dBA.

City of Loma Linda

Operation

Section 9.20.040 (Land Use Compatibility for Community Noise Environments) of the City of Loma Linda’s municipal code contains performance standards by land use category as shown in Table 5.11-2.

**Table 5.11-2
City of Loma Linda Municipal Code – Noise**

Land Use Category and Similar Activities	Maximum Community Noise Exposure Levels	Ldn or CNEL, dBA
Residential	Normally Acceptable	55
	Conditionally Acceptable	70
	Normally Unacceptable	75
	Clearly Unacceptable	76
Residential (evening)* 10:00 PM—7:00 AM	Normally Acceptable	< 50
	Conditionally Acceptable	55 or more
Transient Lodging Motels, Hotels	Normally Acceptable	65
	Conditionally Acceptable	70
	Normally Unacceptable	75
	Clearly Unacceptable	76 or more
Schools, Libraries, Churches, Hospitals, Nursing Homes	Normally Acceptable	70
	Conditionally Acceptable	70
	Normally Unacceptable	80
	Clearly Unacceptable	81 or more
Auditoriums, Concert Halls, Amphitheaters	Conditionally Acceptable	80
	Clearly Unacceptable	90 or more
Sports Arenas, Outdoor Spectator Sports	Conditionally Acceptable	80
	Clearly Unacceptable	90 or more
Playgrounds, Neighborhood Parks	Normally Acceptable	70
	Normally Unacceptable	75
	Clearly Unacceptable	76 or more
Golf Course, Riding Stables, Water Recreation, Cemeteries	Normally Acceptable	
	Normally Unacceptable	80
	Clearly Unacceptable	81 or more

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**Table 5.11-2
City of Loma Linda Municipal Code – Noise**

Land Use Category and Similar Activities	Maximum Community Noise Exposure Levels	Ldn or CNEL, dBa
Office Buildings, Business Commercial and Professional	Normally Acceptable	70
	Conditionally Acceptable	75
	Normally Unacceptable	76 or more
Industrial, Manufacturing Utilities, Agriculture	Normally Acceptable	70
	Conditionally Acceptable	80
	Normally Unacceptable	81 or more

Emergency type land uses, emergency response vehicles, and emergency notification measures shall be considered as Normally Acceptable measures and exempt from violations and or penalties.

Construction

Section 9.20.050 of Loma Linda’s municipal code states that “Noises considered to be a nuisance between the hours of ten p.m. and seven a.m. shall include but not be limited to construction related noises,” and that “special waivers may be granted per Sections 9.20.060 and 9.20.070 (Ord. 481 § 1, 1992).”

City of Moreno Valley

Operation

Chapter 11.80 (Noise Regulation) of the City of Moreno Valley’s municipal code sets forth various noise standards including maximum sound levels (in dBA) for source land uses as shown in Table 5.11-3.

**Table 5.11-3
City of Moreno Valley Municipal Code – Noise**

Residential		Commercial	
<i>Daytime</i>	<i>Nighttime</i>	<i>Daytime</i>	<i>Nighttime</i>
60	55	65	60

Construction

Section 11.80.030 of the City of Moreno Valley municipal code (Construction and Demolition) states: “No person shall operate or cause the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between the hours of eight p.m. and seven a.m. the following day such that the sound there from creates a noise disturbance, except for emergency work by public service utilities or for other work approved by the city manager or designee. This section shall not apply to the use of power tools as provided in subsection (D)(9) of this section.”

Riverside County

Operation

Table 1, Section 9.52.040 of the County of Riverside’s municipal code contains exterior noise standards by General Plan land use designation. Residential land uses have a noise standard limit of 55 dBA Lmax

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from 7 AM to 10 PM and 45 dBA Lmax from 10 PM to 7 AM. Commercial land uses have a noise standard limit of 65 dBA Lmax from 7 AM to 10 PM and 55 dBA Lmax from 10 PM to 7 AM.

Construction

The County of Riverside's municipal code, section 9.52.060 and 9.52.070, state as follows:

Power Tools and Equipment. No person shall operate any power tools or equipment between the hours of ten p.m. and eight a.m. such that the power tools or equipment are audible to the human ear inside an inhabited dwelling other than a dwelling in which the power tools or equipment may be located. No person shall operate any power tools or equipment at any other time such that the power tools or equipment are audible to the human ear at a distance greater than one hundred (100) feet from the power tools or equipment.

Exceptions. Exceptions may be requested from the standards set forth in Section 9.52.040 or 9.52.060 of this chapter and may be characterized as construction-related, single-event or continuous-events exceptions. An application for a construction-related exception shall be made to and considered by the director of building and safety on forms provided by the building and safety department and shall be accompanied by the appropriate filing fee. No public hearing is required.

Additionally, section 15.04.020 states that "whenever a construction site is within one-quarter of a mile of an occupied residence or residences, no construction activities shall be undertaken between the hours of six p.m. and six a.m. during the months of June through September and between the hours of six p.m. and six a.m. during the months of October through May. Exceptions to these standards shall be allowed only with the written consent of the building official."

City of San Bernardino

Operation

The City of San Bernardino maintains a comprehensive Noise Ordinance (Section 19.20.030.15) within its Development Code which specifies the maximum acceptable levels of noise for residential uses in the City. According to the Noise Ordinance, in residential areas, no exterior noise level shall exceed 65 dBA and no interior noise level shall exceed 45 dBA.

The City's Municipal Code also contains City noise level regulations. The City has adopted a number of policies that are directed at controlling or mitigating environmental noise effects. The City's Noise Ordinance (Municipal Code Chapter 8.54, Noise Control) controls hours of operation for multiple sources of excessive noise. Excessive noise is not permitted between the hours of 8:00 PM and 8:00 AM in residential zones, and between 8:00 PM and 7:00 AM in all other zones. Unreasonably loud noise is determined by multiple factors including, but not limited to: level of noise; level of

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background noise; proximity to sensitive receptors; zoning of the noise source area; density of inhabitation of the noise source area; time of day or night the noise occurs; duration; whether the noise is recurrent, intermittent, or constant; and whether the noise is produced by a commercial or noncommercial activity

Construction

Section 8.54.020, Title 8, Health and Safety, of the City of San Bernardino’s municipal code states as follows:

The operation or use between the hours of 10:00 p.m. and 8:00 a.m. of any pile driver, steam shovel, pneumatic hammers, derrick, steam or electric hoist, power driven saw, or any other tool or apparatus, the use of which is attended by loud and excessive noise, except with the approval of the City.

Additionally, Section 8.54.070 (Disturbances from Construction Activity), states:

No person shall be engaged or employed, or cause any other person to be engaged or employed, in any work of construction, erection, alteration, repair, addition, movement, demolition, or improvement to any building or structure except within the hours of 7:00 a.m. and 8:00 p.m. (Ord. MC-1246, 5-21-07).

County of San Bernardino

Operation

Section 83.01.080, Noise, of Title 8, Development Code of the County of San Bernardino’s municipal code contains noise standards for operational type noise as shown in Table 5.11-4.

**Table 5.11-4
City of San Bernardino Municipal Code – Noise**

Noise Standards for Stationary Noise Sources		
<i>Affected Land Uses (Receiving Noise)</i>	<i>7:00 AM - 10:00 PM L_{eq}</i>	<i>10:00 PM - 7:00 AM L_{eq}</i>
Residential	55 dBA	45 dBA
Professional Services	55 dBA	55 dBA
Other Commercial	60 dBA	60 dBA
Industrial	70 dBA	70 dBA

L_{eq} = (Equivalent Energy Level). The sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period, typically 1, 8, or 24 hours.

dBA = (A-weighted Sound Pressure Level). The sound pressure level, in decibels, as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound, placing greater emphasis on those frequencies within the sensitivity range of the human ear.

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Construction

Chapter 82.18 Noise Hazard (NH) Overlay of the County of San Bernardino’s municipal code states as follows:

Exempt noise. The following sources of noise shall be exempt from the regulations of this Section:

(3) Temporary construction, maintenance, repair, or demolition activities between 7:00 a.m. and 7:00 p.m., except Sundays and Federal holidays.

City of Victorville

Operation

Section 13.01.050 of the City of Victorville’s municipal code states that noise levels shall not exceed certain base ambient noise levels. These noise levels are shown in Table 5.11-5.

**Table 5.11-5
City of Victorville Municipal Code – Noise**

Zone	Time	Sound Level Decibels
All residential zones	10:00pm to 7:00am	55 dBA
	7:00am to 10:00pm	65 dBA
All commercial zones	Anytime	70 dBA
All industrial zones	Anytime	75 dBA

If the ambient noise level exceeds the applicable limit as noted in the above table, the ambient noise level shall be the standard.

Construction

The City of Victorville’s municipal code (Section 13.01.060 and 16-6.12.060, Noise Source Exemption), states as follows:

The following activities shall be exempted from the provisions of this chapter:

(2) The provisions of this regulation shall not preclude the construction, operation, maintenance and repairs of equipment, apparatus or facilities of park and recreation projects, public works projects or essential public works services and facilities, including those utilities subject to the regulatory jurisdiction of the California Public Utilities Commission.

(9) Construction activity on private properties that are determined by the director of building and safety to be essential to the completion of a project. (Ord. 1962 § 2 (part), 2002).

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City of Banning

Operation

The City of Banning’s municipal code states (in section 8.44.080) that noise levels shall not exceed the base ambient noise levels listed in Table 5.11-5. If the ambient noise level exceeds the applicable limits shown in Table 5.11-6, the ambient noise level shall be the standard.

**Table 5.11-6
City of Banning Municipal Code – Noise**

Decibels	Time Zone	Use
45	10:00 PM — 7:00 AM	Residential
55	7:00 AM — 10:00 PM	Residential
75	Anytime	Industrial and commercial

Construction.

Section 8.44.090 (Noises prohibited—unnecessary noise standard) of the City of Banning’s municipal code states as follows:

Any other provisions of this chapter notwithstanding, the following acts are expressly prohibited as a violation of this chapter. Such acts are hereby expressly declared to be loud, unusual and unnecessary noises in violation of this chapter; namely:

E. Construction, landscape maintenance or repair.

1. It shall be unlawful for any person to engage in or permit the generation of noise related to landscape maintenance, construction including erection, excavation, demolition, alteration or repair of any structure or improvement, at such sound levels, as measured at the property line of the nearest adjacent occupied property, as to be in excess of the sound levels permitted under this chapter, at other times than between the hours of 7:00 A.M. and 6:00 P.M. The person engaged in such activity is hereby permitted to exceed sound levels otherwise set forth in this chapter for the duration of the activity during the above described hours for purposes of construction. However, nothing contained herein shall permit any person to cause sound levels to at any time exceed fifty-five dBA for intervals of more than fifteen minutes per hour as measured in the interior of the nearest occupied residence or school.
2. Construction related noise as defined in subsection (E)(1) immediately above, may take place outside the time period set forth in subsection (E)(1) and above the relative sound levels in case of urgent necessity in the interest of public health and safety, and then only with the prior permission of the building inspector. Such permit may be granted for a period

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not to exceed three days or until the emergency ends, whichever is less. The permit may be renewed for periods of three days while the emergency continues.

3. Unless exempted by this chapter, if the building official should determine that the public health and safety will not be impaired by the construction related noise, the building inspector may issue a permit for construction within the hours of 6:00 P.M. and 7:00 A.M., upon application being made at the time the permit for the work is awarded or during the progress of the work. The building official may place such conditions on the issuance of the permit as to him or her shall seem appropriate to maintain the public health and safety.

City of Beaumont

Operation

The city's municipal code (section 9.02.030, Prohibited Noise in Residential Zones), states the following:

Notwithstanding any other provision of this Code, and in addition thereto, it shall be unlawful, and it is hereby declared a public nuisance, for any person to make, suffer, permit, continue, or cause to be made or continued, any loud noise, commotion, gathering or event, which disturbs the peace or quiet of the neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitivity. Further, it shall be unlawful for any person to make, or permit the making of, noise related to landscape maintenance or construction, including the erection, excavation, demolition, alteration or repair of any structure or improvement, which disturbs the peace or quiet of the neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitivity, between the hours of 8:00 p.m. in the evening and 6:00 a.m.

Construction

The City of Banning's municipal code, Chapter 9.02 prohibits the creation of noise from construction which disturbs the peace or quiet of the neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitivity, between the hours of 8:00 p.m. in the evening and 6:00 a.m.

City of Palm Springs

Operation

The City of Palm Springs municipal code noise ordinance (Chapter 11.71, Section 11.74.031) has the following noise level limits:

The noise level or sound level referred to in this section shall mean the higher of the following:

1. Actual measured ambient noise level; or
2. That noise level limit as determined from the table in this subsection (see Table 5.11-7).

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**Table 5.11-7
City of Palm Springs Municipal Code – Noise Level Limits**

Zone	Time	Sound Level (A-weighted) Decibels
Residential	7 AM to 6 PM	50
Low Density	6 PM to 10 PM	45
	10 PM to 7 AM	40
Residential	7 AM to 6 PM	60
High Density	6 PM to 10 PM	55
	10 PM to 7 AM	50
Commercial	7 AM to 6 PM	60
	6 PM to 10 PM	55
	10 PM to 7 AM	50
Industrial	7 AM to 6 PM	70
	6 PM to 10 PM	60
	10 PM to 7 AM	55

If the measurement location is on a boundary between two different zones, the noise level limit applicable to the lower noise zone plus five dB shall apply. (Ord. 1167 § 1, 1982)

The time duration allowances set forth in the table below shall apply to those noise level limits set forth in Section 11.74.031 during the daytime hours (see Table 5.11-8).

**Table 5.11-8
City of Palm Springs Municipal Code – Duration of Sound**

Duration of Sound	dBA Allowance
Up to 30 minutes per hour	+ 3
Up to 15 minutes per hour	+ 6
Up to 10 minutes per hour	+ 8
Up to 5 minutes per hour	+11
Up to 2 minutes per hour	+15
Up to 1 minutes per hour	+18
Up to 30 seconds per hour	+21
Up to 15 seconds per hour	+24

The provisions of this section shall not apply to construction equipment used in connection with emergency work (Ordinance 1167, Section 1, 1982).

Construction

Chapter 8.04, Uniform Codes, of the City of Palm Springs municipal code prohibits construction noise except in accordance with Section 8.04.220, which limits hours of construction as follows:

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(a) No person shall be engaged or employed nor shall any person cause any other person to be engaged or employed in any work of construction, erection, alteration, repair, addition to, or improvement of any realty, building or structure, except during the hours specified as follows, if the noise or other sound produced by such work is of such intensity or quality that it disturbs the peace and quiet of any other person of normal sensitivity. For new construction, the permitted hours of construction specified below shall be conspicuously posted on site (see Table 5.11-9).

Table 5.11-9
City of Palm Springs Municipal Code – Permitted Hours of Construction

Weekdays	Saturday	Sundays and Holidays*
7 AM to 7 PM	8 AM to 5 PM	Not permitted

* Thanksgiving Day, Christmas Day, New Year's Day, July 4th, Labor Day and Memorial Day.

(b) Any person doing or causing work prohibited by subsection (a) of this section, after being informed orally or in writing that such work has caused noise or sounds which disturb any other person's peace and quiet, shall immediately cease such work and shall thereafter perform such work only within the times permitted in subsection (a) of this section.

Exceptions to the above limitations include:

- Construction work complying with the terms of a written early work permit which may be issued by the building official upon a showing of sufficient need due to circumstances of an unusual or compelling nature;
- Work being conducted in the public right-of-way under the authority of the engineering department shall be allowed on a daily basis between seven a.m. and three-thirty p.m. except weekends and holidays unless otherwise approved by the city engineer

5.11.3 Significance Criteria

The significance criteria used to evaluate impacts to noise are based on criteria listed in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.). A significant impact would occur if the project would:

- Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies
- Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels
- Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project

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- Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels
- For a project located within the vicinity of a private airstrip, where the project would expose people residing or working in the project area to excessive noise levels.

5.11.4 Impact Analysis

The boxes in the chart below have been checked accordingly to characterize the level of significance for each CEQA criterion. The rationale for the anticipated significance levels is provided below the chart in each of the corresponding sections.

Would the project:	Potentially Significant Impact	Less Than Significant with APMs Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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- a) **Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Adelanto Compressor Station

Construction

Less than Significant Impact. The Adelanto Compressor Station components are described in detail in Section 3.5.1. Construction would normally occur Monday through Saturday between the hours of 7:00 AM to 7:00 PM or as limited by the City's noise ordinance. The nearest noise-sensitive land use at the Adelanto Compressor Station is the Adelanto Detention Facility, located approximately 0.5 mile east of the compressor station. During construction, equipment operation would be the primary noise source associated with construction activities and could affect noise sensitive receivers adjacent to the construction site.

Specific Proposed Project construction details and equipment fleet specifications are not available at this time. However, the following are typical types of construction equipment that would be expected:

- Concrete/industrial saws
- Dozers
- Tractors/loaders/backhoes
- Forklifts
- Welders
- Cement and mortar mixers
- Paving equipment
- Trenching equipment
- Off-highway water trucks
- Materials delivery trucks
- Pneumatic tools
- Excavators
- Graders
- Cranes
- Generator sets
- Air compressors
- Pavers
- Scrapers
- Rollers
- Concrete trucks
- Asphalt trucks.

The range of maximum noise levels for various types of construction equipment at a distance of 50 feet is depicted in Table 5.11-10. The noise values represent maximum noise generation, or full-power operation of the equipment. As an example, a loader and two dozers, all operating at full power and relatively close together, would generate a maximum sound level of approximately 90 dB at 50 feet from their operations. As one increases the distance between

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equipment, or there is a separation of areas with simultaneous construction activity, dispersion and distance attenuation reduce the effects of separate noise sources added together. In addition, typical operating cycles may involve 2 minutes of full-power operation, followed by 3 or 4 minutes at lower levels. The average noise level during construction activities is generally lower, since maximum noise generation may only occur up to 50% of the time.

**Table 5.11-10
Construction Equipment Noise Emission Levels**

Equipment	Typical Sound Level (dBA) 50 Feet from Source
Air compressor	81
Backhoe	80
Compactor	82
Concrete mixer	85
Concrete pump	82
Concrete vibrator	76
Crane, mobile	83
Dozer	85
Generator	81
Grader	85
Impact wrench	85
Jackhammer	88
Loader	85
Paver	89
Pneumatic tool	85
Pump	76
Roller	74
Saw	76
Truck	88

Source: FTA 2006.

The nearest off-site sensitive receptor to the Proposed Project work is the Adelanto Detention Facility, located approximately 2,500 feet from the Proposed Project site. The nearest (non-institutionalized) residences are located approximately 1 mile to the north-northeast of the Proposed Project site. The noise levels from construction operations decrease at a rate of approximately 6 dB per doubling of distance from the source. Therefore, at a distance of 2,500 feet, construction noise levels would be about 34 dB lower than shown in Table 5.11-1, ranging from approximately 40 to 55 dBA. At the nearest residences, construction noise levels would range from approximately 33 to 48 dBA. The City of Adelanto's noise ordinance (Municipal Code Section 17.90.020, Noise, (d) Construction Practices) limits construction activity and equipment maintenance to the hours between 7:00 AM to dusk on weekdays. Without prior consent of the Building Official, construction may not occur on weekends or State holidays. Non-noise generating activities (e.g. interior painting) are not subject to these restrictions. Additionally, stationary construction equipment which generates noise in excess

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of 65 dBA at the Proposed Project boundaries must be acoustically shielded and located at least 100 feet from occupied residences.

Construction of the Adelanto Compressor Station would take place within the specified hours and would not violate City of Adelanto noise standards for construction; therefore, noise from construction of the Adelanto Compressor Station would be a less than significant impact.

Operation

Less than Significant Impact with APMs Incorporated. The Proposed Project would have minimal effects on noise levels as a result of continuous operation. There would be a negligible increase in local traffic noise resulting from maintenance workers traveling periodically to and from the site. Noise sources associated with the operation of the Proposed Project primarily include the natural gas turbine-driven compressors, which would be housed within the compressor building, as well as three natural gas-fueled generators, housed within a separate building on site.

All major noise-generating machinery at the Adelanto Compressor Station would be housed within purpose-built structures or would be within a separate noise enclosure (as necessary) so as to comply with City of Adelanto municipal code limits for noise at the Proposed Project boundary. The noise level associated with Proposed Project stationary facilities is anticipated to be similar to existing levels.

Overall, noise impacts associated with operations and maintenance activities would be infrequent and of a low level. These impacts would be less than significant. However, implementation of **APM-NOI-1** would ensure that any noise attributable to the Adelanto Compressor Station is minimized.

Natural Gas Pipeline

Construction

Potentially Significant Impact. Proposed Project construction would be similar to other pipeline projects in terms of schedule, equipment used, and types of activities. Construction would temporarily increase nearby noise and vibration levels at adjacent noise-sensitive land uses. Noise and vibration levels would vary during the construction period, depending on the construction phase.

The loudest equipment types generally operating at a site during construction would contribute to a composite average or equivalent site noise level. Noise levels from common construction equipment at various distances can be estimated conservatively by assuming that the only

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attenuating mechanism is the divergence of the sound waves in open air (Table 3.11-10). Some residences and other noise-sensitive land uses are located immediately adjacent to the construction area for the proposed pipeline, although more typical source-receiver distances would range from 50 feet to several hundred feet.

Sensitive receptors located within approximately 500 feet of the pipeline right-of-way and pressure limiting station facilities would experience short-term inconvenience from the construction equipment noise. On-site noise levels are anticipated to be in the 70 to 85 dBA range at 50 feet, or approximately 78 to 93 dBA at a distance of 20 feet. Affected noise-sensitive land uses would be within the residential and commercial areas located primarily in the Cities of Adelanto, Victorville, San Bernardino, Colton, Loma Linda, Moreno Valley, Beaumont, Banning, and Palm Springs, and in unincorporated San Bernardino County and Riverside County. Construction noise and vibration levels related to the Proposed Project would vary during the construction period, depending on the construction phase and number and location of operating construction equipment. Pipeline construction generally proceeds at rates ranging from several hundred feet to 1 mile per day. However, due to the assembly-line method of construction, these activities could last from one week to 30 days at a given location. Because the construction moves through an area relatively quickly, adverse noise impacts would typically be localized, intermittent, and short-term. Construction of the pipeline and aboveground facilities would take approximately 19 months to complete.

Noise generated from construction equipment, drilling, and blasting would all temporarily contribute to increased noise levels. Blasting and HDD would have noise levels of about 79 and 94 dBA at a distance of 50 feet. In addition, a temporary increase in local traffic noise would occur as a result of construction workers and equipment traveling to and from the sites. In less populated or rural areas, although livestock and nesting birds in the immediate vicinity of construction activities may be temporarily disturbed, the impact on the noise at any specific location would be short-term. Similarly, noise and vibration associated with construction of the proposed aboveground facilities in rural areas would be intermittent during the construction period, but the overall impact would be temporary and is not expected to be significant. Furthermore, nighttime noise levels would normally be unaffected because most construction activities would be limited to daylight hours.

Blasting, if necessary, would likely be the most prominent source of unwanted noise and vibration during construction. All blasting would be conducted during daylight hours. When blasting is required, a Blasting Plan would be developed to address specifications for the following items: use of explosives; blasting; notification; transportation of blasting material; methods for limiting ground vibrations; air-overpressure levels; records requirements and safety and warning programs; and vibration predictions based on project parameters. The U.S.

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Department of Labor's Occupational Safety and Health Administration (OSHA) requires detailed safety measures to be implemented for each blasting event to ensure worker safety.

Noise impacts would be reduced by implementation of **APM-NOI-2a** and **APM-NOI-2b** but would still result in relatively high intermittent noise levels at the nearest sensitive receptors in the immediate vicinity of the proposed pipeline (up to 93 dBA at a distance of 20 feet from pipeline construction). As such, short-term noise during construction would be considered a potentially significant impact.

Operation

Less than Significant Impact. Overall, noise impacts associated with operations and maintenance activities along the proposed pipeline would be infrequent and of a low level. These impacts would not be significant. However, implementation of the APM-NOI-3 would ensure that any noise attributable to ancillary facilities such as valve stations, blowdown valves and modified pressure limiting stations is minimized. Therefore operational noise from the pipeline would be less than significant.

- b) *Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?***

Adelanto Compressor Station

Less than Significant Impact. Construction of the Adelanto Compressor Station could generate ground-borne vibrations associated with conventional construction activities. As described in Section 5.11.4a, the nearest noise/vibration-sensitive land use is located approximately 2,500 feet from the Proposed Project site. Vibration from conventional construction equipment typically dissipates to levels below perceptibility within 50 feet or less. Therefore, this impact would be less than significant.

Operation of the Adelanto Compressor Station is not anticipated to create perceptible vibration at the Proposed Project boundaries or at nearby noise/vibration-sensitive land uses. The machinery associated with the Adelanto Compressor Station would not transmit substantial levels of vibration into the ground. Therefore, this impact would be less than significant.

Natural Gas Pipeline

Less than Significant Impact with APMs Incorporated. The natural gas pipeline component of the Proposed Project could generate ground-borne vibrations associated with conventional construction, blasting and HDD drilling activities. As discussed above, the vibration levels from conventional construction dissipate relatively rapidly. Within 20 to 30 feet, vibration from

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conventional construction equipment may be perceptible but would be below thresholds for potential damage to structures. The locations of HDD drilling sites that are in close proximity to sensitive receptors, including residents, include two locations within the City of Phelan, a location in South Pointe (Colton), and a location in Moreno Valley. This impact could potentially be significant, but would be temporary in duration. The impact of groundborne vibrations from construction, blasting and HDD drilling would be reduced to less than significant levels by implementation of **APM-NOI-2a** and **APM-NOI-2b**.

Operation of the pipeline is not anticipated to create perceptible vibration at the Proposed Project right-of-way or at nearby noise/vibration-sensitive land uses. Therefore, this impact would be less than significant.

- c) ***Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?***

Adelanto Compressor Station

Less than Significant Impact with APMs Incorporated. Construction phase noise of the Adelanto Compressor Station is discussed in Section 5.11.4a. Noise during construction would be temporary and thus would not result in a substantial permanent increase in ambient noise levels.

Operational phase noise of the Adelanto Compressor Station is discussed in Section 5.11.4a. With implementation of **APM-NOI-1**, operational noise is not anticipated to result in substantial permanent increases in the Proposed Project vicinity. This would be a less than significant impact.

Natural Gas Pipeline

Less than Significant Impact. Noise generated during the construction phase of the natural gas pipeline is discussed in Section 5.11.4a. Noise during construction would be temporary and thus would not result in a substantial permanent increase in ambient noise levels.

Operational phase noise of the natural gas pipeline is discussed in Section 5.11.4a. With implementation of **APM-NOI-3**, operational noise is not anticipated to result in substantial permanent noise increases in the Proposed Project vicinity. This would be a less than significant impact.

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- d) ***Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?***

Adelanto Compressor Station

Less than Significant Impact with APMs Incorporated. Noise generated during the construction phase of the Adelanto Compressor Station is discussed in Section 5.11.4a. The noise from construction activities would not result in substantial temporary or periodic increases at nearby noise-sensitive land uses. This would be a less than significant impact.

Operations and maintenance phase noise of the Adelanto Compressor Station is discussed in Section 5.11.4a. With implementation of **APM-NOI-1**, noise generated during operations and maintenance of the compressor station is not anticipated to result in substantial temporary or periodic noise increases in the Proposed Project vicinity. This would be a less than significant impact.

Natural Gas Pipeline

Potentially Significant Impact. Construction phase noise of the natural gas pipeline is discussed in Section 5.11.4a. With implementation of **APM-NOI-2a** and **APM-NOI-2b**, construction noise would be reduced; however, given the proximity of sensitive receptors to the pipeline construction activities along portions of the alignment, impacts would remain potentially significant.

Operations and maintenance phase noise of the natural gas pipeline is discussed in Section 5.11.4a. With implementation of **APM-NOI-3**, operational noise is not anticipated to result in substantial temporary or periodic noise increases in the Proposed Project vicinity. This would be a less than significant impact.

- e) ***Would the project be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?***

Less than Significant Impact. The proposed pipeline would be located within two miles of the San Bernardino International Airport and Banning Municipal Airport. However, construction activities would only occur for a short duration in the vicinity of each airport and no sensitive receptors are located in these areas. Therefore, the combination of construction-related noise with airport noise would be a less than significant impact.

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- f) **Would the project be within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?**

No Impact. The nearest private airstrip, the Adelanto Airport, is more than 0.5 miles west of the alignment between Mile Posts AM-1 and AM-2. Therefore there would be no noise impacts associated with pipeline construction in combination with airport noise.

5.11.5 Applicant Proposed Measures

- APM-NOI-1 Noise Mitigation and Monitoring Plan – Adelanto Compressor Station Operation.** The Applicant will address (through either major equipment specification, design of acoustically-rated enclosures or a combination of these) noise levels from operation and from maintenance of the Adelanto Compressor Station in order to comply with City of Adelanto requirements.
- APM-NOI-2a Construction Noise Mitigation Plan.** Noise impacts from construction will be mitigated in accordance with a Noise Mitigation Plan to minimize effects on sensitive receptors and species. During permitting, the Applicant will develop site-specific noise mitigation plans, including blasting plans, to comply with local regulations. Noise mitigation plans will be provided to the construction contractors for implementation. The Applicant will also operate construction equipment according to manufacturer specifications to minimize noise impacts. Haul trucks and other engine-powered equipment will be equipped with mufflers that meet all applicable regulations. Haul trucks will be operated in accordance with posted speed limits. The use of truck engine compression brakes will be limited to emergencies.
- APM-NOI-2b Notification Prior to Construction.** Construction activities would occur within 500 feet of residential and commercial areas along the Proposed Project alignment. The Applicant will give advance notice to occupants and landowners prior to construction. Site-specific Blasting Plans will include procedures for notification prior to blasting.
- APM-NOI-3 Noise Mitigation and Monitoring Plan – Pipeline Operation.** The Applicant will operate equipment such that applicable noise standards will not be exceeded. Sound attenuating measures may include major equipment specification, design of acoustically-rated enclosures or a combination of both.

5.11.6 References

U.S. Department of Transportation, Federal Transit Administration, Office of Planning and Environment. May, 2006. FTA-VA-90-1003-06. *Transit Noise and Vibration Impact Assessment*. (Prepared under contract by Harris, Miller, Miller and Hanson). Burlington, MA.

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5.12 Population and Housing

This section describes the impacts related to population and housing resulting from the Proposed Project.

5.12.1 Environmental Setting

The Proposed Project is located in portions of City of Adelanto, City of Victorville, Unincorporated San Bernardino County, City of San Bernardino, City of Colton, City of Loma Linda, City of Moreno Valley, Unincorporated Riverside County, City of Beaumont, and City of Banning. The historical and future population growth data for the above mentioned jurisdictions are presented in Table 5.12-1, and the historical and current housing data for the above mentioned jurisdictions are presented in Table 5.12-2.

5.12.2 Regulatory Setting

State

Housing Element Law (Government Code Section 65580 et seq.)

State law recognizes the vital role local governments play in the supply and affordability of housing. Each governing body (City Council or Board of Supervisors) of a local government in California is required to adopt a comprehensive, long-term general plan for the physical development of the city, city and county, or county. The housing element is one of the seven mandated elements of the local general plan. Housing element law, enacted in 1969, mandates that local governments adequately plan to meet the existing and projected housing needs of all economic segments of the community. The law acknowledges that, in order for the private market to adequately address housing needs and demand, local governments must adopt land use plans and regulatory systems which provide opportunities for, and do not unduly constrain, housing development. As a result, housing policy in the State rests largely upon the effective implementation of local general plans and, in particular, local housing elements. Housing element law also requires the Department of Housing and Community Development review local housing elements for compliance with State law and to report its written findings to the local government.

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**Table 5.12-1
Historical and Estimated Population Growth**

Year	City of Adelanto	City of Victorville	Unincorporated San Bernardino County	City of San Bernardino	City of Colton	City of Loma Linda	City of Moreno Valley	Unincorporated Riverside County	City of Beaumont	City of Banning	City of Palm Springs
2010 ^a	31,765	115,903	291,776	209,924	52,154	23,261	193,365	504,392	36,877	29,603	44,552
2011 ^a	31,615	116,857	293,242	210,110	52,319	23,239	194,451	451,722	38,034	29,723	44,829
2012 ^a	31,002	118,823	294,626	211,247	52,581	23,341	197,088	357,700	38,967	30,051	45,415
2013 ^a	31,172	119,937	295,447	211,866	52,758	23,390	198,183	358,924	39,787	30,177	45,724
2014 ^a	32,511	120,590	297,425	212,721	53,057	23,614	199,258	363,590	40,876	30,325	46,135
2020	46,100	145,300	301,600	231,200	60,700	26,700	213,700	471,500	56,500	42,200	48,900
2035 ^b	68,400	190,100	372,600	261,400	71,700	31,700	255,200	710,600	79,400	61,900	56,100

Source: ^a DOT 2014; ^bSCAG 2012.

**Table 5.12-2
Historical and Current Housing Data**

Year	City of Adelanto	City of Victorville	Unincorporated San Bernardino County	City of San Bernardino	City of Colton	City of Loma Linda	City of Moreno Valley	Unincorporated Riverside County	City of Beaumont	City of Banning	City of Palm Springs
2010	9,086	36,655	132,921	65,401	16,350	9,649	55,559	173,143	12,908	12,144	34,794
2011	9,134	36,901	133,002	65,403	16,358	9,649	55,635	159,658	13,262	12,144	34,864
2012	9,201	37,054	133,118	65,434	16,366	9,648	55,784	133,550	13,445	12,152	34,944
2013	9,235	37,427	133,212	65,451	16,383	9,648	55,835	133,395	13,668	12,149	35,022
2014	9,281	37,498	133,363	65,454	16,398	9,697	55,852	134,466	13,975	12,149	35,160

Source: DOT 2014.

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Regional Housing Needs Assessment (RHNA)

The Regional Housing Needs Assessment (RHNA) is mandated by State Housing Law as part of the periodic process of updating local housing elements of the general plan. The RHNA quantifies the need for housing within each jurisdiction during specified planning periods. The RHNA is completed periodically by the Southern California Association of Governments and its counterparts in other parts of the state, as mandated by State law. It consists of two measurements to meet the housing needs: existing need, and future need. The existing need assessment examines variables from the most recent Census to measure ways in which the housing market is not meeting the needs of current residents. The future need for housing is determined primarily by the forecasted growth in households in a community. The RHNA also considers how each jurisdiction might grow in ways that will decrease the concentration of low-income households in certain communities. The need for new housing is distributed among income groups so that each community moves closer to the regional average income distribution

Local

There are no local regulations applicable to the Proposed Project.

5.12.3 Significance Criteria

The significance criteria used to evaluate impacts involving population and housing are based on criteria listed in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.). A significant impact would occur if the project would:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

5.12.4 Impact Analysis

The boxes in the chart below have been checked accordingly to characterize the level of significance for each CEQA criterion. The rationale for the anticipated significance levels is provided below the chart in each of the corresponding sections.

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Would the project:	Potentially Significant Impact	Less Than Significant with APMs Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) *Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?***

No Impact. The Proposed Project will provide natural gas supplies needed to maintain reliability and balance available supplies with customer demand within the Applicant’s Southern System and therefore is not anticipated to directly or indirectly induce substantial population growth in the area. No new housing or new businesses are proposed under the Proposed Project. Approximately 40 people would be employed for construction of the Adelanto Compressor Station and approximately 90 people would be employed per construction spread for pipeline construction during the peak construction period. Construction activities would be short term and temporary, in which no permanent accommodations for construction workers would be needed. It is anticipated that local qualified workforce would be utilized based upon experience and availability (see Section 3.8 regarding anticipated workforce requirements to construct the Proposed Project). Any temporary accommodations (i.e., motels, hotels) that may be needed would be available in the vicinity of the Proposed Project area. Implementation of the Proposed Project would not result in changes that would require a substantial addition of workers/employees to maintain and operate the new pipeline and modified compressor station. Therefore, impacts would not occur.

- b) *Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?***

No Impact. The majority of the pipeline alignment would be located within existing SoCalGas right-of-way, along other existing utility corridors, and/or along existing paved roads along its 95-mile route. The Proposed Project construction would require temporary access roads, staging

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areas, and work areas that may extend beyond the existing right-of-way. Additionally, pipeline easements would be acquired from private landowners. The Proposed Project would mostly be underground, within existing right-of-ways, existing utility corridors, paved roads, and future easements and is not anticipated to displace existing residential structures as no residential structures are proposed to be demolished. There will be no need to construct replacement housing; therefore, no impacts would occur.

c) *Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

No Impact. The majority of the proposed pipeline alignment would be located within existing SoCalGas right-of-way, along other existing utility corridors, and/or along existing paved roads along its 95-mile route. The Proposed Project construction would require temporary access roads, staging areas, and work areas that may extend beyond the existing right-of-way. Additionally, pipeline easements would be acquired from private landowners. However, the pipeline location within existing right-of-ways, existing utility corridors, paved roads, and future easements would not displace people as no residential structures are proposed to be demolished, necessitating the construction of replacement housing elsewhere. Therefore, no impacts would occur.

5.12.5 Applicant Proposed Measures

No impacts to population and housing would occur; therefore, no APMs are proposed.

5.12.6 References

DOF (California Department of Finance). 2014. Population and Housing Estimates for Cities, Counties, and the State, January 1, 2011-2014, with 2010 Benchmark. Accessed May 21, 2014. <http://www.dof.ca.gov/research/demographic/reports/estimates/e-5/2011-20/view.php>.

SCAG (Southern California Association of Governments). 2012. Adopted 2012 RTP Growth Forecast. Accessed May 21, 2014. <http://gisdata.scag.ca.gov/Pages/SocioEconomicLibrary.aspx?keyword=Forecasting>.

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5.13 Public Services

This section describes public services in the Proposed Project vicinity, including fire protection, police protection, schools, and emergency services, and provides an analysis detailing the Proposed Project's potential to generate a need for new public services.

5.13.1 Environmental Setting

The Proposed Project traverses multiple jurisdictions, and public services located within the Project vicinity are therefore provided by numerous providers. Available public services include law enforcement, fire departments, emergency response services, hospitals, and schools. Table 5.13-1 shows the agencies that provide fire protection, police protection, and public school services in the jurisdictions throughout the proposed alignment.

**Table 5.13-1
Public Services**

Affected Jurisdiction	Length (mi.)	Project Component			Public Service		
		Adelanto Compressor Station	Adelanto to Moreno Pipeline	Moreno to Whitewater Pipeline	Fire	Police	School
City of Adelanto	2.2	X	X		San Bernardino County Fire Department	San Bernardino County Sheriff's Department	Adelanto Elementary School District
City of Victorville	1.4		X		San Bernardino County Fire Department, Victorville Division	San Bernardino County Sheriff's Department	Multiple, including Victor Valley Union High School District
U.S. Forest Service (USFS)	9.9		X		USFS in coordination with CAL Fire ^a and local departments	USFS	N/A
Unincorporated San Bernardino County	19.0		X		San Bernardino County Fire Department	San Bernardino County Sheriff's Department	multiple
City of San Bernardino	14.6		X		San Bernardino City Fire Department	San Bernardino Police Department	San Bernardino Unified School District
City of Colton	2.0		X		Colton Fire Department	Colton Police Department	Colton Joint Unified School District
City of Loma Linda	0.8		X		Loma Linda Fire Department	San Bernardino County Sheriff's Department	Redlands Unified School District
City of Moreno Valley	8.0		X	X	Riverside County Fire Department ^{b,c}	Moreno Valley Police	Moreno Valley Unified School

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**Table 5.13-1
Public Services**

Affected Jurisdiction	Length (mi.)	Project Component			Public Service		
		Adelanto Compressor Station	Adelanto to Moreno Pipeline	Moreno to Whitewater Pipeline	Fire	Police	School
						Department	District; Val Verde Unified School District
Unincorporated Riverside County	28.2			X	Riverside County Fire Department ^c	Riverside County Sheriff's Department	multiple
City of Beaumont	1.5			X	Riverside County Fire Department ^c	Beaumont Police Department	Beaumont Unified School District
City of Banning	6.4			X	Riverside County Fire Department ^c	Banning Police Department	Banning Unified School District
U.S. Bureau of Land Management	0.2			X	BLM resources in coordination with CAL FIRE	BLM Resources	n/a
City of Palm Springs	1.8			X	Palm Springs Fire Department	Palm Springs Police Department	Palm Springs Unified School District
Total	95						

Sources:

- | | |
|---|--|
| <ul style="list-style-type: none"> Adelanto Elementary School District Webpage Banning Unified School District Webpage Beaumont Unified School District City of Colton Fire Department Webpage City of Colton Joint Unified School District Webpage City of Colton Webpage City of Loma Linda Webpage City of Moreno Valley "Fire Department Strategic Plan" City of Palm Springs Webpage City of San Bernardino Webpage City of Victorville Webpage | <ul style="list-style-type: none"> Greatschools.org (Loma Linda School District) Webpage Moreno Valley Unified School District Webpage Palm Springs Unified School District Webpage Riverside County Fire Department Webpage Riverside County Office of Education Webpage Riverside County Sheriff's Department Webpage San Bernardino City Unified School District San Bernardino County Sheriff's Department Webpage San Bernardino County Fire Department Webpage San Bernardino County Superintendent of Schools Webpage |
|---|--|

- ^a California Department of Forestry and Fire Protection.
- ^b The Moreno Valley Fire Department contracts with the Riverside County Fire Department. As stated in the below note, Riverside County Fire Department contracts with CAL FIRE
- ^c The Riverside County Fire Department contracts with CAL FIRE

Fire and Police Protection

As shown above, fire protection along the proposed alignment is provided by a combination of State, county, and local departments, and police protection is provided by multiple county and local departments.

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Schools

The area of the Proposed Project overlaps multiple school districts, which are generally characterized in the above table. As described in Section 5.7, Hazards and Hazardous Materials, there are 15 schools within a quarter mile of the proposed alignment.

Parks

Parks and other recreational facilities in the vicinity of the Proposed Project are characterized in Section 5.14, Recreation.

Emergency Service

There are multiple hospitals and medical facilities within the communities through which the pipeline progresses. The following hospitals are located within 5 miles or less of the proposed alignment: Loma Linda University Medical Center (City of Loma Linda), Patton State Hospital (City of San Bernardino), Riverside County Regional Medical Center (City of Moreno Valley), and the San Geronio Memorial Hospital (City of Banning) (Google Earth 2013). Emergency services (i.e., paramedics and EMTs) are provided by the fire departments within each of the jurisdictions listed in Table 5.13-1.

5.13.2 Regulatory Setting

Local General Plans

California Government Code Section 65300 et seq. requires cities and counties to prepare and adopt a comprehensive, long-term general plan for the physical development of the county or the city. Section 65302 of this code requires cities and counties to include a variety of elements in their general plan, each of which must describe policies to guide development relative to the issue area characterized in the element. One of the required elements is the “safety element.” Section 65302 requires this element to provide for the “the protection of the community from any unreasonable risks” associated with natural and human-caused hazards such as earthquakes, dam failure, slope instability, flooding, and fires. The safety element is required to include mapping of known seismic and other geologic hazards and is also required to address evacuation routes, military installations, peak load water supply requirements, and minimum road widths and clearances around structures for protection from fire and geologic hazards (Government Code Section 65302(g)(1)). Thus, each jurisdiction within the Project area has an adopted general plan, and each general plan contains a safety element with goals, policies, and objectives pertaining to the required topics. For example, the County of San Bernardino General Plan includes a policy requiring the County to continue the Fire Department’s consolidation efforts in order to provide necessary service levels and to achieve deployment goals (County of San Bernardino 2007). Similarly, the County of Riverside General Plan requires the county to review fire response agreements

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to ensure that fire reporting and response times do not exceed those listed in the County’s Fire Protection Master Plan (County of Riverside 2014).

5.13.3 Significance Criteria

The significance criteria used to evaluate impacts to public services are based on criteria listed in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.). A significant impact would occur if the project would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: fire protection, police protection, schools, parks, or other public facilities.

5.13.4 Impact Analysis

The boxes in the chart below have been checked accordingly to characterize the level of significance for each CEQA criterion. The rationale for the anticipated significance levels is provided below the chart in each of the corresponding sections.

Would the project:	Potentially Significant Impact	Less Than Significant with APMs Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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- a) ***Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:***

Fire Protection?

Less than Significant Impact. Construction and operation of the Proposed Project would generally require fire services at levels comparable to existing service in the vicinity of the proposed alignment. The Proposed Project would result in construction and operation of a 95-mile subsurface natural gas pipeline and infrastructure modifications at several existing appurtenant aboveground facilities along the alignment. No housing would be developed and no increases in population would occur as a result of the Proposed Project.

As with any construction project, construction activities would have the potential to increase risk of fire along the proposed alignment due to unintended ignition from construction activities near dry brush. Portions of the proposed alignment are located with High and Very High fire hazard severity zones; thus, the potential for ignition would be elevated in these areas. However, this temporary increased risk would not be expected to result in the need for new or physically altered governmental facilities and would not be expected to affect service ratios, response times, or other performance objectives for fire protection. The existing fire stations that provide fire protection for the roadways and utility corridors near the proposed alignment would provide fire protection during both construction and operation of the Proposed Project.

The non-local workforce required during construction would be minor relative to the current population of surrounding communities and would therefore not generate a substantial increased need for fire or emergency services. As stated in Chapter 3, emergency response providers near the proposed route would be notified in advance of construction locations, road closure schedules (if required), and potential alternate routes that can be used in event of a road closure. Additionally, local and emergency access would be maintained throughout and all welding trucks used for construction would be equipped with a minimum of one 20-pound dry chemical unit fire extinguisher, as stated in Chapter 3. These precautions would minimize emergency calls to local fire departments and would decrease the potential for spread of construction-related fire.

Operational conditions of the Proposed Project would consist of subsurface natural gas transmission via the proposed pipeline, unstaffed operation of several aboveground appurtenant structures, and routine maintenance and repair activities. Operation would not be expected to result in an increased need for fire protection services or facilities. The proposed

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alignment generally parallels existing roadway and utility corridors and would not create new incompatible land uses that would create additional demands for public services. Therefore, the existing service level that is provided throughout the Proposed Project vicinity would be consistent with the operational needs of the Proposed Project. As stated in Chapter 3, the Applicant would conduct routine preventative maintenance and emergency response procedures to maintain continuity of access to the proposed transmission facilities. This would ensure that emergency responders would be able to access the alignment and facilities in the event of an emergency during operation of the Proposed Project.

Operation of the Proposed Project would not increase the number of individuals living and working within the vicinity of the alignment. As stated in Chapter 3, the proposed pipeline and appurtenant structures would not require staffing, aside from the personnel required for routine maintenance. Thus, operation of the Proposed Project would not generate increased numbers of residents and would therefore not require a substantial increase in fire protection or emergency service facilities. Additionally, the gas supplied by the pipeline fulfills a need for more reliable gas service to existing residential and commercial uses in the Applicant's Southern System service territory. Therefore, operation of the pipeline would not induce growth within the Southern System service territory that would increase the need for fire protection facilities or services.

Implementation of the Proposed Project would not generate a substantial change in the area's need for fire protection services and facilities and would not adversely affect service ratios, response times, or other performance objectives. Therefore, no new or altered fire protection facilities would be required, and impacts would be less than significant.

Police Protection?

Less than Significant Impact. Construction and operation of the Proposed Project would generally require police services at levels comparable to existing service in the vicinity of the proposed alignment. The Proposed Project would result in construction and operation of a 95-mile subsurface natural gas pipeline and infrastructure modifications at several existing appurtenant aboveground facilities along the alignment. No housing would be developed and no increases in population would occur as a result of the Proposed Project.

Construction of the Proposed Project would not result in a substantial need for additional police protection services within the vicinity of the Proposed Project. The non-local workforce required during construction would be minor relative to the current population of surrounding communities and would not result in substantially increased needs for police services. As stated in Chapter 3, emergency response providers near the proposed route would be notified in advance of construction locations, road closure schedules (if required), and potential alternate

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routes that can be used in event of a road closure. Local and emergency access would be maintained throughout construction, as stated in Chapter 3.

Operational conditions of the Proposed Project would consist of subsurface natural gas transmission via the proposed pipeline, unstaffed operation of several aboveground appurtenant structures, and routine maintenance and repair activities. Because the Proposed Project would not induce population growth in the Proposed Project vicinity and because operation would not require additional workforce aside from personnel required for routine maintenance procedures, population growth resulting in the need for additional police protection services or facilities would not result from Proposed Project operation.

Implementation of the Proposed Project would not generate a substantial change in the area's need for police protection services and facilities and would not adversely affect service ratios, response times, or other performance objectives. Therefore, no new or altered police protection facilities would be required, and impacts would be less than significant.

Schools?

No Impact. Construction and operation of the Proposed Project would not significantly affect school enrollment or impact the performance objectives of local schools. The Proposed Project would result in construction and operation of a 95-mile subsurface natural gas pipeline and infrastructure modifications at several existing appurtenant aboveground facilities along the alignment. No housing would be developed and no increases in population would occur as a result of the Proposed Project.

The non-local workforce required during construction would be minor; therefore, any additional increase in workforce within the Project vicinity during construction would be minimal and temporary and would not result in an increase in school enrollment. Thus, construction of the Proposed Project would not result in the need for new or physically altered school facilities. As discussed in Section 5.7, there are 15 schools located within ¼ mile of the proposed alignment. Any potential hazards or land use conflicts related to the proximity of these schools to the proposed alignment area discussed in Section 5.7, Hazards and Hazardous Materials.

Operational conditions of the Proposed Project would consist of subsurface natural gas transmission via the proposed pipeline, unstaffed operation of several aboveground appurtenant structures, and routine maintenance and repair activities. Because the Proposed Project would not induce population growth in the Proposed Project vicinity and because operation would not require additional workforce aside from personnel required for routine maintenance procedures, population growth resulting in the need for additional schools would not result from Proposed Project operation.

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Implementation of the Proposed Project would not generate a substantial change in the area's need for school services or school facilities and would not adversely affect performance objectives of local schools. Therefore, no new or altered school facilities would be required, and no impact would occur.

Parks?

Less than Significant Impact. The Proposed Project's potential to result in an impact to parks is discussed in Section 5.14, Recreation.

Other Public Facilities?

Less than Significant Impact. Implementation of the Proposed Project would generally require emergency services, library services, and other governmental services at levels comparable to existing service in the vicinity of the proposed alignment. The Proposed Project would result in construction and operation of a 95-mile subsurface natural gas pipeline and improvements or infrastructure modifications at several existing appurtenant aboveground facilities along the alignment. No housing would be developed and no increases in population would occur as a result of the Proposed Project.

Construction of the Proposed Project may result in the need for emergency medical services related to construction accidents. Numerous safety measures and precautions would be followed during construction. Specifically, as described in Chapter 3, any blasting activity would require a blast plan that would include safety and warning programs that would be in accordance with OSHA requirements. Additionally, as stated in Chapter 3, emergency response providers near the proposed route would be notified in advance of construction locations, road closure schedules (if required), and potential alternate routes that can be used in the event of a road closure. Local and emergency access would be maintained throughout construction, as stated in Chapter 3. These procedures would ensure that emergency service providers would have access to both the Project site and surrounding communities, were an accident to occur at the Project site or within the vicinity of the Proposed Project site.

Operational conditions of the Proposed Project would consist of subsurface natural gas transmission via the proposed pipeline, unstaffed operation of several aboveground appurtenant structures, and routine maintenance and repair activities. The need for new or physically altered governmental facilities is normally associated with population growth or significant changes in land use. As stated above, operation of the Proposed Project would not induce population growth or create new land uses that would create additional demands on public services. Therefore, operation of the Proposed Project would not be expected to result in the need for new or

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physically altered governmental facilities and would not have a substantial adverse effect on service ratios, response times, or other performance objectives for public services.

Implementation of the Proposed Project would not generate a substantial change in the area's need for emergency services, libraries, or other governmental facilities. Therefore, no new or altered facilities would be required, and impacts would be less than significant.

5.13.5 Applicant Proposed Measures

Impacts to public services would be less than significant; therefore no APMs are proposed.

5.13.6 References

AESD (Adelanto Elementary School District). 2014. AESD Webpage. Accessed May 19, 2014. <http://www.aesd.net/>

Beaumont Unified School District. 2014. "Schools." Beaumont Unified School District Webpage. Accessed May 19, 2014. http://www.beaumont-ca.schoolloop.com/cms/page_view?d=x&piid=&vpid=1251955385310.

BUSD (Banning Unified School District). 2014. BUSD Webpage. Accessed May 19, 2014. <http://www.banning.k12.ca.us/>.

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5.14 Recreation

This section describes the recreation facilities that may be affected by the Proposed Project, as well as the potential for the Proposed Project to generate a need for additional recreational facilities in the Proposed Project vicinity.

5.14.1 Environmental Setting

Segments 1 and 2 of the Proposed Project traverse the San Bernardino National Forest, and Segment 7 traverses a small area of land managed by the BLM. Additionally, the Proposed Project traverses multiple local jurisdictions, many of which contain recreational resources. The federal and local recreational resources within the vicinity of the Proposed Project are detailed below.

San Bernardino National Forest

The proposed alignment traverses the San Bernardino National Forest, which is within USFS jurisdiction. The Proposed Project would cross the San Bernardino National Forest through the Cajon Pass, which contains recreation areas administered by the USFS Front Country Ranger District. The USFS identifies the “Cajon Pass Place” as the “major transportation gateway and utility corridor into Southern California” (USFS 2005a). Throughout its transversal of the San Bernardino National Forest, the proposed alignment would follow the existing I-15 corridor and would be located within Federal Energy Corridor 368, an area designated for the development of utility alignments.

Within the San Bernardino National Forest, the I-15 corridor is designated on the USFS Recreation Opportunity Spectrum Map as “Roaded Natural” (USFS 2005b). Roaded Natural areas are typically full-access areas that are relatively undeveloped. Roaded Natural areas generally contain both motorized roadways and trails. Trails within this area are expected to have low to moderate use and motorized roadways are expected to have moderate to high use (USFS 1990). The recreation designation of “Roaded Natural” is consistent with the I-15 corridor, as the I-15 is a motorized roadway that traverses generally naturalized areas in the San Bernardino National Forest. Although the majority of the Proposed Project would be situated within the Roaded Natural Recreation Opportunity Spectrum, a small portion along I-15 is situated near an area designated as Semi-Primitive, Non-Motorized. Areas within this designation are generally located more than a half-hour walk from motorized travel and may contain trails and campsites. These areas are expected to have low levels of use (USFS 1990).

In addition to Recreation Opportunity Spectrum designations, the USFS also delineates Land Use Zones within the San Bernardino National Forest. The Proposed Project traverses lands designated as “Developed Area Interface,” which allows for the highest level of human use, and “Back County,” which allows for low to moderate human use (USFS 2005a).

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Within the Cajon Pass Place of the San Bernardino National Forest, the Proposed Project traverses the San Andreas Special Interest Area. The USFS designates Special Interest Areas to “protect and, where appropriate, foster public use and enjoyment of areas with scenic, historical, geological, botanical, zoological, paleontological, or other special characteristics.” USFS states that appropriate uses for Special Interest Areas consist of “uses that maintain the special characteristics for which the area was designated.” The USFS identifies the desired condition for the San Andreas Special Interest Area as one that maintains “the quality of the natural resources while continuing to provide use as a transportation and utility corridor” (USFS 2005a).

U.S. Bureau of Land Management

A small portion of Segment 7 of the proposed alignment would traverse less than two miles of an area within BLM jurisdiction. As stated in Section 5.14.2, BLM manages lands for multiple use and sustained yield. This section of the proposed alignment would be situated adjacent to an existing SoCalGas pipeline (Line 5000) and existing paved roadways.

Local Recreational Resources

There are a variety of county and city parks and other recreational amenities within the vicinity of the Proposed Project. Although the alignment runs near the boundaries of several of these recreational facilities, it does not traverse any of these local resources.

5.14.2 Regulatory Setting

Plans, regulations, and policies relevant to the Proposed Project at the federal, state, and local level are listed below. Each contains a brief overview of the standard for each plan, regulation, and policy that form the basis for impacts analysis.

Federal

Federal Land Policy and Management Act of 1976

The Proposed Project would traverse a relatively minor portion of BLM land; however, the pipeline traversal of this land would be consistent with BLM’s mandate to manage BLM land for multiple use. As provided in Federal Land Policy and Management Act Section 102, BLM’s legal mandate is to manage BLM lands in accordance with the principles of multiple use and sustained yield (43 United States Code 1701).

San Bernardino National Forest Land and Resource Management Plan

The San Bernardino National Forest Land and Resource Management Plan designates Land Use Zones within the San Bernardino National Forest to protect sensitive ecosystems and species while allowing public access to the land for recreational use. Land Use Zones crossed by the Proposed Project are

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identified in Section 5.14.1. The plan also outlines goals, regulations, and typical activities for the Land Use Zones and the Special Interest Areas (USFS 2005a).

San Bernardino National Forest Ecological Restoration Implementation Plan

In March 2011, the Pacific Southwest Region of the USFS released a statement of its Leadership Intent for Ecological Restoration, which laid out the Region's guiding vision and goals for its stewardship of wildland and forests for the next 15–20 years. The draft Implementation Plan reflects USFS's current thinking on how the Leadership Intent will be implemented. USFS plans to update the document annually to reflect the most recent community input and science advancements (USFS "Ecological Restoration Implementation Plan"). The current plan states that the USFS will concentrate San Bernardino National Forest restoration efforts in the Upper Santa Ana watershed. The plan identifies numerous restoration projects that the USFS plans to focus on during the next 2 to 4 years (USFS "San Bernardino Ecological Restoration Implementation Plan").

5.14.3 Significance Criteria

The significance criteria used to evaluate impacts to recreation are based on criteria listed in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.). A significant impact would occur if the project would:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated
- Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

5.14.4 Impact Analysis

The boxes in the chart below have been checked accordingly to characterize the level of significance for each CEQA criterion. The rationale for the anticipated significance levels is provided below the chart in each of the corresponding sections.

Would the project:	Potentially Significant Impact	Less Than Significant with APMs Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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- a) ***Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?***

Less than Significant Impact. Implementation of the Proposed Project would not increase the use of existing neighborhood and regional parks or other recreational facilities. Physical impacts to recreation facilities are usually associated with population growth. The Proposed Project would result in construction and operation of a 95-mile natural gas subsurface pipeline and infrastructure modifications at several existing appurtenant aboveground facilities along the alignment. No housing would be developed under the Proposed Project. Additionally, the natural gas supplied by the pipeline fulfills a need for improved natural gas service to existing residential and commercial uses in the applicant's Southern System service territory. Therefore, operation of the pipeline would not induce growth within the Southern System service territory. Implementation of the Proposed Project would not generate population growth that would increase the use of the recreational facilities characterized in Section 5.14.1. Therefore, implementation of the Project would not result increased use of the recreational facilities, and impacts would be less than significant.

Additionally, the Proposed Project would not have a substantial adverse impact on recreational activities within USFS or BLM lands. Within the San Bernardino National Forest, the Proposed Project would generally fall within the I-15 corridor and would also fall within Federal Energy Corridor 368, an area designated for utility alignments. The areas through which the Proposed Project would progress within USFS are predominantly existing developed, disturbed areas traversed by motorized roadways and multiple utility alignments. Although recreational uses may occur in the lands adjacent to the I-15 corridor, any interruption in recreational use of these lands would be temporary. The area through which the Moreno to Whitewater pipeline would cross within BLM lands is minor (approximately 0.2 mile) and use of this land for an underground pipeline would be consistent with the multiple use designation of BLM lands.

After the pipeline is installed, the construction area would be returned to its original condition to an extent that is reasonably possible. In non-paved areas, post-construction site rehabilitation would include returning the ground surface to the state of surrounding conditions. In paved areas, post-construction site rehabilitation would include repaving, consistent with local requirements. Long-term operation of the Proposed Project would therefore have a less than significant impact on recreational uses, as construction sites would retain their existing character and function after construction. Although construction of the Proposed Project has the potential to temporarily impose on recreational activities within minor portions of USFS and BLM lands, these impingements would generally occur in areas that are well-traveled by motorized uses and that have been federally designated for use as a utility corridor (USFS) or are

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intended for multiple uses (BLM). Impacts to recreational uses during construction would be adverse but less than significant.

b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?*

No Impact. The Proposed Project would result in construction and operation of a 95-mile natural gas subsurface pipeline and infrastructure modifications at several existing appurtenant aboveground facilities along the alignment. As discussed above, implementation of the Proposed Project would not generate population growth that would increase the use of recreational facilities requiring the construction or expansion of existing recreational facilities elsewhere. Because the Proposed Project would not include or require construction of recreational facilities, no impact would result.

5.14.5 Applicant Proposed Measures

Impacts to recreational facilities would be less than significant; therefore, no APMs are proposed.

5.14.6 References

43 U.S.C. 1701. Declaration of Policy for the Federal Land Policy and Management Act of 1976.

USFS (U.S. Forest Service).1990. Recreation Opportunity Spectrum Primer and Field Guide. R6-REC-021-90. April 1990. Accessed May 14, 2014. http://www.fs.fed.us/cdt/carrying_capacity/rosfieldguide/ros_primer_and_field_guide.htm.

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5.15 Transportation and Traffic

This section describes the impacts related to transportation and traffic resulting from the Proposed Project.

5.15.1 Environmental Setting

The Proposed Project traverses several federal highways, California state routes, and local streets. A description of the pipeline segments and the jurisdictions that apply to each is provided below:

- Segment 1 – Adelanto Compressor Station to the San Bernardino National Forest Boundary (City of Adelanto, City of Victorville)
- Segment 2 – San Bernardino National Forest (USFS)
- Segment 3 – Swarthout Canyon Road along U.S. Route 66 to Reche Canyon Road (Unincorporated San Bernardino County, City of San Bernardino, City of Highland, City of Colton, City of Loma Linda)
- Segment 4 – Reche Canyon Road to Moreno Pressure Limiting Station (City of Loma Linda, City of Moreno Valley, Unincorporated Riverside County)
- Segment 5 – Moreno Pressure Limiting Station to State Highway 79 (City of Moreno Valley, Unincorporated Riverside County)
- Segment 6 – State Highway 79 to Sunset Avenue (City of Beaumont, City of Banning)
- Segment 7 – Sunset Avenue to Whitewater Pressure Limiting Station (BLM, Morongo Reservation, City of Palm Springs).

Existing Roadway Network

Table 5.15-1 identifies the highways and the number of local roadways that would be crossed by the proposed alignment by jurisdiction.

**Table 5.15-1
Roadway Crossings**

Jurisdiction	Highway Crossings	Number Local Road Crossings
City of Adelanto	SR 18	6
City of Banning	SR 243	25
City of Beaumont	—	5
City of Colton	—	9
City of Loma Linda	I-10	4
City of Moreno Valley	SR 60	27
City of Palm Springs	—	1
County of Riverside	I-10, SR 79	30

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**Table 5.15-1
Roadway Crossings**

Jurisdiction	Highway Crossings	Number Local Road Crossings
City of San Bernardino	I-215, SR 30	87
County of San Bernardino	I-15, I-215	63
City of Victorville	—	3
U.S. Forest Service	I-15, SR 138	2 (+ various U.S. Forest Service roads)

5.15.2 Regulatory Setting

Federal

There are no applicable federal transportation policies or regulations related to the Proposed Project.

State

Caltrans

Caltrans is the public agency responsible for designing, building, operating, and maintaining California's state highway system, which consists of freeways, highways, expressways, toll roads, and the area between the roadways and property lines. Caltrans is also responsible for permitting and regulating the use of state roadways. Caltrans' construction practices require temporary traffic control planning during any activities that interfere with the normal function of a roadway.

Local

Congestion Management Plans

Since 1990, state statute requires that a congestion management program be developed, adopted and updated biennially for every county that includes an urbanized area and shall include every city and the county government within that county. Federal congestion management requirements were included in the Intermodal Surface Transportation Efficiency Act in 1991. The Congestion Management Plan (CMP) has several required elements, and looks at the links between land use, transportation and air quality. The CMP identifies the regional transportation system, which includes at a minimum all state highways and principal arterials, and sets level of service standards for these facilities.

The CMP is prepared by the county's congestion management agency. Within the Proposed Project area, those agencies are the Riverside County Transportation Commission and the San Bernardino Associated Governments. The Southern California Association of Governments is required under federal planning regulations to determine that CMPs within its region are consistent with the Regional Transportation Plan. Riverside's CMP was adopted in December 2011. The San Bernardino Associated

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Governments is in the process of a major CMP update. The current San Bernardino plan was developed in 2007 and amended in 2011.

General Plans

Cities and counties in California must prepare and periodically update a comprehensive, long term general plan to guide its future. The seven mandatory elements of the general plan includes a circulation element, which identifies existing and proposed thoroughfares, transportation routes, terminals, and other local public utilities and facilities – all correlated with the land use element. The affected jurisdictions and the date of the circulation element are identified in Table 5.15-2. The circulation elements of these jurisdictions include policies regarding the safe and efficient movement of people and goods. The elements do not specifically address the effects of short-term construction.

**Table 5.15-2
Local Circulation Elements**

Jurisdiction	Circulation Element Adoption
City of Adelanto	1994
City of Banning	2006
City of Beaumont	2007
City of Colton	2013
City of Loma Linda	2009
City of Moreno Valley	2006
City of Palm Springs	2007
County of Riverside	2008
City of San Bernardino	2005
County of San Bernardino	2007
City of Victorville	2008

5.15.3 Significance Criteria

The significance criteria used to evaluate impacts to transportation and traffic are based on criteria listed in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.). A significant impact would occur if the project would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit

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- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)
- Result in inadequate emergency access
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

5.15.4 Impact Analysis

The boxes in the chart below have been checked accordingly to characterize the level of significance for each CEQA criterion. The rationale for the anticipated significance levels is provided below the chart in each of the corresponding sections.

Would the project:	Potentially Significant Impact	Less Than Significant with APMs Incorporated	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Would the project:	Potentially Significant Impact	Less Than Significant with APMs Incorporated	Less Than Significant Impact	No Impact
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a) ***Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?***

Less than Significant Impact with APMs Incorporated. The Proposed Project would affect the transportation system in two ways: (1) generation of additional short term traffic related to construction activities; and (2) temporary disruption of existing traffic patterns due to pipe installation within roadways.

Construction activity for a large pipeline project typically is broken into manageable lengths called "spreads" (see Section 3.8.5). Each spread may be up to 15 miles in length in open lands. In urban areas, each spread may be up to 2 miles in length. Various specialized crews operate in sequence within each spread. As discussed in Section 3.8, up to 90 construction workers may work in a spread over a period of several days, with up to 40 trucks used (including pick-up trucks, flatbeds for equipment and material hauling, water trucks, dump trucks, and fuel trucks). Equipment would be stored at designated staging areas, described in Section 3.8.

The trips generated by construction workers would be short-term, and relatively small. Movement of equipment would generally be limited, both in the number of trips and the hours affected (these trips would typically occur before and after peak AM and PM traffic hours). Movement of equipment to and from staging areas and at roadway crossings would be addressed in the traffic control plan, per **APM-TRF-1**.

When the pipeline alignment must cross a freeways or major roadway (including highways and principal arterial streets), the crossing will be constructed using either boring (either a "cased" bore or a "slick" bore technique) or directional drilling. This will minimize the effect of construction on existing traffic. Where trenching is required for pipeline construction across a roadway, either partial or full road closures would be required. If pipeline construction adjacent

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to a roadway required the closure of the road shoulder or a travel lane, traffic flow could be impaired. This impact would be potentially significant without further action.

Therefore, for construction within a roadway, the contractor shall prepare and implement a traffic control plan, described in **APM-TRF-1**. The plan, which shall be reviewed by affected jurisdictions (city, county, Caltrans, USFS), shall identify required notification and signage, hours of construction, alternate routes if necessary, and coordination with transit agencies and emergency response providers. Implementation of the traffic control plans would reduce the short-term construction impacts on transportation to less than significant levels.

- b) *Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?***

Less than Significant Impact with APMs Incorporated. CMP facilities (designated roads or highways) occur within the Proposed Project area. However, impacts to these facilities would be short-term and would not affect the long-term implementation of a CMP. As CMP facilities are typically highways or principal arterial roadways, these facilities would most likely be crossed using boring or directional drilling techniques. Where open trenching must be used, implementation of **APM-TRF-1** would minimize traffic impacts.

- c) *Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?***

No Impact. The Proposed Project would not affect the demand for air transportation or affect air traffic patterns.

- d) *Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?***

No Impact. The Proposed Project would not result in the permanent alteration of a transportation facility. Certain major facilities would be crossed using boring or directional drilling. Other facilities would be crossed using trenching, and would be returned to its original grade, alignment, and roadway surface condition.

- e) *Would the project result in inadequate emergency access?***

Less than Significant Impact with APMs Incorporated. The Proposed Project would not result in permanent alteration of transportation facilities or existing roadway access. Construction activity could affect emergency access. This potential impact would be reduced to less than significant with the implementation of **APM-TRF-1**.

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- f) *Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?*

Less than Significant Impact with APMs Incorporated. The Proposed Project would not result in permanent changes that could affect policies, plans, or programs for alternative transportation. Transit, bicycle, and pedestrian circulation could be temporarily impacted by construction at roadway crossings. **APM-TRF-1** will include provisions for temporary pedestrian, bicycle, and transit access. With implementation of **APM-TRF-1**, short-term impacts would be less than significant.

5.15.5 Applicant Proposed Measures

APM-TRF-1 Construction Traffic Control Plan. Prior to construction within the right-of-way of a roadway, the contractor shall prepare and implement a construction traffic control plan. The plan shall be submitted to the agency of jurisdiction (city, county, Caltrans, and/or USFS). The plan shall contain the following elements:

- Anticipated days and time of construction.
- Signage and traffic control plan.
- Prior notification of property owners/residents whose access will be affected.
- Detour routes, if necessary.
- Alternate pedestrian/bicycle access, if necessary.
- Coordination with local transit agencies.
- Coordination with local emergency response providers (local police, fire, and medical dispatch).
- Provisions for night work, if necessary.

5.15.6 References

Adelanto. 1994. General Plan. Adopted 1994.

Banning. 2006. General Plan Community Development Element. Adopted 2006.

Beaumont. 2007. General Plan. Adopted 2007.

Colton. 2013. General Plan Mobility Element. Adopted 2013.

Loma Linda. 2009. General Plan. Adopted 2009.

Moreno Valley. 2006. General Plan. Adopted 2006.

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Palm Springs. 2007. General Plan Circulation Element. Adopted 2007.

RCTC (Riverside County Transportation Commission). 2011. Riverside County Transportation Commission Congestion Management Plan. Adopted 2011.

Riverside County. 2008. General Plan Circulation Element. Adopted 2008.

San Bernardino. 2005. General Plan. Adopted 2005.

San Bernardino County. 2007. General Plan. Adopted 2007.

SANBAG (San Bernardino Associated Governments). 2007. San Bernardino Associated Governments Congestion Management Plan. Adopted 2007; updated 2011.

Victorville. 2008. General Plan. Adopted 2008.

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5.16 Utilities and Services Systems

This section describes the utilities and service systems that may be affected by the Proposed Project, as well as the potential for the Proposed Project to generate a need for additional utilities and service systems in the Proposed Project vicinity.

5.16.1 Environmental Setting

The Proposed Project traverses multiple jurisdictions; therefore utilities and services within the Proposed Project area are provided by numerous agencies and organizations. Available utilities and service systems include potable water, wastewater conveyance and treatment, stormwater drainages, and landfills. The providers of each of these services are characterized below.

Potable Water

The regional water providers that supply water to local districts within the Proposed Project area are the Mojave Water Agency, the San Bernardino Valley Municipal Water Authority (Valley District), San Geronio Pass Water, and the Desert Water Agency (Mojave Water Agency 2014, Valley District 2007a, State Water Contractors 2014). These agencies supply water to numerous local water districts that serve the jurisdictions throughout the proposed alignment, such as the Adelanto Water Department and the City of San Bernardino Municipal Water Department in the City of San Bernardino (City of Adelanto 2014; City of San Bernardino Municipal Water Department 2014). Some local water suppliers, such as the City of Banning’s municipal water service, source their water from city-owned wells (City of Banning 2014).

Landfills

Active landfills that accept construction waste within the vicinity of the Proposed Project are characterized in Table 5.16-1.

**Table 5.16-1
Landfills**

Landfill	Address	Permitted Capacity (cubic yards)	Remaining Capacity (cubic yards)	Landfill Class 1	Waste Type
Victorville Sanitary Landfill	18600 Stoddard Wells Road Victorville, CA 92307 (San Bernardino County)	83,200,000	81,510,000	III	construction/demolition
Colton Sanitary Landfill	850 Tropica Rancho Road Colton, CA 92324 (San Bernardino County)	15,497,000	2,700,000	III	agricultural, construction/demolition, industrial, mixed municipal, other designated, tires, wood waste
California Street Landfill	2151 Nevada Street Redlands, CA 92373 (San Bernardino County)	10,000,000	6,800,000	III	construction/demolition, mixed municipal, other designated, sludge (bio solids)

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**Table 5.16-1
Landfills**

Landfill	Address	Permitted Capacity (cubic yards)	Remaining Capacity (cubic yards)	Landfill Class 1	Waste Type
Badlands Sanitary Landfill	31125 Ironwood Avenue Moreno Valley, CA 92555 (Riverside County)	33,560,993	14,730,025	III	agricultural, ash, construction/demolition, dead animals, green materials, industrial, inert, metals, mixed municipal, tires, wood waste
Lamb Canyon Sanitary Landfill	16411 State Hwy 79 Beaumont, CA 92223 (Riverside County)	34,292,000	18,955,000	III	agricultural, construction/demolition, dead animals, green materials, industrial, inert, metals, mixed municipal, tires

- ¹ Class I Landfills: Hazardous and nonhazardous waste
 Class II Landfills: Designated and nonhazardous waste
 Class III Landfills: Nonhazardous waste

Source: CalRecycle 2014a.

In addition to the Class III landfills listed above, a Class I landfill operated by Clean Harbors LLC is located in Kern County within community of Buttonwillow. As reported by CalRecycle in the facility's 2014 facility permit, the site has a capacity of 13,250,000 cubic yards and an annual loading of 500,000 tons per year. This facility accepts contaminated soil, industrial waste, other designated waste, and other hazardous waste (CalRecycle 2014b).

Wastewater Conveyance

Wastewater conveyance in the jurisdictions throughout the proposed alignment is generally provided by public agencies and local municipal water districts, as well as regional water districts, such as the Valley District (Valley District 2007b).

Stormwater

Stormwater flows in the Proposed Project area are generally conveyed by facilities developed and maintained by the Riverside County Flood Control and Water Conservation District and the San Bernardino County Flood Control District (County of San Bernardino Webpage; Riverside Flood Control and Water Conservation District Webpage). These agencies manage stormwater infrastructure in their respective jurisdictions within the Proposed Project area. It is noted that the Riverside County Flood Control District's jurisdiction only encompasses the western 40% of Riverside County. Thus, the eastern tip of the proposed alignment nears the terminus of the Riverside Flood Control District. However, the Riverside County Flood Control District still provides certain non-tax supported functions (such as floodplain management, development review, and NPDES compliance) to the entirety of the County (Riverside Flood Control and Water Conservation District 2014).

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5.16.2 Regulatory Setting

Federal

National Pollution Discharge Elimination System Permits

The NPDES permit system was established as part of the CWA to regulate both point source discharges (a municipal or industrial discharge at a specific location or pipe) and nonpoint source discharges (diffuse runoff of water from adjacent land uses) to surface waters of the United States. For point source discharges, such as sewer outfalls, each NPDES permit contains limits on allowable concentrations and emissions of pollutants contained in the discharge.

Resource Conservation and Recovery Act

CFR Volume 40, Part 258 (Resource Conservation and Recovery Act [RCRA] Subtitle D), contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs that include federal landfill criteria. The federal regulations address the location, operation, design, and closure of landfills, as well as groundwater monitoring requirements.

State

Regional Water Quality Control Board National Pollution Discharge Elimination System

The Proposed Project is located within the jurisdictions of the three RWQCBs: Lahontan, Santa Ana, and Colorado River Basin (SWRCB “California Water Boards”). These agencies are responsible for implementing the federally mandated NPDES program within their respective jurisdiction. They also are responsible for developing and enforcing water quality objectives and implementation plans.

Urban Water Management Planning Act (1983)

The Urban Water Management Planning Act (California Water Code, Division 6, Part 2.6, Section 10610 et seq.) was enacted in 1983 and has been amended multiple times. The act applies to urban water suppliers that provide water for municipal purposes to over 3,000 customers or suppliers that provide more than 3,000 acre-feet of water annually. The act requires these specified water suppliers to prepare and adopt an urban water management plan (UWMP) and to update this plan at least once every 5 years. The UWMP must identify short-term and long-term water demand management measures to meet growing water demands during normal, dry, and multiple-dry years.

Senate Bill 610 and Senate Bill 221

SB 610 and SB 221 became effective January 1, 2002 and amended Sections 10910–10915 of the California Water Code. These bills require counties and cities to consider the availability of adequate water supplies for certain proposed development projects. The statutes require cities and counties to

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obtain written verification that the local water supplier has sufficient supply to proposed projects that fall subject to the SB 610 or to SB 221.

Projects that fall subject to SB 610 include residential, commercial, and industrial projects of certain sizes, as well as any that would demand water equal to or greater than a 500-dwelling-unit project. Projects that fall subject to SB 221 are residential subdivisions of more than 500 dwelling units. Additionally, under SB 221, a proposed project that would increase the number of existing connections by 10% or more for a public water system with fewer than 5,000 existing connections also requires a water supply assessment.

The UWMPs required by Water Code Section 10610 et seq. are the foundational documents for compliance with both SB 610 and SB 221, as UWMPs can be used to meet the standards of both statutes (DWR 2003).

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989, also known as AB 939, requires that each city or county prepare a new integrated waste management plan. The act further required each city to prepare a Source Reduction and Recycling Element by July 1, 1991. Each Source Reduction and Recycling Element includes a plan for achieving a solid waste goal of 25% by January 1, 1995, and 50% by January 1, 2000. A number of changes to the municipal solid waste diversion requirements under the Integrated Waste Management Act were adopted, including a revision to the statutory requirement for 50% diversion of solid waste. In 2011, AB 341 was passed, requiring the California Department of Resources Recycling and Recovery (CalRecycle) to require local agencies to include strategies to enable the diversion of 75% of all solid waste by 2020.

California Code of Regulations, Titles 14 and 27

Title 14 (Natural Resources, Division 7) and Title 27 (Environmental Protection, Division 2 [Solid Waste]) govern the handling and disposal of solid waste and operation of landfills, transfer stations, and recycling facilities.

Senate Bill 63

On July 28, 2009, SB 63 was approved and filed, allowing the abolishment of the California Integrated Waste Management Board (CIWMB) and the transfer of its duties and responsibilities to a new department called the California Department of Resources Recycling and Recovery, or CalRecycle. This legislation was passed in order to combine the state's solid waste and recycling programs. The combination of the Waste Management Division and the Division of Recycling to form CalRecycle went into effect on January 1, 2010. At the state level, the management of solid waste is now governed by regulations established by CalRecycle, which delegates local permitting, enforcement, and inspection responsibilities to local enforcement agencies.

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Local

Local UWMPs

Pursuant to the Urban Water Management Planning Act described above, the urban water suppliers throughout the alignment have prepared UWMPs. In accordance with the act, these UWMPs identify measures to manage water demand in a variety of drought conditions.

San Bernardino County CIWMP

San Bernardino County has prepared a CIWMP Pursuant to AB 939. The County's CIWMP was prepared in November 1997 and revised as part of a Five-Year Review Report in November 2012. The review concluded that the County's CIWMP continues to serve as an appropriate reference tool for implementing and monitoring compliance with AB 939. The review also ensured that the County has demonstrated at least 15 years of regional disposal capacity to serve local community needs.

Riverside County CIWMP

Riverside County has prepared a CIWMP Pursuant to AB 939. The CIWMP underwent a Five-Year Review in 2013 to ensure that the existing CIWMP can continue to serve as an appropriate reference tool for implementing and monitoring compliance with AB 939. The review also ensured that the County has demonstrated at least 15 years of regional disposal capacity to serve local community needs.

5.16.3 Significance Criteria

The significance criteria used to evaluate impacts to utilities and service systems are based on criteria listed in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.). A significant impact would occur if the project would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed
- Result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments

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- Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs
- Comply with federal, state, and local statutes and regulations related to solid waste.

5.16.4 Impact Analysis

The boxes in the chart below have been checked accordingly to characterize the level of significance for each CEQA criterion. The rationale for the anticipated significance levels is provided below the chart in each of the corresponding sections.

Would the project:	Potentially Significant Impact	Less Than Significant with APMs Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) *Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

Less than Significant Impact. The Proposed Project would result in construction and operation of a 95-mile natural gas subsurface pipeline and infrastructure modifications at several existing appurtenant aboveground facilities along the alignment. Implementation of the Proposed

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Project would not discharge concentrated wastewater or large volumes of wastewater to a wastewater treatment facility that would exceed treatment requirements of the Lahontan, Santa Ana, or the Colorado River Basin RWQCBs.

Construction activities would involve four primary water uses during Proposed Project construction, as characterized in Table 5.16-2. As shown in the table below, a maximum of 15.6 million gallons of water would be used for hydrostatic testing over the course of construction activities. This total represents a maximum water volume for hydrostatic testing water usage, as it assumes that none of the test water would be reused. All used hydrostatic test water would be treated and discharged under an NPDES permit, which is addressed in Section 5.8, Hydrology and Water Quality.

**Table 5.16-2
Construction Water Use**

Water Use	Total Maximum Amount Required for Construction (millions of gallons)	Disposal Method
Dust control along unpaved access roads, right-of-way grading operations, and trench compaction	89.1 ^a (270,000 gallons per construction day)	Absorbed in place by soil
Equipment and roadway wash down	66 ^b (up to 20,000 gallons per construction day)	Discharged into existing storm drainage system in accordance with an NPDES permit
Dust control and equipment / roadway wash down for construction activities at the Adelanto Compressor Station	1.3 ^c	Absorbed in place by soil and/or discharged into existing storm drainage system in accordance with an NPDES permit
Hydrostatic testing along the Adelanto to Moreno pipeline	7 to 10.5 ^d	Once the test has been completed on the initial segment, water would be transferred to the next section of pipe and reused for testing purposes wherever possible (see APM-HYDRO-5). Once testing is complete, used hydrostatic test water would be treated as required by the applicable RWQCB and discharged under an NPDES permit to be obtained by the Applicant (see Section 5.8, Hydrology and Water Quality).
Hydrostatic testing along the Moreno to Whitewater pipeline	3.5 to 5 ^d (up to 5,000 gallons per day)	Same as above.
Hydrostatic testing for the Adelanto Compressor Station	0.05 (50,000 gallons total)	
Portable restroom facilities	Negligible	Portable restrooms would be serviced as needed by the provider and would consume negligible quantities of potable water.

^a Assumes up to 270,000 gallons of water per day over the course of the 15-month period requiring dust suppression, given 22 workdays per month. This is considered a worst-case scenario number, as there may be some construction days that would not require water use for dust control.

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- b Assumes up to 20,000 gallons of water per day over the course of the 15-month period requiring dust suppression, given 22 workdays per month. This is considered a worst-case scenario number, as there may be some construction days that would not require equipment and roadway wash down.
- c Assumes up to 5,000 gallons of water per day over the course of the 12-month period requiring dust suppression and equipment / roadway wash down, given 22 workdays per month. This is considered a worst-case scenario number, as there may be some construction days that would not require equipment and roadway wash down.
- d Quantity of water to be refined after detailed engineering drawings are completed. These numbers represent the maximum worst-case scenario for hydrostatic testing water usage, as these numbers do not assume that any reuse would occur. However, reuse of hydrostatic testing water would occur wherever practicable, as discussed in **APM-HYDRO-5**.

Operational conditions of the Proposed Project would consist of subsurface natural gas transmission via the proposed pipeline, unstaffed operation of several aboveground appurtenant structures, and routine maintenance and repair activities. The installation of new natural gas turbines at the Adelanto Compressor Station would not create a new source of wastewater, as natural gas turbines do not require significant amounts of cooling water. As such, operation, including maintenance and repair, would not include any facilities or uses associated with the generation of wastewater.

Implementation of the Proposed Project would therefore not exceed wastewater treatment requirements of the Lahontan, the Santa Ana, or the Colorado River Basin RWQCBs. Any wastewater produced during construction would be disposed of and treated in accordance with the NPDES permit to be obtained by the Applicant. Impacts would thus be less than significant.

b) *Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

No Impact. The Proposed Project would result in construction and operation of a 95-mile natural gas subsurface pipeline and infrastructure modifications at several existing appurtenant aboveground facilities along the alignment. Implementation of the Proposed Project would not require or result in the construction of new water or wastewater treatment facilities or the expansion of existing facilities.

As shown in Table 5.16-2, wastewater generated during construction would relate to water used for hydrostatic testing. This water would be treated and disposed in accordance with an NPDES permit, which is further addressed in Section 5.8, Hydrology and Water Quality. Although some of this water may be directed to a wastewater treatment facility, a maximum of 15.6 million gallons directed to multiple treatment facilities over the course of pipeline construction period would not generate the need for a new or expanded wastewater treatment facility. The water needs during construction would be supplied by existing hydrants, aqueducts, and other available water sources, as stated in Chapter 3, Project Description. Thus, construction water

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needs would be served by existing water infrastructure and would not require new or expanded water facilities.

Operational conditions of the Proposed Project would consist of subsurface natural gas transmission via the proposed pipeline, unstaffed operation of several aboveground appurtenant structures, and routine maintenance and repair activities. Operation, including maintenance and repair, would not be expected to include any uses associated with the use of water or the generation of wastewater. Any water uses or wastewater sources would be minimal and would not generate the need for additional or expanded water or wastewater facilities.

Therefore, implementation of the Proposed Project would not require water or generate wastewater to the extent that new or additional water or wastewater facilities would be required, and no impacts would occur.

c) *Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

No Impact. The Proposed Project would result in construction and operation of a 95-mile natural gas subsurface pipeline and infrastructure modifications at several existing appurtenant aboveground facilities along the alignment. Implementation of the Proposed Project would not require or result in the construction of new stormwater drainage facilities or the expansion of existing facilities.

As shown in Table 5.16-2, up to 20,000 gallons of water per day, or a worst-case scenario of about 66 million gallons over the course of the construction of the Proposed Project, would be used for construction activities. Section 5.8, Hydrology and Water Quality, addresses the use of this water and associated stormwater and water quality impacts. The use of a maximum aggregate of 66 million gallons of water would be spread over the course of the 95-mile proposed alignment and would feed into the stormwater drainage systems of approximately 14 different jurisdictions. Therefore, temporary use of each jurisdiction's stormwater drainage system would be minor and would not overwhelm any one system to the extent that new or expanded facilities would be required.

Operational conditions of the Proposed Project would consist of subsurface natural gas transmission via the proposed pipeline, unstaffed operation of several aboveground appurtenant structures, and routine maintenance and repair activities. The Proposed Project would involve installation of new equipment at existing compressor stations and pressure limiting stations. These Proposed Project components have the potential to result in minor increases of impervious surfaces at each location. However, each addition would occur as a

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minor addendum to the existing impervious utilities area. Thus, any minor increases in runoff due to the proposed additions to the compressor station and pressure limiting station sites would not result in the need for new or expanded stormwater drainage systems.

Therefore, implementation of the Proposed Project would not increase stormwater runoff to the extent that new or expanded stormwater drainage systems would be required, and no impacts would occur.

d) *Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

Less than Significant Impact. The Proposed Project would result in construction and operation of a 95-mile natural gas subsurface pipeline and infrastructure modifications at several existing appurtenant aboveground facilities along the alignment. Implementation of the Proposed Project would not require or result in the need for new or expanded entitlements for water supplies.

As shown in Table 5.16-2, construction of the Proposed Project would require the use of roughly 172 million gallons of water in total. This represents the worst-case scenario of water usage for the construction of the Proposed Project. The assumption of 172 million gallons of water usage assumes that the maximum projected amount of water for dust control and for roadway and equipment washing would be used each day of construction. It also assumes that none of the hydrostatic testing water would be reused for subsequent tests. These worst-case scenario conditions are unlikely to occur, as each construction day would not likely require the maximum amount of dust control and roadway/equipment wash water. **APM-HYDRO-5** is provided to ensure that hydrostatic test water would be reused wherever possible.

Construction water usage would occur over the course of the 19-month pipeline construction period and over the course of the 95-mile alignment. Within urbanized areas, the water is anticipated to be sourced from local hydrants, canals, aqueducts or water wells available along the construction route, as stated in Chapter 3, Project Description. Water in the jurisdictions situated throughout the alignment is provided by three different regional water providers, in addition to wells owned by local water suppliers. Sourcing a maximum total of 172 million gallons of water over the course of Proposed Project from multiple jurisdictions and providers would not be anticipated to exceed the supply of any one provider or source. Additionally, the Applicant would coordinate with each anticipated supplier to ensure that construction water needs would be accommodated by existing supplies.

Operational conditions of the Proposed Project would consist of subsurface natural gas transmission via the proposed pipeline, unstaffed operation of several aboveground

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appurtenant structures, and routine maintenance and repair activities. Water required for these operational activities would be minimal and would not overwhelm local supplies.

Therefore, implementation of the Proposed Project would not increase water use in the Project area to the extent that new or expanded entitlements would be required, and impacts to local water supplies would thus be less than significant.

- e) ***Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?***

Less than Significant Impact. As discussed in part (b) above, neither construction nor operation of the Proposed Project would result in the discharge of large volumes of wastewater to a facility that would exceed its wastewater treatment capacity. Therefore, implementation of the Proposed Project would not substantially change the amount of wastewater effluent that is directed to treatment facilities in the Project area. Impacts to wastewater treatment facilities would therefore be less than significant.

- f) ***Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?***

Less than Significant Impact. The Proposed Project would result in construction and operation of a 95-mile natural gas subsurface pipeline and infrastructure modifications at several existing appurtenant aboveground facilities along the alignment.

Construction of the Proposed Project would produce minor amounts of construction waste. As stated in Chapter 3, Project Description, waste generation from construction would generally consist of excavated materials, short sections of pipe and wastes from welding and coating, boxes and crates used for shipping materials, and nominal amounts of oils and solvents. Excavated materials would consist of soil and concrete/asphalt rubble and would also have the potential to include contaminated soils. The total amount of excavated material that would need to be disposed of would be approximately 143,092 cubic yards of material. As stated in Chapter 3, it is anticipated that local construction recycling operations would be contacted to recycle portions of the excavated soil. Nonhazardous wastes would be deposited at appropriate local landfills and recycling centers in the jurisdictions throughout the proposed alignment. Contaminated soil would be sent to a permitted Class I hazardous waste landfill, as stated in Chapter 3. A Class I landfill located in Kern would be expected to have sufficient permitted capacity to handle the limited amounts of hazardous waste anticipated to be generated by the Proposed Project. As shown in Table 5.16-1, the landfills within the vicinity of the Project area

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would have adequate permitted capacity to accommodate the temporary construction-related solid waste that would be generated by the Proposed Project.

Operational conditions of the Proposed Project would consist of subsurface natural gas transmission via the proposed pipeline, unstaffed operation of several aboveground appurtenant structures, and routine maintenance and repair activities. Operation activities, such as maintenance and repair, would not generate solid waste in an amount that would affect the permitted capacity of the landfills in Riverside or San Bernardino Counties. Therefore, implementation of the Proposed Project would not generate solid waste to the extent that permitted capacities of nearby landfills would be exceeded.

g) *Would the project comply with federal, state, and local statutes and regulations related to solid waste?*

Less than Significant Impact. Construction and operation of the Proposed Project would comply with federal, state, and local statutes related to solid waste. Construction may involve removal and disposal of contaminated soils. Contaminated soils would be disposed of in a Class I hazardous waste landfill. As a result, construction of the Proposed Project would comply with all applicable statutes and regulations related to solid waste.

Operational conditions of the Proposed Project would consist of subsurface natural gas transmission via the proposed pipeline, unstaffed operation of several aboveground appurtenant structures, and routine maintenance and repair activities. These activities are not expected to generate solid waste subject to federal, state, or local statutes and regulations. Therefore, implementation of the Proposed Project would comply with solid waste statutes and regulations, and impacts would be less than significant.

5.16.5 Applicant Proposed Measures

No APMs would be required as impacts to utilities and service systems would be less than significant; however, **APM-HYDRO-5**, Water Reuse Plan, would be incorporated to minimize water use during construction.

5.16.6 References

California Water Code, Section 10610 et seq. Division 6, Conservation, Development, and Utilization of State Water Resources. Part 2.6, Urban Water Management Planning. Chapter 3, Urban Water Management Plans.

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Valley District. 2007b. "What We Do." San Bernardino Valley Municipal Water District Webpage. Accessed May 20, 2014. http://www.sbvmd.com/what_we_do/.

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5.17 Cumulative Analysis

Cumulative impacts are defined in CEQA Guidelines Section 15355 as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” A cumulative impact occurs from “the change in the environment, which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor, but collectively significant, projects taking place over a period of time” (14 CCR 15355(b)).

5.17.1 Impact Summary

The potential impacts of the Proposed Project are primarily temporary effects related to construction. Construction of the Adelanto Compressor Station is expected to last for 18 months and pipeline construction and installation would take approximately 19 months. The construction of other projects during that time frame, including utilities, residential, commercial, industrial, and roadway construction and maintenance projects, could overlap with the Proposed Project and compound or increase the impacts identified in this document. It is anticipated that other projects would voluntarily or be conditioned to include mitigation measures for potentially significant construction effects that would reduce these short-term effects.

Jurisdictions affected by the proposed alignment would be contacted for a list of pending and approved projects that would begin construction in, or prior to, 2019. These projects will be reviewed for potentially significant impacts similar to the impacts described in this document. These jurisdictions are listed in Table 5.17-1.

**Table 5.17-1
Location of Potential Cumulative Impacts by Jurisdiction**

Affected Jurisdiction	Length (mi.)	Project Component		
		Adelanto Compressor Station	Adelanto to Moreno Pipeline	Moreno to Whitewater Pipeline
City of Adelanto	2.2	X	X	
City of Victorville	1.4		X	
U.S. Forest Service	9.9		X	
Unincorporated San Bernardino County	19.0		X	
City of San Bernardino	14.6		X	
City of Colton	2.0		X	
City of Loma Linda	0.8		X	
City of Moreno Valley	8.0		X	X
Unincorporated Riverside County	28.2		X	X

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**Table 5.17-1
Location of Potential Cumulative Impacts by Jurisdiction**

Affected Jurisdiction	Length (mi.)	Project Component		
		<i>Adelanto Compressor Station</i>	<i>Adelanto to Moreno Pipeline</i>	<i>Moreno to Whitewater Pipeline</i>
City of Beaumont	1.5			X
City of Banning	6.4			X
U.S. Bureau of Land Management	0.2			X
City of Palm Springs	1.8			X

5.18 Growth-Inducing Impacts

This section describes the Proposed Project’s potential to contribute to regional growth and land use trends. CEQA Guidelines Section 15126.2(d) states that a project could be considered growth-inducing if it would “foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.” Growth inducing impacts can occur if a project would induce growth either directly or indirectly in the surrounding environment. Furthermore, Section 15126.2(d) states that “[i]t must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.”

5.18.1 Impact Summary

A project providing utility service, including natural gas, may induce growth by removing a barrier to future development. The Proposed Project, as described in Chapter 3 is not a capacity-enhancing project, but rather is a reliability project. As such, the Proposed Project would provide reliable minimum flow requirements to serve existing customers but would not directly provide for an increase in service capability within the Proposed Project area. The Proposed Project would therefore not have a growth-inducing effect related to provision of additional utility service.

Growth inducement may also occur as a result of additional employees or residents to the Proposed Project area. The Proposed Project would provide short-term construction employment during the length of construction. As described in Section 3.8, it is estimated that approximately 40 people would be employed for construction of the compressor station and a typical crew would number 90 workers per construction spread. These workers would provide economic benefits to the local economy. However, the Proposed Project would not be of a size or duration that would require the construction of additional housing (most workers would be drawn from the region) or the introduction of new businesses (existing businesses would be expected to handle the needs of the workforce). The Proposed Project would therefore not have a growth-inducing effect related to construction.

6 DETAILED DISCUSSION OF SIGNIFICANT IMPACTS

6.1 Potentially Significant Impacts

The analysis contained in this PEA has determined that no potentially significant impacts would occur as a result of Proposed Project operations. However, potentially significant impacts could occur as a result of construction of the Proposed Project. Specifically, construction activities would result in potentially significant impacts that are temporary in nature and related to air quality/greenhouse gas emissions and noise. These impacts are discussed in detail below.

Air Quality/Greenhouse Gas Emissions

Violate air quality standards or contribute substantially to an existing or projected air quality violation

Construction of the Proposed Project would result in a temporary addition of pollutants to the local airshed caused by soil disturbance, fugitive dust emissions, and combustion pollutants from on-site construction equipment, as well as from off-site trucks hauling construction materials. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions. Therefore, such emission levels can only be approximately estimated, with a corresponding uncertainty in precise ambient air quality impacts.

Implementation of the Proposed Project would generate construction-related air pollutant emissions from three general activity categories: entrained dust, equipment and vehicle exhaust emissions, and architectural coatings. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM₁₀ and PM_{2.5} emissions. Exhaust from internal combustion engines used by construction equipment, hauling trucks (dump trucks), vendor trucks (i.e., delivery trucks), and worker vehicles results in emissions of NO_x, VOCs, CO, PM₁₀, and PM_{2.5}. The application of architectural coatings, such as exterior/interior paint and other finishes, would also produce VOC emissions.

The Proposed Project would be required to comply with MDAQMD Rules 401 and 403.2 and SCAQMD Rules 403 and 403.1 to control fugitive dust emissions generated during excavation, land clearing, and other grading activities. Standard construction practices that would be employed to reduce fugitive dust emissions would be implemented in accordance with **APM-AIR-1**. The Proposed Project would also be required to comply with MDAQMD Rule 431 and SCAQMD Rules 431.1 and 431.2 regarding the sulfur content in fuels; MDAQMD Rule 1103 and SCAQMD Rules 1108 and 1108.1 regarding asphalt, if applicable; and MDAQMD Rule 1113 and SCAQMD Rule 1113 regarding architectural coatings. These measures would assist in minimizing project-generated fugitive dust emissions and combustion and other air pollutants.

6 Detailed Discussion of Significant Impacts

Given the amount of concurrent construction required and the scale of the Proposed Project, there would likely be short-term, unavoidable impacts to air quality during construction, mostly from fugitive dust and minor increases in certain criteria air pollutants such as VOCs, NO_x, CO, SO₂, PM₁₀, and PM_{2.5}. These impacts would be localized, would not occur in the same location along the alignment for a prolonged period of time, would be short-term at the compressor station location, and would end after construction has been completed. **APM-AIR-2** would be implemented to quantify air quality emissions and develop emissions reduction strategies, as appropriate, for emissions that exceed applicable significance thresholds. Until further analysis has been conducted and appropriate APMs have been identified, impacts would be considered potentially significant.

Cumulatively considerable net increase in criteria pollutants for which the project region is in non-attainment under an applicable federal or state ambient air quality standard

It is anticipated that construction emissions from the Proposed Project would exceed the MDAQMD significance thresholds or the SCAQMD construction daily thresholds; however, this would be confirmed through implementation of **APM-AIR-2**. Construction of the Proposed Project would be required to comply with MDAQMD and SCAQMD rules and regulations, including rules related to visible emissions, fugitive dust, and liquid fuels sulfur content. Until further analysis has been conducted and appropriate APMs have been identified, impacts would be considered potentially significant.

Generate greenhouse gas emissions that may have a significant impact on the environment

Construction of the Proposed Project would result in GHG emissions, which are primarily associated with use of off-road construction equipment, on-road hauling and vendor trucks, and worker vehicles.

The MDAQMD has established GHG emissions thresholds that would apply to the portion of the Proposed Project located within the MDAB; however, the MDAQMD Guidance for determining potential significance of GHG emissions does not differentiate between construction and operational GHG emissions. Accordingly, the adopted daily and annual GHG thresholds of 548,000 pounds/day of CO₂E and 100,000 tons/year of CO₂E, respectively, are applicable to both short-term and long-term emissions. As stated in Section 5.3.4, The SCAQMD has adopted a quantitative GHG threshold for industrial projects for which the construction-generated emissions are amortized over a 30-year project lifetime and added to the operational GHG emissions. Thus, the total construction GHG emissions would be calculated, amortized over 30 years, and added to the total operational emissions associated with the Proposed Project for comparison with the GHG significance threshold of 10,000 MT CO₂E for the SCAQMD.

As with project-generated construction air pollutant emissions, GHG emissions generated during construction would be short-term in nature, lasting only for the duration of the construction period, and they would not represent a long-term source of GHG emissions. Although significant impacts would not be anticipated, **APM-AIR-2** would be implemented to determine the potential for Proposed Project

6 Detailed Discussion of Significant Impacts

construction to cause a cumulatively considerable contribution to climate change. Pending further study, construction impacts are considered to be potentially significant.

Conflict with applicable plans, policies, or regulations adopted to reduce greenhouse gas emissions

The Climate Change Scoping Plan, approved by CARB on December 12, 2008, provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. As such, the Scoping Plan is not directly applicable to specific projects. Moreover, the Final Statement of Reasons for the amendments to the CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that "[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009b). Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., Low Carbon Fuel Standard,), among others. While state regulatory measures would ultimately reduce GHG emissions associated with the Proposed Project through their effect on these sources, no statewide plan, policy, or regulation would be specifically applicable to reductions in GHG emissions from the proposed pipeline construction or operation.

The Adelanto Compressor Station is located in the City of Adelanto and is under the jurisdiction of the City and the MDAQMD. The Adelanto to Moreno pipeline would be located within the jurisdictions of the City of Adelanto, City of Victorville, USFS, San Bernardino County, City of San Bernardino, City of Colton, City of Loma Linda, City of Moreno Valley, Riverside County, the MDAQMD, and the SCAQMD. The Moreno to Whitewater pipeline would be located within the jurisdictions of Riverside County, the City of Beaumont, the City of Banning, the BLM, the City of Palm Springs, and the SCAQMD.

Currently, neither the MDAQMD nor the SCAQMD have adopted an applicable plan (such as a climate action plan), policy, or regulation to reduce GHG emissions or GHG-reduction measures that would apply to the GHG emissions associated with the Proposed Project. At the time this analysis was prepared, however, a comprehensive research of potential applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions has not been completed, as the Proposed Project is located in numerous jurisdictions. San Bernardino County adopted a *Final GHG Emissions Reduction Plan* in March 2014 and Riverside County prepared a Draft Climate Action Plan in May 2012; however, the Proposed Project's consistency with the adopted San Bernardino County plan has not yet been evaluated.

As with the Scoping Plan, it is common for rules and regulations adopted by cities, counties, and other agencies relevant to GHG emissions to primarily focus on long-term sources of emissions, such as

6 Detailed Discussion of Significant Impacts

mobile, area, and stationary source emissions. Although construction of the Proposed Project would occur along the entire proposed alignment (which extends through all of the jurisdictions listed above), construction activities would not represent a long-term source of GHG emissions. Furthermore, natural gas pipeline installation and construction associated with modifying the compressor station would follow standard construction practices and would be required to comply with MDAQMD and SCAQMD rules and regulations, which would potentially result in a reduction in GHG emissions associated with internal combustion engines used by construction equipment. Substantial daily operational GHG emissions are only anticipated to result from the proposed compressor station located in the City of Adelanto within the jurisdiction of the City and the MDAQMD and would not occur in the other jurisdictions that the proposed alignment traverses.

Although it is not anticipated that short-term Proposed Project construction would conflict with applicable GHG reduction or climate action plans, policies, or regulations adopted by the various jurisdictions within the proposed alignment, **APM-AIR-5** would be implemented to ensure that further study is conducted. Pending further study of applicable plans, policies, and regulations, this cumulative impact is considered potentially significant and would require additional analysis.

Noise

Exposure of persons to or generation of noise levels in excess standards established in the local general plan or noise ordinance, or applicable standards of other agencies

Proposed Project construction would be similar to other pipeline projects in terms of schedule, equipment used, and types of activities. Construction would temporarily increase nearby noise and vibration levels at adjacent noise-sensitive land uses. Noise and vibration levels would vary during the construction period, depending on the construction phase.

The loudest equipment types generally operating at a site during construction would contribute to a composite average or equivalent site noise level. Noise levels from common construction equipment at various distances can be estimated conservatively by assuming that the only attenuating mechanism is the divergence of the sound waves in open air (Table 3.11-10). Some residences and other noise-sensitive land uses are located immediately adjacent to the construction area for the proposed pipeline, although more typical source-receiver distances would range from 50 feet to several hundred feet.

Sensitive receptors located within approximately 500 feet of the pipeline right-of-way and pressure limiting station facilities would experience short-term inconvenience from the construction equipment noise. On-site noise levels are anticipated to be in the 70 to 85 dBA range at 50 feet, or approximately 78 to 93 dBA at a distance of 20 feet. Affected noise-sensitive land uses would be within the residential and commercial areas located primarily in the communities of Beaumont, Banning, Moreno Valley, Colton, Rialto, Devore, Cajon, and Adelanto. Construction noise and vibration levels related to the

6 Detailed Discussion of Significant Impacts

Proposed Project would vary during the construction period, depending on the construction phase and number and location of operating construction equipment. Pipeline construction generally proceeds at rates ranging from several hundred feet to 1 mile per day. However, due to the assembly-line method of construction, these activities could last from one week to 30 days at a given location. Because the construction moves through an area relatively quickly, adverse noise impacts would typically be localized, intermittent, and short term. Construction of the pipeline and associated aboveground facilities would take approximately 19 months to complete.

Noise generated from construction equipment, drilling, and blasting would all temporarily contribute to increased noise levels. Blasting and HDD would have noise levels of about 79 and 94 dBA at a distance of 50 feet. In addition, a temporary increase in local traffic noise would occur as a result of construction workers and equipment traveling to and from the sites. In less populated or rural areas, although livestock and nesting birds in the immediate vicinity of construction activities may be temporarily disturbed, the impact on the noise at any specific location would be short-term. Similarly, noise and vibration associated with construction of the proposed aboveground facilities in rural areas would be intermittent during the construction period, but the overall impact would be temporary and is not expected to be significant. Furthermore, nighttime noise levels would normally be unaffected because most construction activities would be limited to daylight hours.

Blasting, if necessary, would likely be the most prominent source of unwanted noise and vibration during construction. All blasting would be conducted during daylight hours. When blasting is required, a Blasting Plan would be developed to address specifications for the following items: use of explosives; blasting; notification; transportation of blasting material; methods for limiting ground vibrations; air-overpressure levels; records requirements and safety and warning programs; and vibration predictions based on project parameters. The U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) requires detailed safety measures to be implemented for each blasting event to ensure worker safety.

Noise impacts would be reduced by implementation of **APM NOI-2a** and **APM-NOI-2b** but would still result in relatively high intermittent noise levels at the nearest sensitive receptors in the immediate vicinity of the proposed pipeline (up to 93 dBA at a distance of 20 feet from pipeline construction). As such, short-term noise during construction would be considered a potentially significant impact.

6 Detailed Discussion of Significant Impacts

Substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project

Construction phase noise of the natural gas pipeline is discussed in Section 5.11.4a. With implementation of **APM-NOI-2a** and **APM-NOI-2b**, construction noise would be reduced; however, given the proximity of sensitive receptors to the pipeline construction activities along portions of the alignment, impacts would remain potentially significant.

Operations and maintenance phase noise of the natural gas pipeline is discussed in Section 5.11.4a. With implementation of **APM-NOI-3**, operational noise is not anticipated to result in substantial temporary or periodic noise increases in the Proposed Project vicinity. This would be a less than significant impact.

6.2 Summary of Environmental Impacts and Applicant Proposed Measures

A summary of all potential environmental impacts associated with the Proposed Project, including Less than Significant Impacts with APMs Incorporated, Less than Significant Impacts, and No Impacts are identified in Table 6-1. This table also provides a listing of all APMs that would be implemented for the Proposed Project, including measures to reduce GHG impacts associated with the Proposed Project.

When a public agency adopts an EIR in conjunction with approving a project, the lead agency shall adopt a program for monitoring or reporting on the measures it has imposed to mitigate or avoid significant adverse environmental effects. Pursuant to the requirements of the California Public Resources Code Section 21081.6 and CEQA Guidelines Section 15097, a Mitigation Monitoring and Reporting Program would be developed for the Proposed Project to ensure compliance with APMs and mitigation measures during project implementation.

Table 6-1
Summary of Potential Environmental Impacts

Environmental Topic	Impact Before Applicant Proposed Measure(s)	Applicant Proposed Measure(s)	Level of Significance After Applicant Proposed Measures
<i>Aesthetics/Visual Resources</i>			
a. Scenic vista effects	Potentially Significant	APM-AES-1, Implementation of Revegetation and Restoration Plan APM-AES-2, Block Valve Locations	Less than Significant
b. Scenic resource damage	Potentially Significant	APM-AES-1, Implementation of Revegetation and Restoration Plan APM-AES-2, Block Valve Locations	Less than Significant
c. Visual quality/character degradation	Potentially Significant	APM-AES-1, Implementation of Revegetation and Restoration Plan APM-AES-2, Block Valve Locations	Less than Significant
d. New source of light or glare	Less than Significant	None	N/A
<i>Agricultural Resources</i>			
a. Convert farmland shown in Farmland Mapping and Monitoring Program maps to non-agricultural use	No Impact	None	N/A
b. Conflict with existing agricultural zoning or a Williamson Act contract	No Impact	None	N/A
c. Conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland production zones	No Impact	None	N/A
d. Loss of forest land or conversion of forest land to a non-forest use	No Impact	None	N/A
e. Changes in existing environment resulting in conversion of farmland or forest land	No Impact	None	N/A
<i>Air Quality</i>			
a. Conflict with or obstruct implementation of air quality plan	Less than Significant	None	N/A
b. Violate air quality standards or contribute substantially to an existing or projected air quality violation	Potentially Significant	APM-AIR-1, Construction Fugitive Dust Control Plan APM-AIR-2, Construction Emissions Analysis APM-AIR-3, Existing Operational Emissions of the Adelanto Compressor Station	Potentially Significant
c. Cumulatively considerable net increase in criteria pollutants for which the project region is in non-attainment under an applicable federal or state ambient air quality standard	Potentially Significant	APM-AIR-2, Construction Emissions Analysis APM-AIR-3, Existing Operational Emissions of the Adelanto Compressor Station	Potentially Significant
d. Expose sensitive receptors to substantial pollutant concentrations	Potentially Significant	APM-AIR-3, Existing Operational Emissions of the Adelanto Compressor Station APM-AIR-4, Sensitive Receptors	Less than Significant
e. Objectionable odors	Less than Significant	None	N/A
<i>Greenhouse Gases</i>			
a. Generate greenhouse gas emissions that may have a significant impact on the environment	Potentially Significant	APM-AIR-2, Construction Emissions Analysis APM-AIR-3, Existing Operational Emissions of the Adelanto Compressor Station	
b. Conflict with applicable plans, policies, or regulations adopted to reduce greenhouse gas emissions	Potentially Significant	APM-AIR-5, Local Climate Action Plans	
<i>Biological Resources</i>			
a. Substantial adverse effect on a species identified as a candidate, sensitive, or special status species by local, state, or federal plans and policies	Potentially Significant	APM-BIO-1, Biological Surveys APM-BIO-2, Preconstruction Surveys APM-BIO-3, Biological Monitoring APM-BIO-4, Minimize Disturbance to Native Vegetation APM-BIO-5, Establish Environmentally Sensitive Areas APM-BIO-6, Avoidance of Vernal Pools APM-BIO-7, Revegetation of Temporarily Disturbed Areas	Less than Significant

**Table 6-1
Summary of Potential Environmental Impacts**

Environmental Topic	Impact Before Applicant Proposed Measure(s)	Applicant Proposed Measure(s)	Level of Significance After Applicant Proposed Measures
		APM-BIO-8, Avoidance and Minimization of Impacts to Jurisdictional Waters APM-BIO-9, BMPs for Avoidance and Minimization of Impacts to Special-status Wildlife Species APM-BIO-10, Worker Environmental Awareness Program (WEAP) APM-BIO-13, Nesting Bird Management Plan APM-BIO-14, Preconstruction Plant Surveys APM-BIO-15, Arroyo Toad Avoidance APM-BIO-16, Condor Avoidance APM-BIO-17, Mohave Ground Squirrel Avoidance APM-BIO-18, Listed Kangaroo Rat Avoidance APM-BIO-19, Coastal California Gnatcatcher Avoidance APM-BIO-20, Riparian Birds Avoidance APM-BIO-21, Avoidance of Desert Tortoise APM-BIO-22, Endangered Species Permits APM-BIO-23, Avoidance of Special-Status Plants APM-BIO-24, Burrowing Owl Avoidance and Mitigation APM-BIO-25, Raptor Nest Avoidance APM-BIO-26, Avoidance of Other Special-status Wildlife APM-BIO-27, Compensation for Sensitive Vegetation Communities, Habitat, and Plants	
b. Substantial adverse effect on riparian habitats or other sensitive natural communities identified in local, state, or federal plans and policies	Potentially Significant	APM-BIO-1, Biological Surveys APM-BIO-4, Minimize Disturbance to Native Vegetation APM-BIO-5, Establish Environmentally Sensitive Areas APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-27, Compensation for Sensitive Vegetation Communities, Habitat, and Plants	Less than Significant
c. Substantial adverse effect on federally protected wetlands	Potentially Significant	APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-8, Avoidance and Minimization of Impacts to Jurisdictional Waters APM-BIO-27, Compensation for Sensitive Vegetation Communities, Habitat, and Plants	Less than Significant
d. Interfere substantially with movement of native resident or migratory species or with established wildlife corridors, or impede the use of native wildlife nursery sites	Potentially Significant	APM-BIO-13, Nesting Bird Management Plan	Less than Significant
e. Conflict with local policies protecting biological resources, such as a tree ordinance	Potentially Significant	APM-BIO-1, Biological Surveys APM-BIO-5, Establish Environmentally Sensitive Areas APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-8, Avoidance and Minimization of Impacts to Jurisdictional Waters APM-BIO-11, Treat Cut Tree Stumps with Sporax APM-BIO-12, Weed Control Plan APM-BIO-28, Regulated Trees	Less than Significant
f. Conflict with provisions of an adopted local, regional, or state habitat conservation plan	Potentially Significant	APM-BIO-1, Biological Surveys APM-BIO-2, Preconstruction Surveys APM-BIO-3, Biological Monitoring APM-BIO-4, Minimize Disturbance to Native Vegetation APM-BIO-5, Establish Environmentally Sensitive Areas APM-BIO-6, Avoidance of Vernal Pools APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-8, Avoidance and Minimization of Impacts to Jurisdictional Waters APM-BIO-9, BMPs for Avoidance and Minimization of Impacts to Special-status Wildlife Species	Less than Significant

**Table 6-1
Summary of Potential Environmental Impacts**

Environmental Topic	Impact Before Applicant Proposed Measure(s)	Applicant Proposed Measure(s)	Level of Significance After Applicant Proposed Measures
		APM-BIO-10, Worker Environmental Awareness Program (WEAP) APM-BIO-11, Treat Cut Tree Stumps with Sporax APM-BIO-12, Weed Control Plan APM-BIO-13, Nesting Bird Management Plan APM-BIO-14, Preconstruction Plant Surveys APM-BIO-15, Arroyo Toad Avoidance APM-BIO-16, Condor Avoidance APM-BIO-17, Mohave Ground Squirrel Avoidance APM-BIO-18, Listed Kangaroo Rat Avoidance APM-BIO-19, Coastal California Gnatcatcher Avoidance APM-BIO-20, Riparian Birds Avoidance APM-BIO-21, Avoidance of Desert Tortoise APM-BIO-22, Endangered Species Permits APM-BIO-23, Avoidance of Special-Status Plants APM-BIO-24, Burrowing Owl Avoidance and Mitigation APM-BIO-25, Raptor Nest Avoidance APM-BIO-26, Avoidance of Other Special-status Wildlife APM-BIO-27, Compensation for Sensitive Vegetation Communities, Habitat, and Plants APM-BIO-29, Urban/Wildlands Interface Guidelines APM-BIO-30, Consistency with Habitat Conservation Plans	
<i>Cultural Resources</i>			
a. Substantial adverse change in the significance of a historical resource as defined in §15064.5	Potentially Significant	APM-CUL-1, Coordination with Native Americans tribes and individuals APM-CUL-2, Consultation with local historical societies and other repositories of information regarding cultural resources of the historical period APM-CUL-3, Cultural Resources Survey APM-CUL-4, Evaluation of Identified Cultural Resources APM-CUL-5, Access Effects of the Project on Historical Resources APM-CUL-6, Treatment Plan of Historical Resources APM-CUL-7, Unanticipated Discovery Plan for Cultural Resources APM-CUL-8, Treatment of Human Remains	Less than Significant
b. Substantial adverse change in the significance of an archaeological resource to §15064.5	Potentially Significant	APM-CUL-1, Coordination with Native Americans tribes and individuals APM-CUL-2, Consultation with local historical societies and other repositories of information regarding cultural resources of the historical period APM-CUL-3, Cultural Resources Survey APM-CUL-4, Evaluation of Identified Cultural Resources APM-CUL-5, Access Effects of the Project on Historical Resources APM-CUL-6, Treatment Plan of Historical Resources APM-CUL-7, Unanticipated Discovery Plan for Cultural Resources APM-CUL-8, Treatment of Human Remains	Less than Significant
c. Directly or indirectly destroy a unique paleontological resource or site or unique feature	Potentially Significant	APM-CUL-9, Paleontological Literature Review and Records Search APM-CUL-10, Paleontological Mitigation Plan	Less than Significant
d. Disturb human remains	Potentially Significant	APM-CUL-1, Coordination with Native Americans tribes and individuals APM-CUL-2, Consultation with local historical societies and other repositories of information regarding cultural resources of the historical period	Less than Significant

Table 6-1
Summary of Potential Environmental Impacts

Environmental Topic	Impact Before Applicant Proposed Measure(s)	Applicant Proposed Measure(s)	Level of Significance After Applicant Proposed Measures
		APM-CUL-3, Cultural Resources Survey APM-CUL-4, Evaluation of Identified Cultural Resources APM-CUL-5, Access Effects of the Project on Historical Resources APM-CUL-6, Treatment Plan of Historical Resources APM-CUL-7, Unanticipated Discovery Plan for Cultural Resources APM-CUL-8, Treatment of Human Remains	
<i>Geology, Soils, and Seismicity</i>			
ai. Rupture of a known earthquake	Potentially Significant	APM-GEO-1, Geotechnical Investigation APM-GEO-2, Determination of active or potentially active faults	Less than Significant
aii. Strong seismic ground shaking	Potentially Significant	APM-GEO-1, Geotechnical Investigation APM-GEO-3, Appropriate design ground motion values	Less than Significant
aiii. Seismic-related ground failure, including liquefaction	Potentially Significant	APM-GEO-1, Geotechnical Investigation APM-GEO-4, Appropriate design features to prevent or limit liquefaction	Less than Significant
aiv. Landslides	Potentially Significant	APM-GEO-1, Geotechnical Investigation APM-GEO-5, Appropriate design features to prevent or limit landslide/slop instability	Less than Significant
b. Substantial soil erosion or the loss of topsoil	Less than Significant	APM-GEO-6, Soil Erosion or Loss of Topsoil	Less than Significant
c. Located on a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse	Potentially Significant	APM-GEO-1, Geotechnical Investigation APM-GEO-7, Appropriate design features to prevent or limit damage to the pipeline and appurtenant structures on unstable geologic unit or soil	Less than Significant
d. Located on expansive soil creating substantial risks to life or property	Potentially Significant	APM-GEO-8, Appropriate design and construction recommendations to prevent or limit expansive material damage to the pipeline and appurtenant structures	Less than Significant
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water	No Impact	None	N/A
<i>Hazards and Hazardous Materials</i>			
a. Significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials	Potentially Significant	APM-HAZ-1, Project-Specific Hazardous Materials Management and Hazardous Waste Management Program APM-HAZ-2, Proper Handling for the Transport of Hazardous Materials APM-HAZ-3, Procedures for Fueling and Maintenance of Construction Equipment APM-HAZ-4, Emergency Response Plan APM-HAZ-5, Containment and Disposal of HDD Drilling Waste APM-HAZ-6, Spill Prevention, Countermeasure, and Control Plan and Hazardous Materials Business Plan	Less than Significant
b. Significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment	Potentially Significant	APM-HAZ-7, Hazardous Materials Contingency Plan APM-HAZ-8, Construction Management Plan APM-HAZ-9, Safety and Reliability Study APM-HAZ-10, Emergency Response Plan	Less than Significant
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school	Potentially Significant	APM-HAZ-9, Safety and Reliability Study	Less than Significant
d. Located on a site that is included on a list of hazardous materials sites and as a result would create a significant hazard to the public or the environment	Potentially Significant	APM-HAZ-7, Hazardous Materials Contingency Plan APM-HAZ-8, Construction Management Plan APM-HAZ-11, Additional Hazardous Materials Research	Less than Significant
e. Located within an airport land use plan, or within two miles of a public airport or public use airport that would result in a safety hazard for people residing or working in the project area	Potentially Significant	APM-TRF-1, Construction Traffic Control Plan	Less than Significant

6 Detailed Discussion of Significant Impacts

Table 6-1
Summary of Potential Environmental Impacts

Environmental Topic	Impact Before Applicant Proposed Measure(s)	Applicant Proposed Measure(s)	Level of Significance After Applicant Proposed Measures
f. Located within the vicinity of a private airstrip that would result in a safety hazard for people residing or working in the project area	Potentially Significant	APM-TRF-1, Construction Traffic Control Plan	Less than Significant
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan	Potentially Significant	APM-HAZ-10, Emergency Response Plan	Less than Significant
h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires	Potentially Significant	APM-HAZ-9, Safety and Reliability Study APM-HAZ-12, Fire Protection Plan	Less than Significant
<i>Hydrology and Water Quality</i>			
a. Violate any water quality standards or waste discharge requirements	Potentially Significant	APM-HYDRO-1, Construction SWPPP APM-HYDRO-2, Equipment Maintenance and Refueling Near Sensitive Areas APM-HYDRO-3, Consultation with the RWQCB to determine if an individual discharge permit is required for dewatering APM-HYDRO-4, Frac-Out Contingency Plan APM-HAZ-6, Spill Prevention, Countermeasure, and Control Plan and Hazardous Materials Business Plan	Less than Significant
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level	Potentially Significant	APM-HYDRO-5, Water Reuse Plan	Less than Significant
c. Substantially alter the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation on- or off-site	Potentially Significant	APM-BIO-1, Biological Surveys APM-BIO-4, Minimize Disturbance to Native Vegetation APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-8, Avoidance and Minimization to Jurisdictional Waters APM-BIO-27, Compensation for Sensitive Vegetation Communities, Habitats, and Plants	Less than Significant
d. Substantially alter the existing drainage pattern of the site or area in a manner which would result in flooding on- or off-site	Potentially Significant	APM-AES-1, Implementation of Revegetation and Restoration Plan	Less than Significant
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff	Less than Significant	None	N/A
f. Substantially degrade water quality	Potentially Significant	APM-HYDRO-1, Construction SWPPP APM-HYDRO-2, Equipment Maintenance and Refueling Near Sensitive Areas APM-HYDRO-4, Frac-Out Contingency Plan APM-HAZ-6, Spill Prevention, Countermeasure, and Control Plan and Hazardous Materials Business Plan APM-BIO-1, Biological Surveys APM-BIO-4, Minimize Disturbance to Native Vegetation APM-BIO-7, Revegetation of Temporarily Disturbed Areas APM-BIO-8, Avoidance and Minimization to Jurisdictional Waters APM-BIO-27, Compensation for Sensitive Vegetation Communities, Habitats, and Plants APM-AES-1, Implementation of Revegetation and Restoration Plan	Less than Significant
g. Place housing within a 100-year flood hazard area	No Impact	None	N/A
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows	No Impact	None	N/A
i. Expose people or structures to a significant risk of loss, injury or death involving flooding	Less than Significant	None	N/A
j. Inundation by seiche, tsunami, or mudflow	Less than Significant	None	N/A

**Table 6-1
Summary of Potential Environmental Impacts**

Environmental Topic	Impact Before Applicant Proposed Measure(s)	Applicant Proposed Measure(s)	Level of Significance After Applicant Proposed Measures
<i>Land Use and Planning</i>			
a. Physically divide an established community	No Impact	None	N/A
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect	Less than Significant	None	N/A
c. Conflict with any applicable habitat conservation plan or natural community conservation plan	Potentially Significant	APM-BIO-30, Consistency with Habitat Conservation Plans	Less than Significant
<i>Mineral Resources</i>			
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state	Less than Significant	None	N/A
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan	Less than Significant	None	N/A
<i>Noise</i>			
a. Exposure of persons to or generation of noise levels in excess standards established in the local general plan or noise ordinance, or applicable standards of other agencies	Potentially Significant	APM-NOI-1, Noise Mitigation and Monitoring Plan – Adelanto Compressor Station Operation APM-NOI-2a, Construction Noise Mitigation Plan APM-NOI-2b, Notification Prior to Construction	Potentially Significant
b. Exposure of persons to or generation of excessive groundborne vibration or groundbourne noise levels	Potentially Significant	APM-NOI-2a, Construction Noise Mitigation Plan APM-NOI-2b, Notification Prior to Construction	Less than Significant
c. Substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project	Potentially Significant	APM-NOI-1, Noise Mitigation and Monitoring Plan – Adelanto Compressor Station Operation APM-NOI-3, Noise Mitigation and Monitoring Plan – Pipeline Operation	Less than Significant
d. Substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project	Potentially Significant	APM-NOI-1, Noise Mitigation and Monitoring Plan – Adelanto Compressor Station Operation APM-NOI-2a, Construction Noise Mitigation Plan APM-NOI-2b, Notification Prior to Construction APM-NOI-3, Noise Mitigation and Monitoring Plan – Pipeline Operation	Potentially Significant
e. Located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public us airport that would expose people residing or working in the project area to excessive noise levels	Less than Significant	None	N/A
f. Located within the vicinity of a private airstrip that would expose people residing or working in the project area to excessive noise levels	No Impact	None	N/A
<i>Population and Housing</i>			
a. Induce substantial population growth in an area, either directly or indirectly	No Impact	None	N/A
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere	No Impact	None	N/A
c. Displace substantial numbers of people necessitating the construction of replacement housing elsewhere	No Impact	None	N/A
<i>Public Services</i>			
a. Substantial adverse physical impacts associated with new or physically altered governmental facilities or the need for new or physically alternated facilities, the construction of which could cause significant environmental impacts, in order to maintain performance objectives for any of the public services:			
Fire protection	Less than Significant	None	N/A
Police protection	Less than Significant	None	N/A
Schools	No Impact	None	N/A
Parks	Less than Significant	None	N/A

**Table 6-1
Summary of Potential Environmental Impacts**

Environmental Topic	Impact Before Applicant Proposed Measure(s)	Applicant Proposed Measure(s)	Level of Significance After Applicant Proposed Measures
Other public facilities	Less than Significant	None	N/A
<i>Recreation</i>			
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated	Less than Significant	None	N/A
b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment	No Impact	None	N/A
<i>Transportation and Traffic</i>			
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation	Potentially Significant	APM-TRF-1, Construction Traffic Control Plan	Less than Significant
b. Conflict with an applicable congestion management program for designated roads or highways	Potentially Significant	APM-TRF-1, Construction Traffic Control Plan	Less than Significant
c. Result in a change in air traffic patterns that would result in substantial safety risks	No Impact	None	N/A
d. Substantially increase hazards due to a design feature or incompatible uses	No Impact	None	N/A
e. Result in inadequate emergency access	Potentially Significant	APM-TRF-1, Construction Traffic Control Plan	Less than Significant
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities	Potentially Significant	APM-TRF-1, Construction Traffic Control Plan	Less than Significant
<i>Utilities and Services Systems</i>			
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board	Less than Significant	APM-HYDRO-5, Water Reuse Plan	Less than Significant
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	No Impact	None	N/A
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	No Impact	None	N/A
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed	Less than Significant	APM-HYDRO-5, Water Reuse Plan	Less than Significant
e. Result in a determination by the wastewater treatment provider, which serves or may serve the project that is has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments	Less than Significant	None	N/A
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs	Less than Significant	None	N/A
g. Comply with federal, state, and local statutes and regulations related to solid waste	Less than Significant	None	N/A

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7 ALTERNATIVES

CEQA and the CEQA Guidelines (Section 15126.6(a)) require that an EIR describe a range of alternatives to a proposed project that would feasibly attain most of the basic project objectives but would avoid or substantially lessen any of the significant effects of the project. This analysis must include evaluation of a “no project” alternative to compare the impacts of approving the proposed project with the impacts of not approving the proposed project (No Project Alternative). In addition, the CEQA Guidelines (Section 15126.6(d)) require the evaluation of a reasonable range of alternatives to the proposed project or its location to provide a comparative analysis for consideration by decision makers.

The Applicant first evaluated whether the existing infrastructure could be modified, or whether non-construction alternatives could meet most of the Proposed Project Objectives. Thereafter, the Applicant evaluated whether new infrastructure is required and where it would be located in order to meet the Project Objectives. The following sections describe the considerations given when evaluating whether a system alternative has the ability to meet most of the Project Objectives. This chapter concludes with a brief description of the system alternatives retained for analysis in the PEA.

7.1 System Alternatives Considered and Eliminated from Consideration

The following section describes non-physical alternatives that were considered and eliminated from future consideration.

7.1.1 Non-Physical Alternatives

Contracting for Upstream Supplies

One potential option for dealing with Southern System supply issues is for SoCalGas to contract supplies from the originating basins to the California border and interstate capacity to meet anticipated Southern System flow requirements. However, the Applicant does not believe this option would provide the needed reliability benefits. Even with basin supplies and matching interstate capacity, Southern System customers would remain subject to supply-related problems outside of California. If, for example, force majeure conditions shut in the supply basins (as they did in February 2011), or the interstate pipeline the Applicant has contracted with experiences operational problems, the Southern System will not receive the supplies it needs. Even after substantial expenditures to lock in long-term supplies and interstate transportation, the utilities will essentially be in the same situation as they experience today from a reliability standpoint. For the reasons discussed above, this option does not meet the Project Objectives as defined in Chapter 2.

7 Alternatives

Southern System Minimum Flow Requirement

The Applicant also considered the merits of supplementing or replacing the existing System Operator tools with a minimum flowing supply requirement for all end-use customers. In fact, in A.08-02-001, the Applicant's most recent BCAP, the Applicant proposed a minimum flow obligation that would have required all customers to deliver up to 20% of their gas usage to the Southern System under certain specified circumstances (Southern System Flow Order).¹⁴ Under this prior proposal, the Utilities' Gas Control Department would be able to call a Southern System Flow Order (SSFO) on end-use customers to flow supply through Blythe or Otay Mesa equal to up to 20% of their gas usage that day. The daily percentage may vary between days and is based on the actual need after the Utilities have exercised their other approved tools. The applicable percentage would be posted on SoCalGas' Electronic Bulletin Board when the SSFO is called.¹⁵

A number of interveners in our previous BCAP proceeding opposed this particular proposal, and the Applicant ultimately decided to drop it as part of an overall settlement of issues in Phase 2 of the 2009 BCAP proceeding.¹⁶

The Applicant believes that there may be merit to requiring all end-use customers to bring some portion of their gas usage into the Southern System. If the Applicant is not able to obtain flowing supplies at Blythe, then it is unlikely that its customers would be able to do so either, no matter how large the potential financial penalty for noncompliance. Therefore, the Southern System minimum flow requirement does not meet the Project Objectives as defined in Chapter 2.

Operational Flow Order / System Balancing

The Applicant also considered the merits of an alternative that would impose an Operation Flow Order (OFO) on its natural gas system and that would impose tighter balancing requirements on customers as an alternative to addressing the need for reliability of the Southern System. The Applicant believes that a "low OFO" procedure could be helpful in ensuring that adequate supplies reach its system when

¹⁴ A.08-02-001, Prepared Direct Testimony of Rodger Schwecke on behalf of SDG&E and SoCalGas, December 5, 2008, pp. 17-20.

¹⁵ Under this proposal, the System Operator would still remain responsible for meeting any Southern System minimum flow requirements that are not met by customer flows into the Southern System. See A.08-02-001, Prepared Direct Testimony of Rodger Schwecke on behalf of SDG&E and SoCalGas, December 5, 2008, p. 18.

¹⁶ D.09-11-006, Appendix A, Section II.K. SoCalGas also presented this approach to customers at the annual Customer Forum in 2013 and related post-Forum workshops.

7 Alternatives

customer usage outstrips customer deliveries. However, a low OFO procedure, in and of itself, would not ensure that needed supplies would reach the Southern System.

Likewise, tighter balancing requirements could help ensure that adequate supplies reach the Applicant's system on a timelier basis than they do under our existing balancing requirements. But tighter balancing requirements would not ensure that those supplies reach the Southern System. As a result of the Applicant's analysis of these alternatives, it was determined that neither the OFO nor the System Balancing alternative met the Project Objectives as defined in Chapter 2.

Based upon our review of these non-construction system alternatives, the Applicant determined that none of the non-physical alternatives described above would satisfy most of the Project Objectives described in Chapter 2; therefore, each of these alternatives was eliminated from further consideration.

7.2 Infrastructure Alternatives

The Applicant examined two infrastructure alternatives to the Proposed Project: (1) the River Route Alternative and (2) the Cross Desert Alternative. Like the Proposed Project, each alternative would add approximately 800 MMcfd of north-to-south flow capacity on the SoCalGas system, which would effectively eliminate the Southern System minimum flow requirement.

7.2.1 River Route Alternative

The River Route Alternative consists of an approximately 100-mile section of 36-inch pipeline within a 100-foot utility corridor extending from North Needles Compressor Station through the South Needles Compressor Station to the Blythe Compressor Station. No additional natural gas compression is required for this alternative. The pipeline alignment of the River Route Alternative would traverse public and private lands within Riverside and San Bernardino Counties. Topography/land use types along the alignment include 30 miles of vacant desert lands, 30 miles of semirural/agricultural lands, and 30 miles of recreational and land conservation lands adjacent to the Colorado River. The River Route Alternative is depicted in Figure 7-1.

Both the River Route Alternative and the Proposed Project would allow the North Desert zonal capacity to be increased from its current 1,590 MMcfd level to 1,890 MMcfd. Because the River Route Alternative would interconnect at Blythe, however, deliveries on the River Route alignment option would compete with other deliveries into Blythe on a one-for-one basis. Therefore, the River Route Alternative would not increase the overall system backbone capacity, whereas the Proposed Project would increase the overall system backbone.

The River Route Alternative partially satisfies the Project Objectives because it would add some measure of supply access to the Southern System. However, the Proposed Project, unlike the River Route Alternative, would provide Southern System customers with access to storage supplies and more receipt points

7 Alternatives

(Wheeler Ridge, Kern River Station, and Kramer Junction), which would increase the reliability of service to such customers. With the River Route Alternative, if force majeure conditions shut in the supply basins or one or more of the interstate pipelines serving Southern California experience operational problems, the Southern System may not receive the supplies it needs. Because the River Route Alternative does not meet the Project Objectives, it has been eliminated from further consideration.

7.2.2 Cross Desert Alternative

The Cross Desert Alternative consists of an approximately 200-mile section of 36-inch pipeline within a 100-foot utility corridor extending from the Adelanto Compressor Station to the Blythe Compressor Station. The Cross Desert Alternative traverses public and private lands within Riverside and San Bernardino Counties. The Cross Desert Alternative would also require upgrades to the Adelanto Compressor Station. Topography/land use types along the alignment include 140 miles of vacant desert lands, 50 miles of foothills and high desert mountainous lands, and 10 miles of semirural/agricultural lands. The Cross Desert Alternative is depicted in Figure 7-2.

Both the Cross Desert Alternative and the Proposed Project would allow the North Desert zonal capacity to be increased from its current 1,590 MMcfd level to 1,890 MMcfd. Because the Cross Desert Alternative would interconnect at Blythe, however, deliveries on the Cross Desert Alternative would compete with other deliveries into Blythe on a one-for-one basis. Therefore, the Cross Desert Alternative would not increase the overall system backbone capacity, whereas the Proposed Project would increase overall system backbone capacity.

As a consequence of its significant additional mileage and associated significant additional cost relative to the Proposed Project, the Cross Desert Alternative would not meet the Project Objectives, as defined in Chapter 2.

2.7.3 Existing Infrastructure Purchase Alternative

Another potential physical option for dealing with future Southern System supply issues is for the Applicant to purchase existing facilities from another entity. The Applicant does not believe, however, that there are any physical facilities it could purchase that would provide a reasonable and economic solution to impending supply-related Southern System cost and reliability problems. No pipeline facilities in Southern California are currently being offered publicly for sale. More important is the fact that none of the existing facilities owned by other companies would provide the same operational benefits. Namely, it would not provide the Southern System with access to storage supplies, and it would leave Southern System customers vulnerable to well freeze-offs and other upstream problems such as pipeline ruptures, outages, and interruptions in service. In addition, this alternative would only transport up to 500 MMcfd, which is insufficient to meet the Project Objectives of 800 MMcfd.

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Existing pipelines would not provide sufficient capacity to meet the Project Objectives, as defined in Chapter 2. Therefore, the Existing Infrastructure Purchase Alternative is eliminated from further consideration in this PEA.

7.2.4 No Project Alternative

CEQA Guidelines Section (15126.6 (e)) requires consideration of the environmental consequences of the Proposed Project not being constructed. The purpose of describing and analyzing the No Project Alternative is to allow a comparison of the impacts of approving the Proposed Project with the impacts of not approving the Proposed Project. A No Project Alternative would leave the Southern System vulnerable to risk of curtailment. If the Proposed Project were not constructed, the Project Objectives would not be met: maintaining Southern System reliability and alleviate the potential for curtailments of customers on the Southern System, resolving supply-related risks to Southern System by providing Southern System customers with access to storage supplies and more receipt points, providing a direct interconnection between the Northern System and the largest load center on the Southern System, and providing Southern System natural gas customers and electric customers served by large electric generators located on the Southern System with the same level of reliability as customers elsewhere on the Applicant's integrated transmission system. Consequently, the No Project Alternative meets none of the Project Objectives, as defined in Chapter 2.

7.2.5 Proposed Project

For each of reasons discussed above, the Applicant has determined that only the Proposed Project meets the basic Project Objectives, as defined in Chapter 2; the Proposed Project is the only alternative retained for evaluation in this PEA. The proposed alignment, along with the alignment alternatives described in Section 7.3, is shown on Figure 7-3.

7.3 Alignment Alternatives

In addition to the Proposed Project described in Chapter 3, the Applicant also considered various segment alignment alternatives. Six alignment alternatives were considered. One, described below, was considered and then rejected from further consideration. Five others were considered and retained as alternative alignments because, while not preferred due to construction difficulties and potential environmental impacts that are greater than the proposed alignment, each of the alignments would be capable of achieving the Project Objectives. A summary chart identifying each of the alignment alternatives is set forth below.

7 Alternatives

7.3.1 Alignment Alternatives Considered and Retained

This section discusses five potential segment alternatives to the proposed alignment that, while not preferred for the reasons set forth below, would achieve the Project Objectives set forth in Chapter 2. The five segment alternatives are shown on Figure 7-3 and are summarized in Table 7-1.

**Table 7-1
Summary of Segment Alternatives**

Segment Alternative	Approx. Mileage	Proposed Project Mile Posts	Environmental Issues Compared to Proposed Project
Line 1185 Segment	4.3	Start: AM-11 End: AM-18	Benefits: follows existing SoCalGas right-of-way (Line 1185) Additional Impacts: closer to residences; crosses additional drainages, canyons and wetland areas; freeway lane closures required; construction impacts to Highway 138; higher potential for archaeological resources
Mathews Ranch Segment	2.9	Start: AM-21 End: AM-25	Benefits: reduced cultural resource impacts by avoiding portions of U.S. Route 66 / National Trails Highway; follows existing SoCalGas right-of-way (Line 4000) Additional Impacts: crosses additional drainages and canyons; increased impacts to San Bernardino National Forest lands; freeway lane closures required; impacts from increase grading and hauling requirements
Devore Segment	3.9	Start: AM-25 End: AM-27	Benefits: avoids newly constructed Cajon Boulevard connector road Additional Impacts: increased impacts to USFS lands; closer to residences; additional right-of-way purchase required
Loma Linda Hills Segment	8.2	Start: AM-43 End: AM-52	Benefits: avoids traffic impacts on Reche Canyon Road Additional Impacts: temporary impacts to San Bernardino International Airport; impacts to recreational facilities and the City of Loma Linda South Hills Preserve; impacts from increased grading and hauling requirements; higher potential for biological and archaeological resources; additional private easements required
Cabazon Segment	7.8	Start: WM-18 End: MW-25	Benefits: follows existing SoCalGas right-of-way (Line 5000 and Line 2000) Additional Impacts: potential impacts to tribal lands; potential impacts to mineral resources; additional private easements required

Line 1185 Segment Alternative

As shown on Figure 7-3, the Line 1185 Segment Alternative generally follows SoCalGas' existing 36-inch Line 1185. This alternative deviates from the proposed alignment approximately 3 miles north of I-15 at Bear Valley Road. This alternative alignment generally extends southeast in SoCalGas right-of-way within undeveloped and developed private land. The alignment enters the San Bernardino National Forest approximately 1 mile east of the southbound I-15 and proceeds easterly crossing the southbound and northbound I-15, the four main BNSF railroad tracks, and one large drainage before reaching the

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terminus of Line 1185 and joining SoCalGas' existing right-of-way. The route then turns southwest and follows the SoCalGas right-of-way to SR 138 and then reconnects with the proposed alignment.

The Line 1185 Segment Alternative presents constraints that are avoided by the proposed alignment. Certain areas along this alternative alignment are composed of primarily loose sandy soils, requiring trench sloping and additional temporary workspace right-of-way. The terrain is undulating, with very steep areas and significant drainage channels. This alternative requires multiple lane closures to enable installation of the pipeline under I-15. Numerous potential archaeological sites are located within the path of this alignment. The alignment extends through and adjacent to waterbodies that are likely ACOE-jurisdictional wetlands and waters.

Conversely, the proposed alignment would avoid loose sandy soils and three steep drainages. Significant additional grading, as compared to the Proposed Project, would also be necessary under this alternative. Furthermore, in contrast to this alternative, traffic impacts to I-15 and potential impacts to wetlands would be minimized under the Proposed Project. Additionally, the proposed alignment follows a designated federal energy corridor and the alignments of other utility infrastructure.

Mathews Ranch Segment Alternative

The Mathews Ranch Segment Alternative begins at existing SoCalGas right-of-way near Swarthout Road east of I-15. This alternative alignment extends south and follows existing right-of-way within close proximity to the northbound I-15. This route would cross several steep canyons and narrow ridges within the San Bernardino National Forest before entering Mathews Ranch, a privately owned parcel located within the San Bernardino National Forest. Under this alternative, approximately 12,000 cubic yards of material would be graded and removed along the existing slopes to provide adequate width for the new pipeline. Fill areas would be established to place the removed soil and avoid haul-off. Once through Mathews Ranch, the alignment turns west to cross the I-15 northbound and southbound freeways entering U.S. Route 66. Construction in this area would require multiple lane closures of I-15. Additionally, several drainages would be affected.

Conversely, the proposed alignment would avoid closure of multiple lanes of I-15 and the creation of new construction access roads into isolated areas. The proposed alignment also would avoid the steep canyon crossings, several drainages, and narrow ridges that would require significant grading.

Devore Segment Alternative

The Devore Segment Alternative begins at U.S. Route 66 north of Kenwood Road. This alignment extends southeast through the San Bernardino National Forest and Mathews Ranch (described above) and into the community of Devore. Within Devore, SoCalGas would need to acquire right-of-way from private landowners. When not on private land, the alignment would be located within narrow public roadways. This alignment exits Devore near the intersection of Devore Road and I-15.

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Conversely, the Proposed Project would avoid the need to acquire right-of-way and construction along the narrow roads within the Devore community and would thus minimize potential construction-related impacts.

Loma Linda Hills Segment Alternative

The Loma Linda Hills Segment Alternative begins in the City of San Bernardino at Tippecanoe Avenue and East Central Street. The alternative alignment then proceeds easterly to Mountain View Avenue then southerly along Mountain View Avenue, crossing the Santa Ana River, I-10, and San Timoteo wash. It jogs easterly along this wash and then turns south, crossing a main railroad track and entering an SCE power line easement to Barton Road. The alignment then turns westerly on Barton Road and back to Mountain View Avenue then southerly on Mountain View Avenue and easterly on Beaumont Avenue to Whittier Street, where it enters the City of Loma Linda South Hills Preserve (Preserve) public use area. The alignment travels approximately 2.75 miles through the Preserve to Reche Canyon Road. This alternative would require acquisition of right-of-way within the Preserve and along other private lands south of Loma Linda Hills. Crossing the Loma Linda Hills would require significant grading operations to remove soil along several narrow, steep ridges to establish a safe construction work area for installing the new pipeline. Approximately 46,000 cubic yards of material would have to be removed and hauled off. The grading would be visible from the general San Bernardino area. The southern 3/4 mile of this alignment lies within or adjacent to a sandy wash and unimproved roads following an existing SoCalGas right-of-way to Reche Canyon Road. Several new access roads and a staging area would be required for spoils stockpile, loading, and equipment parking and maintenance to support the grading operations. Existing unpaved access roads would have to be graded and widened for construction traffic.

Conversely, the proposed alignment would avoid the Preserve and would be located primarily within public roadways. Furthermore, the significant grading that would be required to create workspaces along this segment alternative would be avoided under the Proposed Project, and the natural views of the hills would be maintained.

Cabazon Segment Alternative

The Cabazon Segment Alternative begins in the community of Cabazon at East Westward Avenue and approximately 1/2 mile west of South Hathaway Street. The alternative alignment then proceeds to the east along private land, which would require new right-of-way, and then follows public roadways to existing the SoCalGas right-of-way at Rushmore Avenue. This alternative alignment travels through an operational sand and gravel quarry adjacent to a main railroad track and the loading spur track within the quarry. This alternative would impact several miles of tribal and other private land between Morongo Trail and Rushmore Streets.

Conversely, the Proposed Project would avoid impacting tribal lands and interrupting quarry operations.

7 Alternatives

7.3.2 Alignment Alternative Considered and Rejected

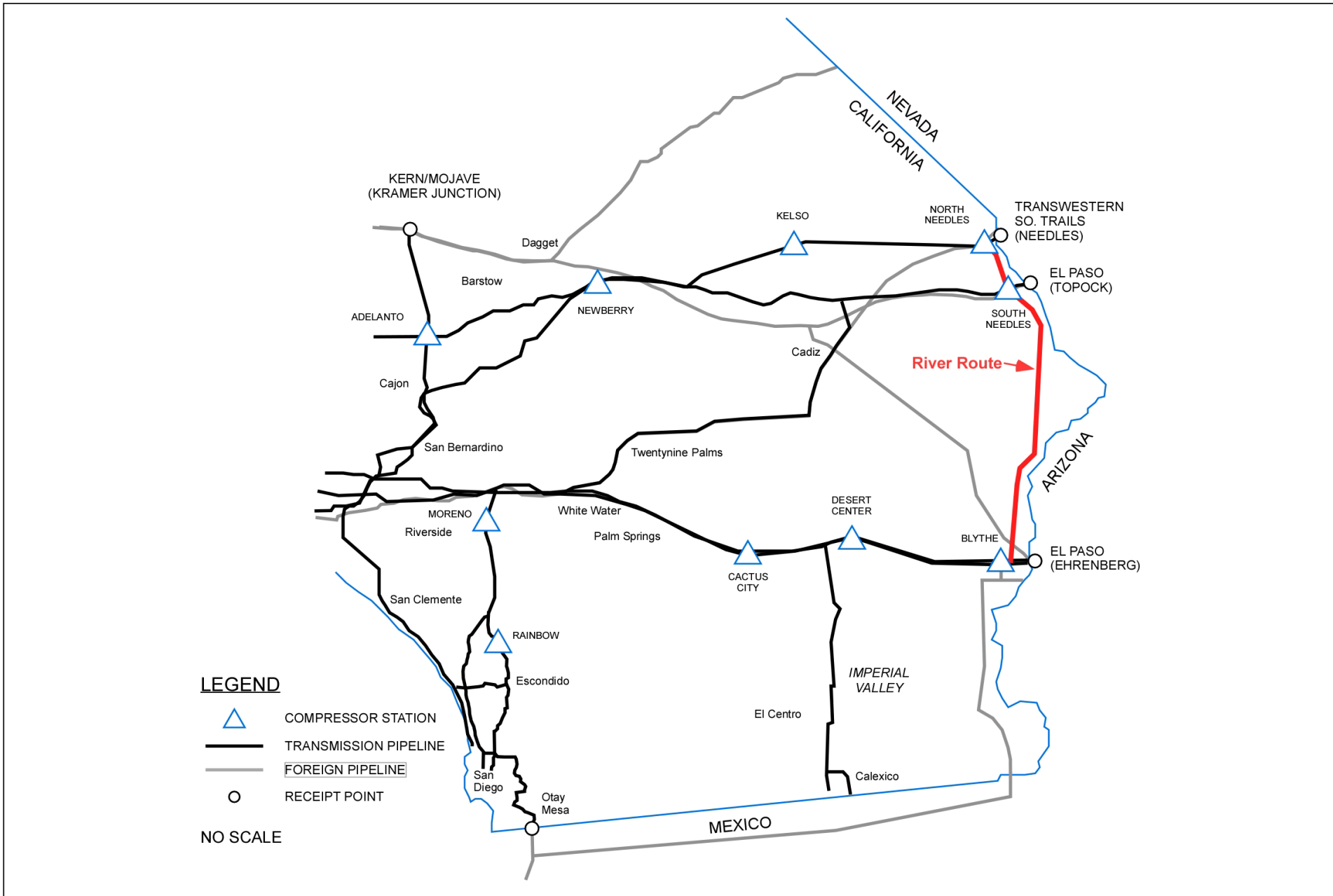
The following alignment alternative was considered but was eliminated from further consideration for the reasons described below.

San Timoteo Segment Alternative





The San Timoteo Segment Alternative begins at the intersection of Mountain View Avenue and Almond Avenue, proceeding east on Almond Avenue then south on California Street, west on Redlands Avenue, south on Nevada Street to San Timoteo Canyon Road and Nevada Street back to San Timoteo Canyon Road southerly, and then southwest on Redlands Boulevard to Locust Street. This alternative alignment lies primarily along two-lane roadways, within Nevada Street, San Timoteo Canyon Road, and Redlands Boulevard. San Timoteo Canyon Road and Redlands Boulevard are the main arterial roadways between Moreno Valley and San Bernardino. Construction of this alternative would require extended road closures of San Timoteo Canyon Road and Redlands Boulevard during construction. Traffic impacts would be significant to local residents along San Timoteo Canyon Road as well as in surrounding communities that use San Timoteo Canyon Road for access. Local and emergency access would be impacted during daylight or night construction operations. These traffic impacts would be significant; consequently, this alternative was eliminated from consideration.

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LEGEND

-  COMPRESSOR STATION
-  TRANSMISSION PIPELINE
-  FOREIGN PIPELINE
-  RECEIPT POINT

NO SCALE

SOURCE: SoCalGas 2014

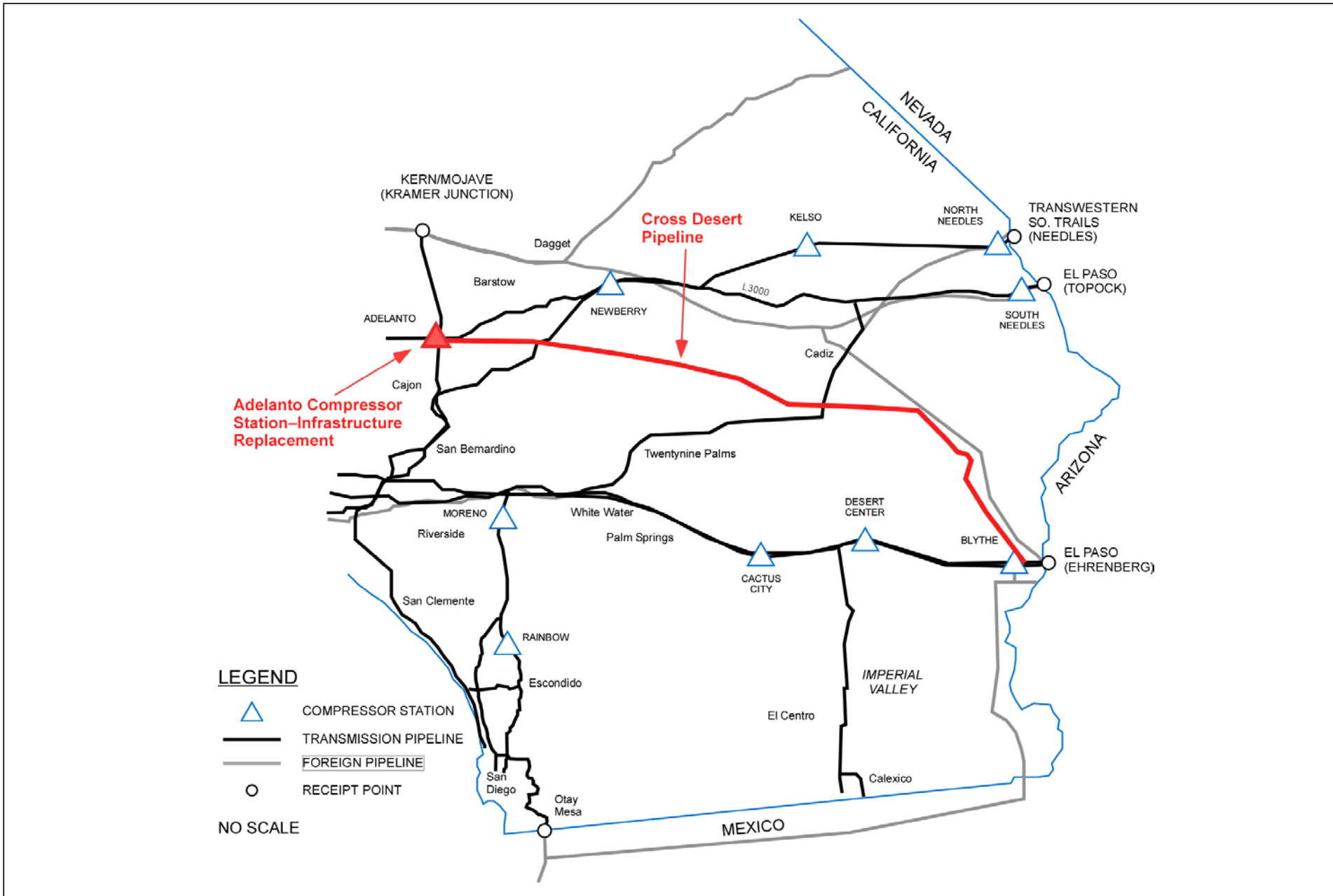


North-South Project





FIGURE 7-1
River Route Alternative

7 Alternatives

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LEGEND

-  COMPRESSOR STATION
-  TRANSMISSION PIPELINE
-  FOREIGN PIPELINE
-  RECEIPT POINT

NO SCALE

SOURCE: SoCalGas 2014

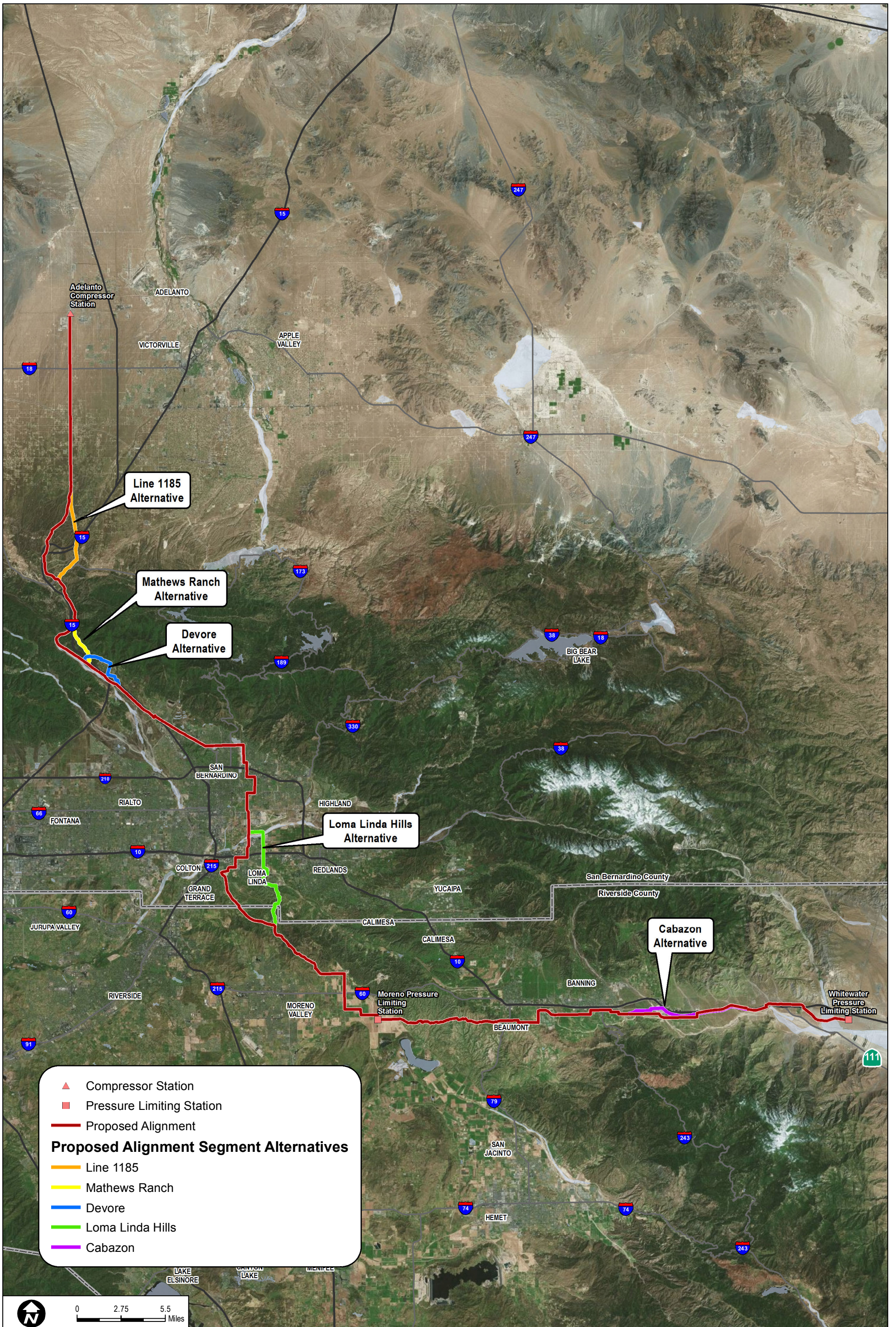


North-South Project

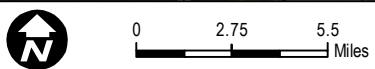
FIGURE 7-2
Cross Desert Alternative

7 Alternatives

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▲ Compressor Station
 ■ Pressure Limiting Station
 — Proposed Alignment
Proposed Alignment Segment Alternatives
 — Line 1185
 — Mathews Ranch
 — Devore
 — Loma Linda Hills
 — Cabazon



SOURCE: BING Maps 2014; Southern California Gas Company 2014



North South Project

FIGURE 7-3
Proposed Alignment Segment Alternatives

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8 FEDERAL PERMITS/ACTIONS REQUIRING NEPA REVIEW

The Proposed Project will extend through land managed by multiple federal agencies. Table 8.1 lists the anticipated federal permits/actions that trigger NEPA review for the Proposed Project.

**Table 8.1
Federal Permits and Approvals**

Federal Permit	Triggering Action	Accepting Authority /Approving Agency	Statutory Reference
EIS / Record of Decision (ROD)	Proposed construction, operation, maintenance and decommissioning of a 36-inch natural gas pipeline on private lands, BLM lands and USFS lands	ROD issued and signed or co-signed by lead NEPA agency and cooperating agencies (to be determined (TBD))	NEPA, 40 CFR 1500 et seq.
Title V Right-of-Way Grant	Proposed Construction, Operation, Maintenance, and Decommissioning of a 36-inch natural gas pipeline on public (BLM administered lands)	U.S. Bureau of Land Management Director and Congressional Notification (pipelines over 24 inches in diameter)	Federal Land Policy and Management Act of 1976 (PL 94-579); Mineral Leasing Act of 1920 30 U.S.C. 181 30 U.S.C.185, Rights-of-way for pipelines through Federal lands 43 CFR 2880 (BLM regulations for Rights-of-way under the Mineral Leasing Act)
Special Use Authorization	Proposed Construction, Operation, Maintenance, and Decommissioning of a 36-inch natural gas pipeline on USFS administered lands	USFS, San Bernardino Forest Supervisor	FLMPA (PL 94-579); 36 CFR 251 (FS Regulations for Special Uses)
Temporary Use Permit(s)	Proposed use of specified Federal lands in the vicinity of, and in connection with a MLA right-of-way (short term uses, not to exceed 3 years)	BLM	43 CFR 2881.12
BA and BO	Grant of right-of-way by the BLM or Special Use Permit by USFS	U.S. Fish and Wildlife Service	ESA, Section 7
Clean Water Act (CWA) 404 Permit (Individual or Nationwide)	Proposed construction may involve discharge of dredged or fill materials in waters of the United States and/or wetlands	U.S. Army Corps of Engineers	CWA, Section 404; 33 CFR 320-330
New Sources Review (construction)	Title V Part 70 (operation); Part 71 if EPA involvement	Mojave Desert Air Pollution Control District	Federal Clean Air Act; 40 CFR Part 70-71

8 Federal Permits/Actions Requiring NEPA Review

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10 OTHER PROCESS-RELATED DATA NEEDS

The CPUC's Information and Criteria List requires that the names and mailing addresses of all owners of land over, under or on which the project, or any part of the project, may be located, and owners of land adjacent thereto, shall be listed in an appendix to the PEA. A table identifying all parcels within 300 feet of the Proposed Project is provided in Appendix E, including each parcel's APN number, owner mailing address, and parcel's physical address.

10 Other Process-Related Data Needs

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**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Application of Southern California Gas Company
(U 904 G) and San Diego Gas & Electric Company
(U 902 G) For Authority To Recover North-South
Project Revenue Requirement In Customer Rates
And For Approval Of Related Cost Allocation And
Rate Design Proposals

Application 13-12-013

**PROPONENT'S ENVIRONMENTAL ASSESSMENT
NORTH-SOUTH PROJECT
(VOLUME 2 OF 2)**

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APPENDIX A
Air Quality Calculations

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Document Title Screening HHRA for Adelanto Turbine Compressor Repower Project

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Facility Owner/Operator Southern California Gas Company

Facility Name Adelanto Compressor Station

NAICS Code 221210 Natural Gas Distribution

Source Description Solar Mars 90 Compressor Set (3 units)

Facility Permit ID MDAQMD FOP 3100066

Facility Address Koala/Rancho Roads, Adelanto, CA 92301

Latitude, North 34.556995°

Longitude, West -117.450384°

Elevation, feet ASL 2,957

Author Bradford Boyes

Peer Reviewer **PRELIMINARY COPY**

Date 5/20/2014

Notes

The Project includes an upgrade of the existing ACS facility. The current station consists of a single gas-turbine driven compressor installed in the early 1970's. The Proposed Project would require approximately 30,000 site horsepower (hp) of compression and would need to be capable of delivering 800 mmscf of natural gas at 850 psig. Consequently, the horsepower output of the existing compressor is inadequate to provide the necessary throughput for the Proposed Project at the required design conditions, and a new compressor meeting the Proposed Project's design criteria would be installed. Since the existing turbine-driven compressor is no longer in commercial production, has high emissions, and ongoing maintenance and procurement of replacement parts is difficult and costly, it would be disconnected and retired in place (decommissioned). The upgraded compressor station operating range would vary from 75 to 800 mmscf, with a minimum suction pressure of 475 psig and a maximum discharge pressure of 850 psig. The design for the compressor station must provide full performance at all expected operating conditions up to 110 °F with lower emissions than the existing equipment. Performance data was provided by SoCalGas for the Adelanto Turbine Compressor Repower Project for a Solar Mars 90 with a broad design temperature range of 20 °F (cold winter night) to 120 °F (hot summer day). Best Available Control Technology (BACT) assumed for NO_x, CO, and VOC consisting of SoLoNO_x™ (dry low NO_x combustors), selective catalytic reduction (SCR) for NO_x, and oxidation catalyst (OXCAT) for CO and VOC, including organic TACs.



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Table 1 - Estimated Criteria Emissions and Ammonia Slip Summary

Criteria Pollutants & Ammonia Slip	Cold Weather (2 units)		Hot Weather (3 units)		Annual tons/yr
	lbs/hr	lbs/day	lbs/hr	lbs/day	
NO _x	2.2	53.9	2.6	62.3	10.6
CO	2.7	65.6	3.2	75.9	12.9
VOC	0.6	15.0	0.7	17.3	2.9
PM ₁₀	3.0	72.8	3.5	84.2	14.3
SO _x	0.2	3.8	0.2	4.4	0.7
NH ₃ Slip	1.7	39.8	1.9	46.1	7.8

Sources: Solar 2014, EPA 1998/2000, SCAQMD 2014, CARB 2014

Table 2 - Estimated Greenhouse Gases Emissions Summary

Greenhouse Gases	Cold Weather (2 units)		Hot Weather (3 units)		Annual MT/yr
	kg/hr	MT/day	kg/hr	MT/day	
CO ₂	12,931	310	14,960	359	122,163
CH ₄	0.93	0.02	1.07	0.03	8.7
N ₂ O	0.22	0.01	0.25	0.01	2.1
CO ₂ e	13,019	312	15,063	362	122,999

Sources: Solar 2014, EPA 2014, CR 2013

Table 3 - Toxic Air Contaminants Screening Health Risk Assessment

Toxic Air Contaminants Risks	Cold Weather (2 units)	Hot Weather (3 units)	Annual Average
Residential Maximum Individual Cancer Risk	4.0E-08	3.5E-08	3.7E-08
Commercial Maximum Individual Cancer Risk	7.4E-09	5.7E-09	6.6E-09
Residential Maximum Chronic Hazard Index	0.00075	0.00066	0.00070
Commercial Maximum Chronic Hazard Index	0.00076	0.00058	0.00067
Residential Maximum Acute Hazard Index	0.0012	0.0010	0.0011
Commercial Maximum Acute Hazard Index	0.0012	0.0009	0.0011

Sources: SCAQMD 2005, CARB 2013, EPA 2011

Table 4 - CEQA Significance Thresholds Evaluation

Pollutant / Risk	Maximum	Threshold	Significance	Annual	Threshold	Significance
	lbs/day	lbs/day		tons/yr	tons/yr	
NO _x	62.3	137	LTS	10.6	25	LTS
CO	75.9	548	LTS	12.9	100	LTS
VOC	17.3	137	LTS	2.9	25	LTS
PM ₁₀	84.2	82	PS	14.3	15	LTS
SO _x	4.4	137	LTS	0.7	25	LTS
CO ₂ e	797,000	548,000	PS	135,600	100,000	PS
MICR (unitless)	—	—	—	3.7E-08	1.0E-05	LTS
HIC (unitless)	—	—	—	0.0007	1.0	LTS
HIA (unitless)	0.0011	1.0	LTS	—	—	—

Source: MDAQMD 2011

Notes:

- PS - Potentially Significant
- LTS - Less Than Significant
- MICR - Maximum Individual Cancer Risk
- HIC - Chronic Hazard Index
- HIA - Acute Hazard Index

Table 5 - Existing Equipment PTE and Difference with Repower BACT PTE

Pollutant	EF	Heat Input	Existing Equipment Potential to Emit			Δ Repower
	lb/mmBTU	mmBTU/hr	lbs/hr	lbs/day	tons/yr*	tons/yr*
NO _x	0.3315	110	36.47	875.22	159.73	-149.13
CO	0.0820	110	9.02	216.48	39.51	-26.60
VOC	0.0021	110	0.23	5.54	1.01	1.94
PM ₁₀	0.0066	110	0.73	17.42	3.18	11.14
SO _x	0.0007	110	0.07	1.72	0.31	0.44
CO ₂ e	117.7768	110	12,955	310,931	51,479	71,521

Source: FOP 3100066, EPA 1998/2000, CR 2013

* CO₂e in metric tonnes per year (MT/yr)



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Solar Mars 90 Compressor Drive - BACT Determination (9.86 MW / 13,220 BHP @ ISO standard conditions, simple cycle, PNG fuel)

Agency	Year	A/N	Facility Name	Manufacturer & Model	Type	Fuel	Exhaust Controls	Rating	NO _x	CO	VOC	PM ₁₀	NH ₃	Averaging Times
								MW	ppmv	ppmv	ppmv	gr/dscf	ppmv	
SCAQMD	2001	974481	University of California San Diego	Solar SoLoNO _x Titan 130S	SC	PNG	SCR+OXCAT	12.89	2.5	5	—	—	—	3-hour
SCAQMD	2001	383044	Indigo Energy Facility	GE LM6000 Sprint	SC	PNG	SCR+OXCAT	45	5	6	2	0.01	5	1-hour
SDAPCD	2008	985693	Escondido Energy Center LLC	GE LM6000	SC	PNG	SCR+OXCAT	46.5	2.5	—	2	—	—	1-hour
SCAQMD	2001	374502	Los Angeles DWP	GE LM6000 Sprint	SC	PNG	SCR+OXCAT	47.4	5	6	2	0.01	5	1-,3-hour
SCAQMD	2003	406065	El Colton LLC	GE LM6000 Sprint	SC	PNG	SCR+OXCAT	48.7	3.5	6	2	0.01	5	3-hour
SDAPCD	2002	976021	CalPeak Power El Cajon LLC	P&W FT-8 DLN Twin Pac	SC	PNG	SCR+OXCAT	49.5	3.5	5	2	—	—	1-,3-hour
SDAPCD	2010	985708	Orange Grove Project	GE LM6000	SC	PNG	SCR+OXCAT	49.5	2.5	—	2	—	—	1-hour
BAAQMD	2002	6510	Lambie Energy Center	GE LM6000 PC	SC	PNG	SCR+OXCAT	49.9	2.5	6	2	3 lb/hr	10	3-hour
SDAPCD	2009	987824	El Cajon Energy LLC	GE LM6000 PC	SC	PNG	SCR+OXCAT	49.95	2.5	—	2	—	—	1-hour
SJVAPCD	2001	98-AFC-2	La Paloma Generating LLC	ABB GT-24	SC	PNG	SCR+OXCAT	262	2.5	6	2	—	10	1-,3-hour
Best Available Control Technology Emissions (ppmv @ 15% oxygen)									2.5	5	2	0.01	5	

Sources: SCAQMD 2014, CARB 2014

Notes:

ppmv corrected to 15% oxygen in stack gas (dry)

VOC expressed as methane (CH₄)

gr/dscf - grains per dry standard cubic foot

SC - simple cycle (no heat recovery)

PNG - pipeline natural gas (CPUC regulated contents)

SCR - selective catalytic reduction

OXCAT - oxidation catalyst

Mars, Titan, and SoLoNO_x are trademarks of Solar Turbines, Inc.



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Facility Name Adelanto Compressor Station
NAICS Code 221210 Natural Gas Distribution
Source Description Solar Mars 90 Compressor Set (3 units)

Input Performance Parameters	Units	1 x Cold	1 x Hot	2 x Cold	3 x Hot
Inlet Air Temperature	°F	20	120	20	120
	°C	-7	49	-7	49
Relative Humidity	percent	30	30	30	30
Elevation	feet ASL	3,000	3,000	3,000	3,000
Barometric Pressure	psia	13.2	13.2	13.2	13.2
	mm Hg	681	681	681	681
Unit Load	percent	100	100	100	100
Heat Input LHV	mmBTU/hr	112.21	86.55	224.42	259.65
Fuel Gas Lower Heating Value	BTU/scf	939.2	939.2	939.2	939.2
Fuel Gas Flowrate	mcf/hr	119.47	92.15	238.95	276.46
Fuel Gas Higher Heating Value	BTU/scf	1019.9	1019.9	1019.9	1019.9
Heat Input HHV	mmBTU/hr	121.85	93.98	243.70	281.95

Output Performance Parameters	Units	1 x Cold	1 x Hot	2 x Cold	3 x Hot
Power Output	BHP	14,748	10,230	29,496	30,690
	KW	10,998	7,629	21,996	22,886
Heat Rate	BTU/BHP-hr	7,608	8,460	7,608	8,460
Thermal Efficiency	percent	33.5%	30.1%	33.5%	30.1%
Turbine Exhaust Temperature	°F	877	971	877	971
	°C	469	522	469	522
Stack Exit Temperature (estimated)	°R	1327	1421	1327	1421
	°K	737	789	737	789
Stack Gas Flowrate	lbs/hr (LHV)	320,505	250,082	641,010	750,246
	dscf/hr (HHV)	3,759,532	2,899,809	7,519,065	8,699,426
	wacf/hr (HHV)	12,845,013	10,609,458	25,690,025	31,828,374
Stack Height (estimated)	feet	46	46	46	46
	meters	14.02	14.02	14.02	14.02
Stack Diameter (estimated)	feet	6.00	6.00	10.39	10.39
	meters	1.83	1.83	3.17	3.17
Stack Exit Velocity (estimated)	ft/min	7,572	6,254	5,048	6,254
	m/sec	38.5	31.8	25.6	31.8

Pre-Control Emissions	Units	1 x Cold	1 x Hot	2 x Cold	3 x Hot
NO _x (SoLoNO _x)™	ppmv @ 15% O ₂	15	—	15	—
	lbs/mmBTU (LHV)	0.060	0.059	0.060	0.059
	lbs/hr (LHV)	6.733	5.106	13.465	15.319
	lbs/mmBTU (HHV)	0.055	0.054	0.055	0.054
	lbs/hr (HHV)	6.733	5.106	13.465	15.319
CO (SoLoNO _x)™	ppmv @ 15% O ₂	25	—	25	—
	lbs/mmBTU (LHV)	0.061	0.060	0.061	0.060
	lbs/hr (LHV)	6.84	5.19	13.69	15.58
	lbs/mmBTU (HHV)	0.056	0.055	0.056	0.055
VOC (SoLoNO _x)™	ppmv @ 15% O ₂	25	—	25	—
	lbs/mmBTU (LHV)	0.035	0.034	0.035	0.034
	lbs/hr (LHV)	3.93	2.94	7.85	8.83
	lbs/mmBTU (HHV)	0.032	0.031	0.032	0.031
	lbs/hr (HHV)	3.90	2.92	7.81	8.77

Sources: Solar 2014, EPA 1998/2000, NOAA 2014



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Facility Name Adelanto Compressor Station
NAICS Code 221210 Natural Gas Distribution
Source Description Solar Mars 90 Compressor Set (3 units)

Fuel Gas Flowrate 0.23895 mmcf/hr
Fuel Gas HHV 1020 BTU/scf
Heat Input HHV 243.70 mmBTU/hr Cold
Daily Operation 24 hrs/day PTE
Annual Operation 8760 hrs/yr PTE
VOC/TAC Ratio 1.0000 lb/lb
TAC Scaler 0.2553 fraction 74.5% OXCAT DRE

Criteria Pollutants, Ammonia Slip & GHGs	BACT	Units	EF	Estimated Emissions		
			lbs/mmBTU	lbs/hr	lbs/day	tons/yr*
NO _x	2.5	ppmv	0.00921	2.24	53.86	9.83
CO	5	ppmv	0.01121	2.73	65.57	11.97
VOC	2	ppmv	0.00256	0.62	14.99	2.74
PM ₁₀	0.01	gr/dscf	0.01244	3.03	72.78	13.28
SO _x	0.6644	lb/mmcf	0.00065	0.16	3.81	0.70
NH ₃ Slip	5	ppmv	0.00681	1.66	39.81	7.27
CO ₂	—		116.98	28,507	684,163	113,272
CH ₄	—		0.00838	2.04	49.00	8.11
N ₂ O	—		0.00198	0.48	11.60	1.92
CO ₂ e	—		117.78	28,702	688,846	114,047

Sources: Solar 2014, SCAQMD 2014, CARB 2014, CR 2013, EPA 1998/2000

* GHGs in metric tonnes per year (MT/yr)

Toxic Air Contaminants	CAS No.	Max EF	Mean EF	Maximum Estimated Emissions		
		lbs/mmcf	lbs/mmcf	lbs/hr	lbs/day	tons/yr
1,3-Butadiene	106990	1.33E-04	1.27E-04	8.11E-06	1.95E-04	3.55E-05
2-Chloronaphthalene	91587	4.69E-07	2.72E-07	2.86E-08	6.87E-07	1.25E-07
2-Methylnaphthalene	91576	6.30E-06	5.29E-06	3.84E-07	9.22E-06	1.68E-06
Acenaphthene	83329	1.22E-04	1.90E-05	7.44E-06	1.79E-04	3.26E-05
Acenaphthylene	208968	8.25E-05	1.47E-05	5.03E-06	1.21E-04	2.20E-05
Acetaldehyde	75070	5.11E-01	1.37E-01	3.12E-02	7.48E-01	1.37E-01
Acrolein	107028	6.93E-02	1.89E-02	4.23E-03	1.01E-01	1.85E-02
Anthracene	120127	1.53E-04	3.38E-05	9.33E-06	2.24E-04	4.09E-05
Benzene	71432	4.72E-02	1.33E-02	2.88E-03	6.91E-02	1.26E-02
Benzo(a)anthracene	56556	1.34E-04	2.26E-05	8.17E-06	1.96E-04	3.58E-05
Benzo(a)pyrene	50328	9.16E-05	1.39E-05	5.59E-06	1.34E-04	2.45E-05
Benzo(b)fluoranthene	205992	6.72E-05	1.13E-05	4.10E-06	9.84E-05	1.80E-05
Benzo(e)pyrene	192972	7.33E-07	5.44E-07	4.47E-08	1.07E-06	1.96E-07
Benzo(g,h,i)perylene	191242	8.25E-05	1.37E-05	5.03E-06	1.21E-04	2.20E-05
Benzo(k)fluoranthene	207089	6.72E-05	1.10E-05	4.10E-06	9.84E-05	1.80E-05
Chrysene	218019	1.50E-04	2.52E-05	9.15E-06	2.20E-04	4.01E-05
Dibenz(a,h)anthracene	53703	1.34E-04	2.35E-05	8.17E-06	1.96E-04	3.58E-05
Ethylbenzene	100414	5.70E-02	1.79E-02	3.48E-03	8.34E-02	1.52E-02
Fluoranthene	206440	3.05E-04	4.32E-05	1.86E-05	4.46E-04	8.15E-05
Fluorene	86737	4.58E-04	5.80E-05	2.79E-05	6.70E-04	1.22E-04
Formaldehyde	50000	6.87E+00	9.17E-01	4.19E-01	1.01E+01	1.84E+00
Hexane	110543	3.82E-01	2.59E-01	2.33E-02	5.59E-01	1.02E-01
Indeno(1,2,3-cd)pyrene	193395	1.34E-04	2.35E-05	8.17E-06	1.96E-04	3.58E-05
Naphthalene	91203	7.88E-03	1.66E-03	4.81E-04	1.15E-02	2.11E-03
Perylene	198550	9.68E-07	7.00E-07	5.90E-08	1.42E-06	2.59E-07
Phenanthrene	85018	2.35E-03	3.13E-04	1.43E-04	3.44E-03	6.28E-04
Propylene	115071	2.00E+00	7.71E-01	1.22E-01	2.93E+00	5.34E-01
Propylene Oxide	75569	5.87E-02	4.78E-02	3.58E-03	8.59E-02	1.57E-02
Pyrene	129000	1.27E-04	2.77E-05	7.75E-06	1.86E-04	3.39E-05
Toluene	108883	1.68E-01	7.10E-02	1.02E-02	2.46E-01	4.49E-02
Xylene (Total)	1330207	6.26E-02	2.61E-02	3.82E-03	9.16E-02	1.67E-02
Totals				6.24E-01	1.50E+01	2.74E+00

Source: CARB 2013. TAC Emission factors obtained from California Air Resources Board (CARB) California Air Toxics Emission Factor Database (CATEF) for turbine burning natural gas, SCC Code 20200203 Turbine: Cogeneration. Maximum emission factor used for this estimate.

Notes:

Total organic TAC emissions scaled against controlled VOC emissions so that total organic TAC emissions equal total VOC emissions (BACT).



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Facility Name Adelanto Compressor Station
NAICS Code 221210 Natural Gas Distribution
Source Description Solar Mars 90 Compressor Set (3 units)

Fuel Gas Flowrate 0.27646 mmcf/hr
Fuel Gas HHV 1020 BTU/scf
Heat Input HHV 281.95 mmBTU/hr Cold
Daily Operation 24 hrs/day PTE
Annual Operation 8760 hrs/yr PTE
VOC/TAC Ratio 1.0000 lb/lb
TAC Scaler 0.2553 fraction 74.5% OXCAT DRE

Criteria Pollutants, Ammonia Slip & GHGs	BACT	Units	EF	Estimated Emissions		
			lbs/mmBTU	lbs/hr	lbs/day	tons/yr*
NO _x	2.5	ppmv	0.00921	2.60	62.32	11.37
CO	5	ppmv	0.01121	3.16	75.86	13.85
VOC	2	ppmv	0.00256	0.72	17.34	3.16
PM ₁₀	0.01	gr/dscf	0.01244	3.51	84.20	15.37
SO _x	0.6644	lb/mmcf	0.00065	0.18	4.41	0.80
NH ₃ Slip	5	ppmv	0.00681	1.92	46.06	8.41
CO ₂	—		116.98	32,982	791,565	131,054
CH ₄	—		0.00838	2.36	56.69	9.39
N ₂ O	—		0.00198	0.56	13.43	2.22
CO ₂ e	—		117.78	33,208	796,983	131,951

Sources: Solar 2014, SCAQMD 2014, CARB 2014, CR 2013, EPA 1998/2000

* GHGs in metric tonnes per year (MT/yr)

Toxic Air Contaminants	CAS No.	Max EF	Mean EF	Maximum Estimated Emissions		
		lbs/mmcf	lbs/mmcf	lbs/hr	lbs/day	tons/yr
1,3-Butadiene	106990	1.33E-04	1.27E-04	9.39E-06	2.25E-04	4.11E-05
2-Chloronaphthalene	91587	4.69E-07	2.72E-07	3.31E-08	7.94E-07	1.45E-07
2-Methylnaphthalene	91576	6.30E-06	5.29E-06	4.45E-07	1.07E-05	1.95E-06
Acenaphthene	83329	1.22E-04	1.90E-05	8.61E-06	2.07E-04	3.77E-05
Acenaphthylene	208968	8.25E-05	1.47E-05	5.82E-06	1.40E-04	2.55E-05
Acetaldehyde	75070	5.11E-01	1.37E-01	3.61E-02	8.65E-01	1.58E-01
Acrolein	107028	6.93E-02	1.89E-02	4.89E-03	1.17E-01	2.14E-02
Anthracene	120127	1.53E-04	3.38E-05	1.08E-05	2.59E-04	4.73E-05
Benzene	71432	4.72E-02	1.33E-02	3.33E-03	7.99E-02	1.46E-02
Benzo(a)anthracene	56556	1.34E-04	2.26E-05	9.46E-06	2.27E-04	4.14E-05
Benzo(a)pyrene	50328	9.16E-05	1.39E-05	6.46E-06	1.55E-04	2.83E-05
Benzo(b)fluoranthene	205992	6.72E-05	1.13E-05	4.74E-06	1.14E-04	2.08E-05
Benzo(e)pyrene	192972	7.33E-07	5.44E-07	5.17E-08	1.24E-06	2.27E-07
Benzo(g,h,i)perylene	191242	8.25E-05	1.37E-05	5.82E-06	1.40E-04	2.55E-05
Benzo(k)fluoranthene	207089	6.72E-05	1.10E-05	4.74E-06	1.14E-04	2.08E-05
Chrysene	218019	1.50E-04	2.52E-05	1.06E-05	2.54E-04	4.64E-05
Dibenz(a,h)anthracene	53703	1.34E-04	2.35E-05	9.46E-06	2.27E-04	4.14E-05
Ethylbenzene	100414	5.70E-02	1.79E-02	4.02E-03	9.65E-02	1.76E-02
Fluoranthene	206440	3.05E-04	4.32E-05	2.15E-05	5.17E-04	9.43E-05
Fluorene	86737	4.58E-04	5.80E-05	3.23E-05	7.76E-04	1.42E-04
Formaldehyde	50000	6.87E+00	9.17E-01	4.85E-01	1.16E+01	2.12E+00
Hexane	110543	3.82E-01	2.59E-01	2.70E-02	6.47E-01	1.18E-01
Indeno(1,2,3-cd)pyrene	193395	1.34E-04	2.35E-05	9.46E-06	2.27E-04	4.14E-05
Naphthalene	91203	7.88E-03	1.66E-03	5.56E-04	1.33E-02	2.44E-03
Perylene	198550	9.68E-07	7.00E-07	6.83E-08	1.64E-06	2.99E-07
Phenanthrene	85018	2.35E-03	3.13E-04	1.66E-04	3.98E-03	7.26E-04
Propylene	115071	2.00E+00	7.71E-01	1.41E-01	3.39E+00	6.18E-01
Propylene Oxide	75569	5.87E-02	4.78E-02	4.14E-03	9.94E-02	1.81E-02
Pyrene	129000	1.27E-04	2.77E-05	8.96E-06	2.15E-04	3.93E-05
Toluene	108883	1.68E-01	7.10E-02	1.19E-02	2.85E-01	5.19E-02
Xylene (Total)	1330207	6.26E-02	2.61E-02	4.42E-03	1.06E-01	1.93E-02
Totals				7.23E-01	1.73E+01	3.16E+00

Source: CARB 2013. TAC Emission factors obtained from California Air Resources Board (CARB) California Air Toxics Emission Factor Database (CATEF) for turbine burning natural gas, SCC Code 20200203 Turbine: Cogeneration. Maximum emission factor used for this estimate.

Notes:

Total organic TAC emissions scaled against controlled VOC emissions so that total organic TAC emissions equal total VOC emissions (BACT).



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Facility Owner/Operator Southern California Gas Company
Facility Name Adelanto Compressor Station
NAICS Code 221210 Natural Gas Distribution
Source Description Solar Mars 90 Compressor Set (3 units)

Tier 3 - AERSCREEN Modeling Analysis (Risk Assessment Procedures for Rules 1401 and 212)

Model Output Dispersion Factors, X/Q	X/Q, Annual Average		X/Q, 1-Hour Average	
	(ug/m ³)/(g/s)	(ug/m ³)/(ton/yr)	(ug/m ³)/(g/s)	(ug/m ³)/(lb/hr)
Highest Residential Receptor Impact	0.1003	0.0029	1.0030	0.1264
Highest Commercial Receptor Impact	0.1022	0.0029	1.0220	0.1288

Stack Height (feet)			
Actual	>14 to 24	>24 to 49	>49
46			

Receptor Distances (meters)	
Residential	Commercial
3,579	2,909

Mass Rate Conversion Factors	(g/s)/(ton/yr)	0.0288	(g/s)/(lb/hr)	0.126

Operating Time	
Hours/day	Hours/year
24	8760

Meteorological Adjustment Factor (MET)		1.00
Annual Adjustment Factor (AF _{ann})		
DBR	Residential	302.00
	Commercial	149.00
EVF	Residential	0.96
	Commercial	0.38

Calculation of Maximum Individual Cancer Risk

MICR = Cancer Potency (CP) x Dose-Inhalation (DI) x Multipathway Factor (MP)
 DI = C_{air} x DBR x EVF x 10⁻⁶
 Cair = Qtons x X/Q x AF_{ann} x MET
 MICR = CP x Q_{tons} x X/Q x AF_{ann} x MET x DBR x EVF x 10⁻⁶ x MP

Calculation of Chronic and Acute Hazard Index

Total HIC = SUM[(Qyr) * (X/Q) * MET * MP]/(Chronic REL) for each TAC
 Total HIA = SUM[Qhr * (X/Q)hr*Adjustment Factor]/(Acute REL) for each TAC
 HIC = Chronic Hazard Index
 HIA = Acute Hazard Index
 Qyr = emissions in lb/year
 Qhr = Annual Emissions expressed in (lbs/hr)
 X/Q = the dispersion factor (ug/m³)/(emission rate)
 REL = Reference Exposure Level (ug/m³)
 MP = multipathway adjustment factor
 MET = meteorological correction factor
 MHC = Max Hourly Controlled
 MAC = Maximum Annual Controlled

Pollutant		Maximum Individual Cancer Risk (MICR)						
Rule 1401 Name	Code	MAC (tons/yr)	MHC (lb/hr)	Cancer Potency	Multi-pathway Factor		Res. MICR	Comm. MICR
					MP _R	MP _W		
Butadiene, 1,3-	B9	3.55E-05	8.11E-06	6.00E-01	1.00	1.00	1.78E-11	3.55E-12
2-Chloronaphthalene		1.25E-07	2.86E-08					
2-Methylnaphthalene		1.68E-06	3.84E-07					
Acenaphthene		3.26E-05	7.44E-06					
Acenaphthylene		2.20E-05	5.03E-06					
Acetaldehyde	A1	1.37E-01	3.12E-02	1.00E-02	1.00	1.00	1.14E-09	2.27E-10
Acrolein	A3	1.85E-02	4.23E-03					
Anthracene		4.09E-05	9.33E-06					
Benzene (including benzene from gasoline)	B1	1.26E-02	2.88E-03	1.00E-01	1.00	1.00	1.05E-09	2.10E-10
Benz[a]anthracene	P10	3.58E-05	8.17E-06	3.90E-01	29.76	14.62	3.48E-10	3.40E-11
Benzo[a]pyrene	P11	2.45E-05	5.59E-06	3.90E+00	29.76	14.62	2.38E-09	2.32E-10
Benzo[b]fluoranthene	P12	1.80E-05	4.10E-06	3.90E-01	29.76	14.62	1.74E-10	1.70E-11
Benzo(e)pyrene		1.96E-07	4.47E-08					
Benzo(g,h,i)perylene		2.20E-05	5.03E-06					
Benzo[k]fluoranthene	P14	1.80E-05	4.10E-06	3.90E-01	29.76	14.62	1.74E-10	1.70E-11
Chrysene	P15	4.01E-05	9.15E-06	3.90E-02	29.76	14.62	3.89E-11	3.80E-12
Dibenz[a,h]anthracene	P17	3.58E-05	8.17E-06	4.10E+00	10.26	5.45	1.26E-09	1.33E-10
Ethyl benzene	E4	1.52E-02	3.48E-03	8.70E-03	1.00	1.00	1.11E-10	2.21E-11
Fluoranthene		8.15E-05	1.86E-05					
Fluorene		1.22E-04	2.79E-05					
Formaldehyde	F3	1.84E+00	4.19E-01	2.10E-02	1.00	1.00	3.22E-08	6.42E-09
Hexane (n-)	H8	1.02E-01	2.33E-02					
Indeno(1,2,3-C,D)pyrene	P27	3.58E-05	8.17E-06	3.90E-01	29.76	14.62	3.48E-10	3.40E-11
Naphthalene	P30	2.11E-03	4.81E-04	1.20E-01	1.00	1.00	2.11E-10	4.21E-11
Perylene		2.59E-07	5.90E-08					
Phenanthrene		6.28E-04	1.43E-04					
Propylene	P78	5.34E-01	1.22E-01					
Propylene oxide (or 1,2-epoxy propane)	P80	1.57E-02	3.58E-03	1.30E-02	1.00	1.00	1.71E-10	3.39E-11
Pyrene		3.39E-05	7.75E-06					
Toluene (methyl benzene)	T3	4.49E-02	1.02E-02					
Xylenes (isomers and mixtures)	X1	1.67E-02	3.82E-03					
Cumulative Totals				Residential MICR →			4.0E-08	
				Commercial MICR →				7.4E-09

Sources: SCAQMD 2005, CARB 2013, EPA 2011

Chronic Health Index (HIC)																	
REL (ug/m3)	Multi-pathway Factor		Res. HIC	Comm. HIC	Target Organs												
	MP _R	MP _w			AL	BN	CV	DEV	END	EYE	HEM	IMM	KID	NS	REP	RESP	SKIN
2.00E+01	1	1	5.13E-09	5.22E-09											X		
1.40E+02	1	1	2.81E-06	2.87E-06												X	
3.50E-01	1	1	1.53E-04	1.56E-04												X	
6.00E+01	1	1	6.06E-07	6.18E-07				X			X		X				
2.00E+03	1	1	2.20E-08	2.24E-08	X			X	X				X				
9.00E+00	1	1	5.88E-04	6.00E-04												X	
7.00E+03	1	1	4.21E-08	4.29E-08									X				
9.00E+00	1	1	6.75E-07	6.88E-07												X	
3.00E+03	1	1	5.14E-07	5.24E-07												X	
3.00E+01	1	1	1.51E-06	1.54E-06												X	
3.00E+02	1	1	4.32E-07	4.40E-07				X					X			X	
7.00E+02	1	1	6.89E-08	7.02E-08									X			X	
Residential Max. HIC →			0.00075		2.2E-08	0.0E+00	0.0E+00	1.1E-06	2.2E-08	0.0E+00	6.1E-07	0.0E+00	2.2E-08	1.1E-06	5.1E-09	7.5E-04	0.0E+00
Commercial Max. HIC →			0.00076		2.2E-08	0.0E+00	0.0E+00	1.1E-06	2.2E-08	0.0E+00	6.2E-07	0.0E+00	2.2E-08	1.2E-06	5.2E-09	7.6E-04	0.0E+00

Acute Health Index (HIA)													
REL (ug/m3)	Adjust. Factor	Res. HIA	Comm. HIA	Target Organs									
				AL	CV	DEV	EYE	HEM	IMM	NS	REP	RESP	SKIN
	1												
	1												
	1												
	1												
4.70E+02	1	8.38E-06	8.54E-06				X					X	
2.50E+00	1	2.14E-04	2.18E-04				X					X	
	1												
1.30E+03	1	2.80E-07	2.85E-07			X		X	X		X		
	1												
	1												
	1												
	1												
	1												
	1												
	1												
	1												
	1												
	1												
5.50E+01	1	9.63E-04	9.81E-04				X						
	1												
	1												
	1												
	1												
	1												
3.10E+03	1	1.46E-07	1.49E-07			X	X				X	X	
	1												
3.70E+04	1	3.50E-08	3.57E-08			X	X			X	X	X	
2.20E+04	1	2.19E-08	2.23E-08				X					X	
Res. Max. HIA →		0.0012		0.0E+00	0.0E+00	4.6E-07	1.2E-03	2.8E-07	2.8E-07	3.5E-08	4.6E-07	2.2E-04	0.0E+00
Comm. Max. HIA →			0.0012	0.0E+00	0.0E+00	4.7E-07	1.2E-03	2.9E-07	2.9E-07	3.6E-08	4.7E-07	2.3E-04	0.0E+00



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Facility Owner/Operator Southern California Gas Company
Facility Name Adelanto Compressor Station
NAICS Code 221210 Natural Gas Distribution
Source Description Solar Mars 90 Compressor Set (3 units)

Tier 3 - AERSCREEN Modeling Analysis (Risk Assessment Procedures for Rules 1401 and 212)

Model Output Dispersion Factors, X/Q	X/Q, Annual Average		X/Q, 1-Hour Average	
	(ug/m ³)/(g/s)	(ug/m ³)/(ton/yr)	(ug/m ³)/(g/s)	(ug/m ³)/(lb/hr)
Highest Residential Receptor Impact	0.0881	0.0025	0.8805	0.1109
Highest Commercial Receptor Impact	0.0784	0.0023	0.7839	0.0988

Mass Rate Conversion Factors	(g/s)/(ton/yr)	0.0288	(g/s)/(lb/hr)	0.126
------------------------------	----------------	--------	---------------	-------

Meteorological Adjustment Factor (MET)		1.00
Annual Adjustment Factor (AF _{ann})		1.00
DBR	Residential	302.00
	Commercial	149.00
EVF	Residential	0.96
	Commercial	0.38

Stack Height (feet)			
Actual	>14 to 24	>24 to 49	>49
46			

Receptor Distances (meters)	
Residential	Commercial
1,779	2,679

Operating Time	
Hours/day	Hours/year
24	8760

Calculation of Maximum Individual Cancer Risk

MICR = Cancer Potency (CP) x Dose-Inhalation (DI) x Multipathway Factor (MP)
 DI = C_{air} x DBR x EVF x 10⁻⁶
 Cair = Qtons x X/Q x AF_{ann} x MET
 MICR = CP x Q_{tons} x X/Q x AF_{ann} x MET x DBR x EVF x 10⁻⁶ x MP

Calculation of Chronic and Acute Hazard Index

Total HIC = SUM[(Qyr) * (X/Q) * MET * MP]/(Chronic REL) for each TAC
 Total HIA = SUM[Qhr * (X/Q)hr*Adjustment Factor]/(Acute REL) for each TAC
 HIC = Chronic Hazard Index
 HIA = Acute Hazard Index
 Qyr = emissions in lb/year
 Qhr = Annual Emissions expressed in (lbs/hr)
 X/Q = the dispersion factor (ug/m³)/(emission rate)
 REL = Reference Exposure Level (ug/m³)
 MP = multipathway adjustment factor
 MET = meteorological correction factor
 MHC = Max Hourly Controlled
 MAC = Maximum Annual Controlled

Pollutant		Maximum Individual Cancer Risk (MICR)						
Rule 1401 Name	Code	MAC (tons/yr)	MHC (lb/hr)	Cancer Potency	Multipathway Factor		Res. MICR	Comm. MICR
					MP _R	MP _W		
Butadiene, 1,3-	B9	3.55E-05	8.11E-06	6.00E-01	1.00	1.00	1.57E-11	2.72E-12
2-Chloronaphthalene		1.25E-07	2.86E-08					
2-Methylnaphthalene		1.68E-06	3.84E-07					
Acenaphthene		3.26E-05	7.44E-06					
Acenaphthylene		2.20E-05	5.03E-06					
Acetaldehyde	A1	1.37E-01	3.12E-02	1.00E-02	1.00	1.00	1.00E-09	1.74E-10
Acrolein	A3	1.85E-02	4.23E-03					
Anthracene		4.09E-05	9.33E-06					
Benzene (including benzene from gasoline)	B1	1.26E-02	2.88E-03	1.00E-01	1.00	1.00	9.26E-10	1.61E-10
Benz[a]anthracene	P10	3.58E-05	8.17E-06	3.90E-01	29.76	14.62	3.05E-10	2.61E-11
Benzo[a]pyrene	P11	2.45E-05	5.59E-06	3.90E+00	29.76	14.62	2.09E-09	1.78E-10
Benzo[b]fluoranthene	P12	1.80E-05	4.10E-06	3.90E-01	29.76	14.62	1.53E-10	1.31E-11
Benzo(e)pyrene		1.96E-07	4.47E-08					
Benzo(g,h,i)perylene		2.20E-05	5.03E-06					
Benzo[k]fluoranthene	P14	1.80E-05	4.10E-06	3.90E-01	29.76	14.62	1.53E-10	1.31E-11
Chrysene	P15	4.01E-05	9.15E-06	3.90E-02	29.76	14.62	3.42E-11	2.92E-12
Dibenz[a,h]anthracene	P17	3.58E-05	8.17E-06	4.10E+00	10.26	5.45	1.11E-09	1.02E-10
Ethyl benzene	E4	1.52E-02	3.48E-03	8.70E-03	1.00	1.00	9.73E-11	1.69E-11
Fluoranthene		8.15E-05	1.86E-05					
Fluorene		1.22E-04	2.79E-05					
Formaldehyde	F3	1.84E+00	4.19E-01	2.10E-02	1.00	1.00	2.83E-08	4.92E-09
Hexane (n-)	H8	1.02E-01	2.33E-02					
Indeno(1,2,3-C,D)pyrene	P27	3.58E-05	8.17E-06	3.90E-01	29.76	14.62	3.05E-10	2.61E-11
Naphthalene	P30	2.11E-03	4.81E-04	1.20E-01	1.00	1.00	1.86E-10	3.23E-11
Perylene		2.59E-07	5.90E-08					
Phenanthrene		6.28E-04	1.43E-04					
Propylene	P78	5.34E-01	1.22E-01					
Propylene oxide (or 1,2-epoxy propane)	P80	1.57E-02	3.58E-03	1.30E-02	1.00	1.00	1.50E-10	2.60E-11
Pyrene		3.39E-05	7.75E-06					
Toluene (methyl benzene)	T3	4.49E-02	1.02E-02					
Xylenes (isomers and mixtures)	X1	1.67E-02	3.82E-03					
Cumulative Totals				Residential MICR →			3.5E-08	
				Commercial MICR →				5.7E-09

Sources: SCAQMD 2005, CARB 2013, EPA 2011

Chronic Health Index (HIC)																	
REL (ug/m3)	Multipathway Factor		Res. HIC	Comm. HIC	Target Organs												
	MP _R	MP _w			AL	BN	CV	DEV	END	EYE	HEM	IMM	KID	NS	REP	RESP	SKIN
2.00E+01	1	1	4.50E-09	4.01E-09											X		
1.40E+02	1	1	2.47E-06	2.20E-06												X	
3.50E-01	1	1	1.34E-04	1.19E-04												X	
6.00E+01	1	1	5.32E-07	4.74E-07				X			X		X				
2.00E+03	1	1	1.93E-08	1.72E-08	X			X	X				X				
9.00E+00	1	1	5.17E-04	4.60E-04												X	
7.00E+03	1	1	3.69E-08	3.29E-08									X				
9.00E+00	1	1	5.92E-07	5.27E-07												X	
3.00E+03	1	1	4.51E-07	4.02E-07												X	
3.00E+01	1	1	1.32E-06	1.18E-06												X	
3.00E+02	1	1	3.79E-07	3.37E-07				X					X		X		
7.00E+02	1	1	6.05E-08	5.39E-08									X		X		
Residential Max. HIC →			0.00066		1.9E-08	0.0E+00	0.0E+00	9.3E-07	1.9E-08	0.0E+00	5.3E-07	0.0E+00	1.9E-08	1.0E-06	4.5E-09	6.6E-04	0.0E+00
Commercial Max. HIC →			0.00058		1.7E-08	0.0E+00	0.0E+00	8.3E-07	1.7E-08	0.0E+00	4.7E-07	0.0E+00	1.7E-08	9.0E-07	4.0E-09	5.8E-04	0.0E+00

Acute Health Index (HIA)													
REL (ug/m3)	Adjust. Factor	Res. HIA	Comm. HIA	Target Organs									
				AL	CV	DEV	EYE	HEM	IMM	NS	REP	RESP	SKIN
	1												
	1												
	1												
	1												
4.70E+02	1	7.36E-06	6.55E-06				X					X	
2.50E+00	1	1.88E-04	1.67E-04				X					X	
	1												
1.30E+03	1	2.46E-07	2.19E-07			X		X	X		X		
	1												
	1												
	1												
	1												
	1												
	1												
	1												
	1												
	1												
	1												
	1												
5.50E+01	1	8.45E-04	7.52E-04				X						
	1												
	1												
	1												
	1												
	1												
3.10E+03	1	1.28E-07	1.14E-07			X	X				X	X	
	1												
3.70E+04	1	3.07E-08	2.74E-08			X	X			X	X	X	
2.20E+04	1	1.93E-08	1.71E-08				X					X	
Res. Max. HIA →		0.0010		0.0E+00	0.0E+00	4.0E-07	1.0E-03	2.5E-07	2.5E-07	3.1E-08	4.0E-07	2.0E-04	0.0E+00
Comm. Max. HIA →			0.0009	0.0E+00	0.0E+00	3.6E-07	9.3E-04	2.2E-07	2.2E-07	2.7E-08	3.6E-07	1.7E-04	0.0E+00



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AERSCREEN 10 Sensitive Receptors List

Units of X/Q are (ug/m³)/(g/s)

No.	Quadrant	Description	Kilometers	Meters	Cold X/Q	Hot X/Q
1	NE	Residential Developments	1.78	1,779	1.0020	0.8805
2	NE	George Visual & Performing Arts Magnet Middle School	2.91	2,909	1.0220	0.7506
3	NE	Westside Park Elementary School	3.64	3,639	0.9985	0.7201
4	NE	Adelanto Elementary School	4.25	4,249	0.9518	0.6986
5	SE	Residential Developments	3.58	3,579	1.0030	0.7211
6	SE	Victoria Magathan Elementary School	3.63	3,629	0.9992	0.7203
7	SE	Don Bradach Elementary School	3.84	3,839	0.9837	0.7151
8	SE	Aldenato High School	2.68	2,679	1.0110	0.7839
9	SE	Desert Trails Elementary School	5.57	5,569	0.8268	0.6215
10	SE	Columbia Middle & Theodore Vick Elementary Schools	5.09	5,089	0.8712	0.6516

receptors.txt

units: meters

1779

2679

2909

3579

3629

3639

3839

4249

5089

5569

Highest Residential X/Q	1.0030	0.8805
Distance, meters	3,579	1,779

Highest Commercial X/Q	1.0220	0.7839
Distance, meters	2,909	2,679



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AERSCREEN INPUT DATA - Point Source	VALUES	VALUES	UNITS
Initial Information			
Title of modeling run	Adelanto_cold	Adelanto_hot	alpha
Input units, English or metric (E/M)	M	M	alpha
Source type (Point, Volume, Area, Circle, Flare, Shielded, Horizontal)	P	P	alpha
Source Information			
Emission rate	1	1	grams/sec
Stack height	14	14	meters
Stack diameter	3.17	3.17	meters
Stack exit temperature	737	789	°K
Stack exit velocity (option 1, m/s)	25.6	31.8	meters/sec
Rural/Urban (R/U)	Rural	Rural	alpha
Population of urban area			integer
Minimum distance to ambient air	50	50	meters
Option for modeling NO ₂ chemistry (1, 2, 3)	1	1	option #
1) No chemistry or pollutant is not NO ₂ (worst case unitary)			
2) Use ozone limiting method			
3) Use plume volume molar ratio method			
In-stack NO ₂ to NO _x ratio for options 2 or 3	0.1	0.1	ratio
Ozone concentration (ambient) for options 2 or 3			ppmv
Building Downwash Information			
Include building downwash (Y/N)	Y	Y	alpha
Use existing BPIPPRM input file (Y/N)	N	N	alpha
Building height	7	7	meters
Maximum horizontal dimension	21	21	meters
Minimum horizontal dimension	14	14	meters
Orientation of maximum building dimension to true North (0-179)	0	0	degrees
Direction of stack from true North axis (0-359)	90	90	degrees
Distance from stack to building center axis	17	17	meters
Terrain Height Information			
Include terrain heights (Y/N)	N	N	alpha
Maximum distance to probe	6000	6000	meters
Include up to 10 discrete receptors (Y/N)	Y	Y	alpha
Filename of discrete receptors (*.txt)	receptors.txt	receptors.txt	.txt
Use flagpole receptors (Y/N)	Y	Y	alpha
Flagpole receptor height	1.5	1.5	meters
Source base elevation above mean sea level (land parcel)	901	901	meters
Meteorology Information for MAKEMET			
Minimum temperature	266	294	°K
Maximum temperature	294	322	°K
Minimum wind speed	1	1	meters/sec
Anemometer height	10	10	meters
Source of surface characteristics (1-user spec, 2-AERMET, 3-ext file)	2	2	option #
Dominant surface profile (land use: 1, 2, 3, 4, 5, 6, 7, 8)	8	8	option #
Dominant climate profile (1-average, 2-wet, 3-dry)	3	3	option #
Output File			
Use non-default name (*.out)	Adelanto_cold	Adelanto_hot	.out

Source: EPA 2011

References

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APPENDIX B
Special Status Species Tables

APPENDIX B

Special Status Species Table

Species Name	Status			Habitat Type	Segment	Occurrence Potential
	Federal/ State/ Other ¹	SBNF Front Country District ²	WRC MSHCP/ CV MSHCP ³			
<i>Amphibians</i>						
Arroyo toad <i>Anaxyrus californicus</i>	FE/SSC/ None	Yes-P	Covered/ Covered	Semi-arid areas near washes, sandy riverbanks, riparian areas, palm oasis, Joshua tree, mixed chaparral and sagebrush; stream channels for breeding (typically 3rd order); adjacent stream terraces and uplands for foraging and wintering	2, 3	Moderate to high potential, CNDDDB record within 650-ft buffer.
Yellow-blotched salamander <i>Ensatina eschscholtzii croceater</i>	None/ SSC/ None	Yes	None/ None	Evergreen and deciduous forests, shaded canyons, oak woodlands and chaparral		Low potential, not within CNDDDB 5-mile buffer and outside of the subspecies' range. This is within the range of <i>E. e. eschscholtzii</i> and <i>klauberi</i> .
Large-blotched salamander <i>Ensatina klauberi</i>	None/ SSC/ None	Yes	None/ None	Moist and shaded evergreen and deciduous woodlands		Low to Moderate potential, not within CNDDDB 5-mile buffer but potential habitat on site. At edge of range.
California red-legged frog <i>Rana draytonii</i>	FT/SSC/ None	No-H	Covered/ None	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands	2, 3	Low potential, CNDDDB record within 650-ft buffer however that was from many decades ago. The species is thought to be extirpated from the vicinity now and limited habitat within the alignment.
Mountain yellow-legged frog <i>Rana muscosa</i>	FE/CE; SSC/ None	Yes	Covered/ None	Lakes, ponds, meadow streams, isolated pools and open riverbanks; rocky canyons in narrow canyons and in chaparral	7	Low to moderate potential, CNDDDB record within 650-ft buffer however the species has not been detected in this vicinity for decades. Species is more likely to occur within higher elevation areas to the east where suitable riffle and run stream habitat occurs.

APPENDIX B (Continued)

Species Name	Status			Habitat Type	Segment	Occurrence Potential
	Federal/ State/ Other ¹	SBNF Front Country District ²	WRC MSHCP/ CV MSHCP ³			
Western spadefoot toad <i>Spea hammondi</i>	None/ SSC/ None	Yes	Covered/ None	Primarily grassland and vernal pools, but also in ephemeral wetlands that persist at least 3 weeks in chaparral, coastal scrub, valley-foothill woodlands, pastures, and other agriculture	7	Moderate to High potential, CNDDDB record within 650-ft buffer. Suitable habitat present.
Coast range newt <i>Taricha torosa torosa</i>	None/ SSC/ None	No	Covered/ None	Wet forests, oak forests, chaparral, and rolling grassland		Moderate potential, not within CNDDDB 5-mile buffer but potential habitat on site.
<i>Reptiles</i>						
Silvery legless lizard <i>Anniella pulchra pulchra</i>	None/ SSC/ None	Yes	None/ None	Stabilized dunes, beaches, dry washes, chaparral, scrubs, pine, oak, and riparian woodlands; associated with sparse vegetation and sandy or loose, loamy soils	7	High potential, CNDDDB record within 650-ft buffer. Suitable firable soils present.
Belding' orange-throated whiptail <i>Aspidoscelis hyperythrus beldingi</i>	None/ SSC/ None	Yes	Covered/ None	Low-elevation coastal scrub, chaparral, and valley-foothill hardwood	4	High potential, CNDDDB record within 650-ft buffer. Suitable habitat present throughout alignment.
Southern rubber boa <i>Charina umbratica</i>	None/ ST/ None	Yes	Covered/ None	Montane oak-conifer and mixed conifer forests, montane chaparral, wet meadows; usually in vicinity of streams or wet meadows		Low potential, within CNDDDB 5-mile buffer. Though suitable habitat exists, they are much more likely to occur in the higher mountains to the east and west.
Northern red diamond rattlesnake <i>Crotalus ruber ruber</i>	None/ SSC/ None	Yes	Covered/ None	Coastal scrub, chaparral, oak and pine woodlands, rocky grasslands, cultivated areas, and desert flats	4, 7	High potential, CNDDDB record within 650-ft buffer. Suitable habitat is present throughout the alignment.
San Bernardino ringneck snake <i>Diadophis punctatus modestus</i>	None/ None/ None	Yes	None/ None	Moist habitats including wet meadows, rocky hillsides, gardens, farmland grassland, chaparral, mixed conifer forest, and woodland		Moderate potential, within CNDDDB 5-mile buffer. Suitable moist microhabitat conditions occur throughout the all segments of the project.

APPENDIX B (Continued)

Species Name	Status			Habitat Type	Segment	Occurrence Potential
	Federal/ State/ Other ¹	SBNF Front Country District ²	WRC MSHCP/ CV MSHCP ³			
Coronado island skink <i>Plestiodon skiltonianus interparietalis</i>	None/ SSC/ None	Yes-P	None/ None	Woodlands, grasslands, pine forests, chaparral; rocky areas near water		Low potential, not within CNDDDB 5-mile buffer and outside of range for this subspecies.
Desert tortoise <i>Gopherus agassizii</i>	FT/ST/ None	Yes-P	None/ Covered	Arid and semi-arid habitats including sandy or gravelly locations along riverbanks, washes sandy dunes, canyon bottoms, desert oases, rocky hillsides, creosote flats and hillsides.	1	Moderate potential, within CNDDDB 5-mile buffer. Habitat and range occurs in the northern San Bernardino segment and eastern-most segment in eastern Riverside County.
San Bernardino mountain kingsnake <i>Lampropeltis zonata parvirubra</i>	None/ SSC/ None	Yes	Covered/ None	Wide range of habitats including conifer forest, oak-pine woodlands, riparian woodland, chaparral, manzanita and coastal scrub		Low potential, within CNDDDB 5- mile buffer. Marginal habitat quality and prefers higher elevations.
Coastal rosy boa <i>Lichanura trivirgata rosafusca</i>	None/ None/ None	Yes	None/ None	Desert and chaparral habitats with rocky soils in coastal canyons and hillsides, desert canyons, washes and mountains	4, 7	High potential, CNDDDB record within 650-ft buffer. Suitable habitat occurs throughout all segments of alignment.
San Diego horned lizard <i>Phrynosoma coronatum blainvillii</i>	None/ SSC/ None	Yes	Covered/ None	Open areas of sandy soil in valleys, foothills and semi-arid mountains including coastal scrub, chaparral, valley-foothill hardwood, conifer, riparian, pine-cypress, juniper and annual grassland	3, 4, 7	High potential, CNDDDB record within 650-ft buffer. Suitable habitat exists throughout all segments of alignment.
Flat-tailed horned lizard <i>Phrynosoma mcallii</i>	None/ SSC/ None	No	None/ Covered	Desert washes and flats with sparse low- diversity vegetation cover		Low potential, within CNDDDB 5- mile buffer. Potential sand transport areas exist along the eastern segment of the alignment, but appears to be south and or east of the actual alignment.
Coast patch-nosed snake <i>Salvadora hexalepis virgultea</i>	None/ SSC/ None	Yes	None/ None	Brushy or shrubby vegetation; requires small mammal burrows for refuge and overwintering sites	7	Moderate to high potential, CNDDDB record within 650-ft buffer. Suitable habitat occurs within the alignment –particularly the canyon portions of the alignment.

APPENDIX B (Continued)

Species Name	Status			Habitat Type	Segment	Occurrence Potential
	Federal/ State/ Other ¹	SBNF Front Country District ²	WRC MSHCP/ CV MSHCP ³			
<i>Birds</i>						
Cooper's hawk (breeding) <i>Accipiter cooperii</i>	None/ WL/ None	Yes	Covered/ None	Nests and forages in dense stands of live oak, riparian woodlands, or other woodland habitats often near water	2	High potential, within CNDDDB 5-mile buffer. Suitable nesting trees occur along alignment.
Northern goshawk (breeding) <i>Accipiter gentilis</i>	None/ SSC/ None	Yes	Covered/ None	Nests primarily in middle and higher elevation dense conifer forests; winters at lower elevations along coast, foothills and northern deserts in riparian and pinyon-juniper woodland		Low potential, not within the CNDDDB 5-mile buffer. Lack of suitable habitat.
Sharp-shinned hawk (breeding) <i>Accipiter striatus</i>	None/ WL/ None	Yes	Covered/ None	Nests in coniferous forests, ponderosa pine, black oak, riparian deciduous, mixed conifer, Jeffrey pine; winters in lowland woodlands and other habitats		Low potential, within CNDDDB 5-mile buffer. Species does not breed along the coastal slope of the mountains in southern California.
Tricolored blackbird <i>Agelaius tricolor</i>	None/ SSC/ None	Yes-P	Covered/ None	Nests near fresh water, emergent wetland with cattails or tules, but also in Himalayan blackberry; forages in grasslands, woodland, and agriculture		Low to moderate potential, within CNDDDB 5-mile buffer. Few suitable patches of emergent vegetation occur along the alignment.
Southern California rufous-crowned sparrow <i>Aimophila ruficeps canescens</i>	None/ WL/ None	Yes	Covered/ None	Nests and forages open scrub and chaparral with low cover of scattered scrub interspersed with rocky and grassy patches	3	High potential, CNDDDB record within 650-ft buffer. Suitable habitat occurs along the entire alignment.
Grasshopper sparrow <i>Ammodramus savannarum</i>	None/ SSC/ None	Yes-L	Covered/ None	Nests and forages in moderately open grassland with tall forbs or scattered shrubs used for perches		Moderate potential, within CNDDDB 5-mile buffer. Suitable habitat includes grassland habitats which primarily occur along the Riverside portions of the alignment.

APPENDIX B (Continued)

Species Name	Status			Habitat Type	Segment	Occurrence Potential
	Federal/ State/ Other ¹	SBNF Front Country District ²	WRC MSHCP/ CV MSHCP ³			
Golden eagle <i>Aquila chrysaetos</i>	None/ FP, WL/ None	Yes	Covered/ None	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas	4, 7	High potential to forage, but low potential to nest. CNDDDB record within 650-ft buffer. Foraging habitat occurs throughout the alignment, but no nests have been detected within the alignment path or within 1 mile of the alignment during previous regional studies.
Short-eared owl <i>Asio flammeus</i>	None/ SSC/ None	No	None/ None	Grassland, prairies, dunes, meadows, irrigated lands, saline and freshwater emergent wetlands	7	Low to moderate potential, CNDDDB record within 650-ft buffer. Typical suitable habitat is limited within the alignment.
Long-eared owl <i>Asio otus</i>	None/ SSC/ None	Yes	None/ None	Nests in riparian habitat, live oak thickets, other dense stands of trees, edges of coniferous forest; forages in nearby open habitats	1	Moderate potential, within CNDDDB 5-mile buffer. Few suitable habitats areas exist along the alignment.
Burrowing owl <i>Athene cunicularia</i>	None/ SSC/ None	Yes	Covered/ Covered	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows.	1	Moderate potential to high, within CNDDDB 5-mile buffer. Suitable open habitat with burrow resources are present along the entire alignment.
Ferruginous hawk <i>Buteo regalis</i>	None/ WL/ None	Yes	Covered/ None	Winters and forages in open, dry country, grasslands, open fields, agriculture		Moderate potential, within CNDDDB 5-mile buffer. Suitable foraging habitat occurs but no nesting opportunities.
Swainson's hawk <i>Buteo swainsoni</i>	None/ ST/ None	No	Covered/ None	Nests in open woodland and savanna, riparian and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture	1	Moderate potential, within CNDDDB 5-mile buffer. Suitable foraging habitat is present throughout the alignment, but does not nest in this area.

APPENDIX B (Continued)

Species Name	Status			Habitat Type	Segment	Occurrence Potential
	Federal/ State/ Other ¹	SBNF Front Country District ²	WRC MSHCP/ CV MSHCP ³			
Western snowy plover <i>Charadrius alexandrinus nivosus</i>	FT/SSC/ None	No	None/ None	Sandy marine and estuarine shores; in the interior breed on sandy, barren or sparsely vegetated flats near saline or alkaline lakes, reservoirs, and ponds		Low potential, within CNDDDB 5-mile buffer. Suitable nesting habitat is only present along the coast and upland foraging habitat only occurs in limited areas.
Mountain plover <i>Charadrius montanus</i>	P-FT/ SSC/ None	No	Covered/ None	Winters in shortgrass prairies, plowed fields, open sagebrush and sandy deserts		Moderate potential, within CNDDDB 5-mile buffer. Suitable upland foraging habitat exists.
Northern harrier <i>Circus cyaneus</i>	None/ SSC/ None	Yes	Covered/ None	Nests in open wetlands including marshy meadows, wet lightly-grazed pastures, old fields, freshwater and brackish marshes, but also in drier habitats such as grassland and grain fields; forages in variety of habitats, including grassland, scrubs, rangelands, emergent wetlands, and other open habitats	4	Moderate potential, CNDDDB record within 650-ft buffer. Foraging habitat is present, but limited nesting habitat.
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	FC/ SE/ None	Yes-P	Covered/ None	Nests dense, wide riparian woodlands and forest with well-developed understories		Low potential, within CNDDDB 5-mile buffer. Very poor habitat quality along alignment. Riparian habitat is too sparse.
Black swift <i>Cypseloides niger</i>	None/ SSC/ None	Yes	Covered/ None	Nests in moist crevices, caves, and cliffs behind or adjacent to waterfalls in deep canyons; forages over a wide range of habitats		Low potential, not within CNDDDB 5-mile buffer and no suitable waterfall habitat present.
Vaux's swift <i>Chaetura vauxi</i>	None/ SSC/ None	No	None/ None	Late stage conifer forest and mixed conifer-deciduous forest; nests in redwood, Douglas-fir and other conifers, and occasionally building and chimneys		Low potential, within CNDDDB 5-mile buffer. Marginal habitat quality.
Yellow warbler <i>Setophaga petechial</i> [= <i>Dendroica petechia brewsteri</i>]	None/ SSC/ None	Yes	Covered/ Covered	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine and mixed conifer habitats		High potential, within CNDDDB 5-mile buffer. Suitable habitat exists within riparian bands along the alignment.

APPENDIX B (Continued)

Species Name	Status			Habitat Type	Segment	Occurrence Potential
	Federal/ State/ Other ¹	SBNF Front Country District ²	WRC MSHCP/ CV MSHCP ³			
White-tailed kite <i>Elanus leucurus</i>	None/ FP/ None	Yes	Covered/ None	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands		Moderate potential, within CNDDDB 5-mile buffer. Suitable habitat for nesting and foraging occurs along the alignment.
Southwestern willow flycatcher <i>Empidonax traillii extimus</i>	FE/ SE/ None	Yes	Covered/ Covered	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration	2, 3	Moderate to high potential, USFS/CNDDDB record within 650-ft buffer. Suitable habitat exists along the alignment. A continuing trend of fewer numbers limits the potential to occur.
California horned lark (breeding) <i>Eremophila alpestris actia</i>	None/ WL/ None	Yes	Covered/ None	Nests and forages in grasslands disturbed lands, agriculture, and beaches; nests in alpine fell fields of the high Sierra	4	High potential, CNDDDB record within 650-ft buffer. Suitable breeding and foraging habitat occurs along the alignment.
Merlin <i>Falco columbarius</i>	None/WL/ None	Yes	Covered/ None	Forages in semi-open areas used for foraging, including coastline, grassland, agriculture, savanna, woodland, lakes, and wetlands		Moderate potential, within CNDDDB 5-mile buffer. Limited nesting opportunities, but abundant foraging opportunities.
Prairie falcon <i>Falco mexicanus</i>	None/ WL/ None	Yes	Covered/ None	Forages in grassland, savanna, rangeland, agriculture, desert scrub, alpine meadows; nest on cliffs or bluffs	2	Moderate potential, within CNDDDB 5-mile buffer. Limited nesting opportunities, but abundant foraging opportunities.
American peregrine falcon <i>Falco peregrinus anatum</i>	None/ FP/ None	Yes	Covered/ None	Nests on cliffs, buildings, bridges; forages in wetlands, riparian, meadows, croplands, especially where waterfowl are present		Moderate potential, within CNDDDB 5-mile buffer. Limited nesting opportunities, but abundant foraging opportunities.
California condor <i>Gymnogyps californianus</i>	FE/ SE/ None	No-H	None/ None	Nest in rock formations, deep caves, and occasionally in cavities in giant sequoia trees (<i>Sequoiadendron giganteus</i>); forages in relatively open grassland and savanna where large animal carcasses can be detected	2, 3	Low potential, within CNDDDB 5-mile buffer. Key areas for this species occur further to the west.

APPENDIX B (Continued)

Species Name	Status			Habitat Type	Segment	Occurrence Potential
	Federal/ State/ Other ¹	SBNF Front Country District ²	WRC MSHCP/ CV MSHCP ³			
Bald eagle <i>Haliaeetus leucocephalus</i>	FD/ SE, FP/ None	No-U	Covered/ None	Nests in forested areas adjacent to large bodies of water, including seacoasts, rivers, swamps, large lakes; winters at large bodies of water in lowlands and mountains	3	Low to moderate potential, CNDDDB record within 650-ft buffer. Very few winter foraging opportunities occur along the alignment and no breeding opportunities.
Yellow-breasted chat <i>Icteria virens</i>	None/ SSC/None	Yes	Covered/ Covered	Nests and forages in dense, relatively wide riparian woodlands and thickets of willows, vine tangles and dense brush		Moderate potential, within CNDDDB 5-mile buffer. Suitable habitat occurs within riparian habitat.
Western least bittern <i>Ixobrychus exilis hesperis</i>	None/ SSC/ None	Yes-P	None/ None	Nests in freshwater and brackish marshes with dense, tall growths of aquatic and semi-aquatic vegetation		Moderate potential, within CNDDDB 5-mile buffer. Suitable habitat occurs along the alignment.
Loggerhead shrike <i>Lanius ludovicianus</i>	None/ SSC/ None	Yes	Covered/ None	Nests and forages in open habitats with scattered shrubs, trees, or other perches	3, 4	High potential, CNDDDB record within 650-ft buffer. Suitable habitat occurs along the entire alignment.
Summer tanager <i>Piranga rubra</i>	None/ SSC/ None	Yes	None/ Covered	Nests and forages in mature desert riparian habitats dominated by cottonwoods and willows		Low potential, within CNDDDB 5-mile buffer. Limited habitat quality. Most suitable habitat occurs southeast of the eastern extent of the alignment.
Coastal California gnatcatcher <i>Polioptila californica californica</i>	FT/ SSC/ None	Yes-P	Covered/ None	Nests and forages in various sage scrub communities, often dominated by California sagebrush and buckwheat; generally avoids nesting in areas with a slope of greater than 40%, and typically less than 1,000 feet in elevation	3, 4	High potential, CNDDDB record within 650-ft buffer. Suitable habitat exists along the southern San Bernardino and western Riverside segments of the alignment.
Purple martin <i>Progne subis</i>	None/ SSC/ None	Yes	Covered/ None	Nest and forages in woodland habitats including riparian, coniferous, and valley foothill and montane woodlands; in the Sacramento region often nests in weep holes under elevated freeways		Moderate potential, within CNDDDB 5-mile buffer. Suitable habitat exists along the Cajon Pass segment of the alignment.

APPENDIX B (Continued)

Species Name	Status			Habitat Type	Segment	Occurrence Potential
	Federal/ State/ Other ¹	SBNF Front Country District ²	WRC MSHCP/ CV MSHCP ³			
California spotted owl <i>Strix occidentalis occidentalis</i>	None/ SSC/ None	Yes	Covered/ None	Nests and forages in dense, old-growth, multi-layered mixed conifer, redwood and Douglas-fir habitats		Low potential, within CNDDDB 5-mile buffer. Very poor habitat quality occurs along the alignment.
Le Conte's thrasher <i>Toxostoma lecontei</i>	None/ SSC/ None	Yes	None/ Covered	Nests and forages in desert wash, desert scrub, alkali desert scrub, desert succulent, and Joshua tree; nests in spiny shrubs or cactus	7	Moderate potential, CNDDDB record within 650-ft buffer. Suitable habitat would exist along the eastern portion of the alignment.
Gray vireo <i>Vireo vicinior</i>	None/SS C	Yes	None/ Covered	Nests and forages in pinyon-juniper woodland, oak, and chamise and redshank chaparral	2	Moderate potential, within CNDDDB 5-mile buffer. Suitable habitat could occur along the Cajon Pass and Banning Bench portions of the alignment.
Least Bell's vireo <i>Vireo bellii pusillus</i>	FE/ FE/ None	Yes	Covered/ Covered	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	2, 3, 4	High potential, CNDDDB record within 650-ft buffer. Suitable habitat exists within riparian bands along the alignment.
<i>Mammals</i>						
pallid bat <i>Antrozous pallidus</i>	None/ SSC/ WBWG: H	Yes-P	None/ None	Grasslands, shrublands, woodlands, forests; most common in open dry habitats with rocky outcrops for roosting, but also roosts in manmade structures and trees	7	High potential, CNDDDB record within 650-ft buffer.
Dulzura pocket mouse <i>Chaetodipus californicus femoralis</i>	None/ SSC/ None	No	None/ None	Open habitat, coastal scrub, chaparral, oak woodland, chamise chaparral, mixed conifer habitats; disturbance specialist; 0 to 3,000 ft		Moderate potential, within CNDDDB 5-mile buffer. Suitable habitat exists along the southern portions of the alignment.
San Diego pocket mouse <i>Chaetodipus fallax fallax</i>	None/ SSC/ None	Yes	Covered/ None	Coastal scrub, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper, and annual grassland	4, 6	Moderate potential, CNDDDB record within 650-ft buffer. Southern alignment is within the northern limits of the species' range.

APPENDIX B (Continued)

Species Name	Status			Habitat Type	Segment	Occurrence Potential
	Federal/ State/ Other ¹	SBNF Front Country District ²	WRC MSHCP/ CV MSHCP ³			
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	None/ SSC/ WBWG: H	Unknown	None/ None	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, also man-made structures and tunnels		Moderate potential, within CNDDDB 5-mile buffer.
San Bernardino kangaroo rat <i>Dipodomys merriami parvus</i>	FE/ SSC/ None	Yes	Covered/ None	Sparse scrub habitat, alluvial scrub/coastal scrub habitats on gravelly and sandy soils near river and stream terraces	3, 4	High potential, CNDDDB record within 650-ft buffer. Suitable habitat occurs within and along the project alignment.
Stephens' kangaroo rat <i>Dipodomys stephensi</i>	FE/ ST/ None	No	Covered/ None	Annual and perennial grassland habitats, coastal scrub or sagebrush with sparse canopy cover or in disturbed areas	4, 5, 6	High potential, CNDDDB record within 650-ft buffer. Suitable habitat occurs within and along the alignment.
Spotted bat <i>Euderma maculatum</i>	None/ None/ WBWG: H	Yes-L	None/ None	Foothills, mountains, desert regions of Southern California, including arid deserts, grasslands, and mixed conifer forests; roosts in rock crevices and cliffs; feeds over water and along washes		Moderate potential, not within CNDDDB 5-mile buffer but potential habitat on site.
Western mastiff bat <i>Eumops perotis californicus</i>	None/ None/ WBWG: H	Yes	None/ None	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees and tunnels		Moderate potential, within CNDDDB 5-mile buffer.
San Bernardino flying squirrel <i>Glaucomys sabrinus californicus</i>	None/ SSC/ None	Yes	Covered/ None	Coniferous and deciduous forests including riparian forests		Low potential, within CNDDDB 5-mile buffer. No suitable habitat exists along the alignment.
Western red bat <i>Lasiurus blossevillii</i>	None/ SSC/ WBWG: H	Unknown	None/ None	Forest, woodland, riparian, mesquite bosque and orchards, including fig, apricot, peach, pear, almond, walnut, and orange; roosts in tree canopy		Moderate potential, not within CNDDDB 5-mile buffer but potential habitat on site.

APPENDIX B (Continued)

Species Name	Status			Habitat Type	Segment	Occurrence Potential
	Federal/ State/ Other ¹	SBNF Front Country District ²	WRC MSHCP/ CV MSHCP ³			
Western yellow bat <i>Lasiurus xanthinus</i>	None/ SSC/ WBWG: H	No	None/ Covered	Valley foothill riparian, desert riparian, desert wash, and palm oasis habitats; below 2,000 ft; roost in riparian and palms		Moderate potential, within CNDDDB 5-mile buffer.
San Diego black-tailed jackrabbit <i>Lepus californicus bennettii</i>	None/ SSC/ None	Yes	Covered/ None	Arid habitats with open ground; grasslands, coastal scrub, agriculture, disturbed area, and rangelands	4	High potential, CNDDDB record within 650-ft buffer. Suitable habitat exists along the entire alignment.
California leaf-nosed bat <i>Macrotus californicus</i>	None/ SSC/ WBWG: H	Unknown	None/ None	Riparian woodlands, desert wash, desert scrub; roosts in mines and caves, occasionally buildings		Moderate potential, within CNDDDB 5-mile buffer.
Western small-footed myotis <i>Myotis ciliolabrum</i>	None/ None/ WBWG: M	Yes	None/ None	Arid woodlands and shrublands, but near water; roosts in caves, crevices, mines, abandoned buildings		Moderate potential, not within CNDDDB 5-mile buffer but potential habitat on site.
Long-eared myotis <i>Myotis evotis</i>	None/ None/ WBWG: M	Yes	None/ None	Nearly all brush, woodland, and forest habitats from sea level to 9,000 ft, but prefers coniferous habitats; forages along habitat edges, in open habitats, and over water; roosts in buildings, crevices, under bark, and snags; caves are used as night roosts		Moderate potential, not within CNDDDB 5-mile buffer but potential habitat on site.
Fringed myotis <i>Myotis thysanodes</i>	None/ None/ WBWG: H	Yes	None/ None	Primarily drier woodlands, including oak, pinyon-juniper, ponderosa pine, and also desert scrub, mesic coniferous forest, grassland, and sage-grass steppe from sea level to 9,350 ft; roosts in crevices in buildings, mines, rocks, cliff faces, and bridges, and large, decadent trees and snags		Moderate potential, not within CNDDDB 5-mile buffer but potential habitat on site.
Long-legged myotis <i>Myotis volans</i>	None/ None/ WBWG: H	Yes	None/ None	Primarily coniferous forests, but also seasonally in riparian and desert habitats; roosts in crevices in cliffs, caves, mines, buildings, exfoliating tree bark, and snags		Moderate potential, within CNDDDB 5-mile buffer.

APPENDIX B (Continued)

Species Name	Status			Habitat Type	Segment	Occurrence Potential
	Federal/ State/ Other ¹	SBNF Front Country District ²	WRC MSHCP/ CV MSHCP ³			
Yuma myotis <i>Myotis yumanensis</i>	None/ None/ WBWG: LM	Yes	None/ None	Riparian, arid scrublands and deserts, and forests associated with water (streams, rivers, tinajas); roosts in bridges, buildings, cliff crevices, caves, mines, and trees		Moderate potential, not within CNDDDB 5-mile buffer but potential habitat on site.
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	None/ SSC/ None	Yes	Covered/ None	Coastal scrub, desert scrub, chaparral, cacti, rocky areas		High potential, within CNDDDB 5-mile buffer. Suitable habitat exists within the rockier terrain of the alignment.
Southern grasshopper mouse <i>Onychomys torridus ramona</i>	None/ SSC/ None	Yes-L	None/ None	Grassland and sparse coastal scrub		Moderate potential, within CNDDDB 5-mile buffer. Suitable habitat exists, particularly in the Riverside portions of the alignment.
Nelson's bighorn sheep <i>Ovis canadensis nelsoni</i>	None/ None/ None	Yes	None/ None	Steep slopes and cliffs, rough and rocky topography, sparse vegetation; also canyons, washes and alluvial fans		Moderate potential, not within CNDDDB 5-mile buffer but potential habitat on site. Suitable habitat occurs along the southern slope of the San Bernardino National Forest.
Peninsular bighorn sheep <i>Ovis canadensis nelsoni</i>	FE/ ST, FP/ None	No	None/ Covered	Dry, rocky, low elevation desert slopes canyons and washes; females near water during lambing season		Low potential, within CNDDDB 5-mile buffer. While the species occurs near the alignment, it is restricted to Mount San Jacinto south of Interstate 10.
San Bernardino white-eared pocket mouse <i>Perognathus alticolus alticolus</i>	None/ SSC/ None	Yes-P	None/ None	Arid ponderosa pine communities		Low potential, within CNDDDB 5-mile buffer. Poor habitat quality.
Los Angeles pocket mouse <i>Perognathus longimembris brevinasus</i>	None/ SSC/ None	No-U	Covered/ None	Lower elevation grassland, alluvial sage scrub, and coastal scrub	4, 7	High potential, CNDDDB record and coastal sage scrub found on site. Suitable habitat occurs along the alignment.

APPENDIX B (Continued)

Species Name	Status			Habitat Type	Segment	Occurrence Potential
	Federal/ State/ Other ¹	SBNF Front Country District ²	WRC MSHCP/ CV MSHCP ³			
American badger <i>Taxidea taxus</i>	None/ SSC/ None	Yes	None/ None	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, pastures, especially with friable soils	4, 5	High potential, CNDDDB record within 650-ft buffer. Suitable habitat occurs along the desert, Riverside badlands, and Banning bench portions of the alignment.
Mojave Ground Squirrel <i>Xerospermophilus mohavensis</i>	None/ST/ None	No	None/ None	Desert scrub habitats including those dominated by creosote bush and burrobush, desert sink scrub, and desert saltbush scrub	1	Moderate potential, within CNDDDB 5-mile buffer. Suitable habitat exists along the northern desert portions of the alignment.
Palm Springs round-tailed ground squirrel <i>Xerospermophilus tereticaudus</i>	None/ SSC/ None	No	None/ Covered	Sandy arid regions of Lower Sonoran Life Zone including creosote bush scrub and creosote-palo verde		Moderate potential, within CNDDDB 5-mile buffer. Suitable habitat exists along the easternmost portions of the alignment.
<i>Fish</i>						
Santa Ana sucker <i>Catostomus santaanae</i>	FT/ SSC/ AFS:TH	No-H	Covered/ None	Small, shallow, cool, clear streams less than 7 meters in width and a few centimeters to more than a meter in depth; substrates are generally coarse gravel, rubble and boulder		Moderate potential, within CNDDDB 5-mile buffer. Known populations occur within the Santa Ana River near the project boundary.
Unarmored threespine stickleback <i>Gasterosteus aculeatus williamsoni</i>	FE/ SE, FP/ AFS:EN	No-H	None/ None	Weedy pools, backwaters, and among emergent vegetation at the stream edge in small Southern California streams. Cool (<24 C), clear water with abundant vegetation.		Moderate potential, not within CNDDDB 5-mile buffer but potential habitat on site.
Arroyo chub <i>Gila orcutti</i>	None/ SSC/ AFS:VU	Yes-P	Covered/ None	Warm, fluctuating streams with slow-moving or backwater sections of warm to cool streams at depths > 40 centimeters; substrates of sand or mud		Low potential, within CNDDDB 5-mile buffer but project is outside of the known range of the species.
Santa Ana speckled dace <i>Rhinichthys osculus</i> ssp.	None/ SSC/ AFS: TH	Yes	None/ None	Permanent streams with cool, flowing rocky-bottomed washes, shallow cobble and gravel riffles	3	High potential, CNDDDB record within 650-ft buffer.

APPENDIX B (Continued)

Species Name	Status			Habitat Type	Segment	Occurrence Potential
	Federal/ State/ Other ¹	SBNF Front Country District ²	WRC MSHCP/ CV MSHCP ³			
Mohave tui chub <i>Siphateles bicolor mohavensis</i>	FE/ SE, FP/ AFS:EN	No	None/ None	Deep pools and sloughs with freshwater flow and substrate for egg attachment.	2	Low potential, within CNDDDB 5-mile buffer but only found within the Piute Creek, Soda Springs and Two Hole Spring.
<i>Invertebrates</i>						
Quino checkerspot butterfly <i>Euphydryas editha quino</i>	FE/None/ None	Yes	Covered/ None	Patchy shrub or small tree landscapes; scrublands		Low potential, within CNDDDB 5-mile buffer. Outside of focused survey area.
Riverside fairy shrimp <i>Streptocephalus woottoni</i>	FE/ None/ None	No	Covered/ None	Vernal pools, non-vegetated ephemeral pools		Moderate potential, within CNDDDB 5-mile buffer. If vernal pools are present, then there is potential, particularly in the western Riverside portions of the alignment.

1 Federal Status:

FC = Candidate for federal listing as threatened or endangered
 FE = Federally Endangered
 FT = Federally Threatened
 State Status:
 SE = State-listed as Endangered
 ST = State-listed as Threatened
 WL= California Department of Fish and Wildlife Watch List
 FP = California Department of Fish and Wildlife Fully Protected Species
 Other Status:
 AFS: EN American Fisheries Society Endangered classification
 AFS: TH American Fisheries Society Threatened classification
 AFS: VU = American Fisheries Society Vulnerable classification
 WBWG Western Bat Working Group High Priority species

2 SBNF Front Country District Occurrence Information:

No = Outside known distribution/range of the species or not included on SBNF special-status species list
 No-U = Occurrence of the species is unlikely based on habitat present.

No-H = Part of the historical range but the species has been extirpated.

Yes = Species is known to occur.

Yes-P = Occurrence of the species is possible; suitable habitat exists.

Yes-L = Occurrence of the species is likely; suitable habitat exists and the species is known from nearby locations.

* These are USFS-derived designations for the entire Front Country District and may not represent the habitats or elevations represented by this project.

3 Covered = included in the Western Riverside County and/or the Coachella Valley MSHCP

APPENDIX C

- 1. Previous Cultural Resource Studies
in the Records Search Area*
- 2. Previously Recorded Cultural Resources
in the Records Search Area*
- 3. Previously Recorded Isolated Finds
in the Records Search Area*
- 4. Section 5.5 and Appendix References*

APPENDIX C
Previous Cultural Resource Studies in the Records-Search Area

Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
Riverside	RI-2	Moreno to Whitewater	cultural resource study area	Miscellaneous Field Notes—Riverside County. San Diego Museum of Man	San Diego Museum of Man 1953
Riverside	RI-24	Adelanto to Moreno	cultural resource study area	Assessment for a Tentative Parcel Map Located in Section 27 and 34, T.2S, R.3W.	Bowls 1981
Riverside	RI-85	Adelanto to Moreno	cultural resource study area	The Crazy Horse Campground Development, Archaeological Impact Statement	Hammond 1973
Riverside	RI-87	Adelanto to Moreno	cultural resource study area	The Proposed Kamgrounds of American Development, Expected Archaeological Impact.	Archaeological Research Unit 1973
Riverside	RI-133	Adelanto to Moreno and Moreno to Whitewater	cultural resource study area	Evaluation: Southern CA Edison Company's Devers-Vista 220 kV Transmission Line, Riverside County, CA	Archaeological Research Unit 1974
Riverside	RI-137	Adelanto to Moreno	cultural resource study area	Perris Reservoir Archaeology, Late Prehistoric Demographic Change in Southeastern CA	Archaeological Research Unit 1974
Riverside	RI-149	Moreno to Whitewater	cultural resource study area	Survey of Beylock Recreational Vehicle Park, North Palm Springs.	Archaeological Research Unit 1974
Riverside	RI-150	Moreno to Whitewater	cultural resource study area	Report for the Proposed Whitewater Safety Roadside Rest Expansion Project on the Interstate Route 10, Riverside, CA	Caltrans 1982
Riverside	RI-161	Adelanto to Moreno and Moreno to Whitewater	cultural resource study area	Resources, West Coast-Midwest Pipeline Project, Long Beach to Colorado River	Greenwood And Associates 1975

APPENDIX C (Continued)

Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
Riverside	RI-161	Moreno to Whitewater	records-search buffer area	Resources, West Coast-Midwest Pipeline Project, Long Beach to Colorado River	Greenwood And Associates 1975
Riverside	RI-182	Adelanto to Moreno	cultural resource study area	Archaeology of Brodiaea Avenue, PI 984, Water Systems Addition, Riverside County, CA	Archaeological Research Unit 1975
Riverside	RI-198	Adelanto to Moreno and Moreno to Whitewater	cultural resource study area	Report on Archaeological Resources to Be Affected by the Transmission System Associated with the Sundesert Nuclear Project.	Department of Parks And Recreation 1976
Riverside	RI-466	Moreno to Whitewater	records-search buffer area	Report on the Five"R" Ranch Located in the Badlands Area near Moreno in the County of Riverside	Scientific Resource survey 1978
Riverside	RI-504	Adelanto to Moreno	cultural resource study area	Survey of the Regulus Investment Company, Incorporated, Land Holdings in Pigeon Pass and Reche Canyon, Riverside County, CA	Weber 1978
Riverside	RI-534	Moreno to Whitewater	cultural resource study area	Native Americans of Western Riverside County, CA and the Devers-Mira Loma 500 kV Transmission Line Route (Lamb Canyon-Mira Loma Section)	Cultural Systems Research Inc. 1979
Riverside	RI-578	Moreno to Whitewater	cultural resource study area	Report for P.M. 11498, Meadowbrook Area, Section 27, T5S, R4W, Riverside County, CA	Archaeological Consultants 1979
Riverside	RI-652	Moreno to Whitewater	cultural resource study area	Reconnaissance (Stage II) of Flood Control Alternatives for the Whitewater River Basin, Riverside County, CA	Archaeological Research Unit 1979
Riverside	RI-816	Moreno to Whitewater	cultural resource study area	Assessment of Areas 1 and 4 of Amendment Number 1 to the Banning Downtown Redevelopment Project	Paul G. Chace And Associates, Escondido 1980
Riverside	RI-819	Moreno to Whitewater	records-search buffer area	Report: The Quail Lake Property; a 590 Acre Parcel in the Badlands of Riverside County	Archaeological Associates 1980

APPENDIX C (Continued)

Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
Riverside	RI-911	Adelanto to Moreno	cultural resource study area	Assessment of Tentative Tract 15380, Reche Canyon, Riverside County, CA.	Lerch 1980
Riverside	RI-924	Moreno to Whitewater	records-search buffer area	Report on the Vista Idyllwild Property Located in the City of Banning, CA	Scientific Resource survey 1980
Riverside	RI-991	Moreno to Whitewater	cultural resource study area	Persistence and Power: A Study of Native American Peoples in the Sonoran Desert and the Devers-Palo Verde High Voltage Transmission Line	Cultural Systems Research 1978
Riverside	RI-1004	Moreno to Whitewater	cultural resource study area	Devers to Valley & Valley to Serrano 500 kV Transmission Route and Serrano to Villa Park 220 Kv Transmission Route, San Gorgonio Pass Addendum, Riverside County, CA	Archaeological Research Unit 1980
Riverside	RI-1060	Moreno to Whitewater	cultural resource study area	Yamisevul: Archaeological Treatment Plan and Testing Report for CA-RIV-269, Riverside County, CA	Statistical Research 1987
Riverside	RI-1064	Adelanto to Moreno	records-search buffer area	Assessment of Tentative Parcel 16565, La Cresta Area Od Rancho CA, Riverside County, CA	Archaeological Research Unit 1980
Riverside	RI-1079	Moreno to Whitewater	records-search buffer area	Assessment of Parcel 16210	Archaeological Consultant 1980
Riverside	RI-1211	Moreno to Whitewater	cultural resource study area	A Cultural Resources Overview of the Colorado Desert Planning Units	Institute For American Research 1980
Riverside	RI-1237	Moreno to Whitewater	records-search buffer area	Cultural Resource Overview for the Devers Substation to Serrano Substation Transmission Route Alternatives Corridor Right-of-Way	Greenwood And Associates 1980
Riverside	RI-1272	Adelanto to Moreno	cultural resource study area	Assessment of Tract No. 13625, Reche Canyon Area of Riverside County, CA	Moore, 1981
Riverside	RI-1277	Moreno to Whitewater	cultural resource study area	Investigations for the San Gorgonio Pass Wind Program, CA	Bureau of Land Management 1981

APPENDIX C (Continued)

Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
Riverside	RI-1432	Moreno to Whitewater	cultural resource study area	Report on Grading Monitoring Activities at Stewart Ranch, Riverside County, CA	Scientific Resource survey 1986
Riverside	RI-1433	Moreno to Whitewater	cultural resource study area	An Historical Study of Stewart Ranch in Riverside County, CA	Anonymous 1985
Riverside	RI-1434	Moreno to Whitewater	cultural resource study area	Report on 900 Acres Parcel (Portion of the Old Stewart Ranch) Located in the Banning/Beaumont Area, Riverside County, CA	Scientific Resource survey 1981
Riverside	RI-1435	Moreno to Whitewater	records-search buffer area	Report on Documentation of an Aboriginal Milling Complex Located on a Portion of the Old Stewart Ranch, Banning/Beaumont Area, Riverside County, CA	Anonymous 1982
Riverside	RI-1473	Moreno to Whitewater	cultural resource study area	San Gorgonio Wind Resource Study: Environmental Impact Report/Environmental Impact Statement	Wagstaff And Brady 1982
Riverside	RI-1474	Moreno to Whitewater	cultural resource study area	Study: Seawest Catellus 1 Windfarm Project (Wecs 103 EIR), Significance Evaluation of Archaeological Site CA-RIV-6379H, Riverside County, CA.	CRM Tech 2000
Riverside	RI-1475	Moreno to Whitewater	cultural resource study area	Report: Seawest Catellus Project, near Whitewater River and Interstate 10, Riverside County, CA	CRM Tech 2000
Riverside	RI-1476	Moreno to Whitewater	cultural resource study area	Investigations—Morongo Indian Reservation, CA	American Indian Resource Organization 1982
Riverside	RI-1536	Moreno to Whitewater	records-search buffer area	Assessment of 239 Acres in San Gorgonio Pass	Anonymous 1981
Riverside	RI-1539	Moreno to Whitewater	records-search buffer area	Evaluation of the Site of the Proposed Cabazon Windpark, San Gorgonio Pass, Riverside County, CA	Archaeological Research Unit 1982
Riverside	RI-1624	Moreno to Whitewater	cultural resource study area	Cultural Resource Overview—San Bernardino National Forest, CA	WESTEC Services 1982

APPENDIX C (Continued)

Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
Riverside	RI-1665	Moreno to Whitewater	cultural resource study area	Devers-Serrano-Villa Park Transmission System Supplement to the Report—Public Review Document and Confidential Appendices	Wirth Associates 1983
Riverside	RI-1678	Moreno to Whitewater	cultural resource study area	Survey of Various Private and Public Land Parcels for the San Gorgonio Pass Wind Program, Riverside County, CA	Taylor 1983
Riverside	RI-1739	Adelanto to Moreno	records-search buffer area	Assessment of Tentative Parcel 19639, Sunnymead Area of Riverside County, CA	Archaeological Research Unit 1983
Riverside	RI-1764	Moreno to Whitewater	records-search buffer area	Assessment of a 25 Acre Parcel: P.M. 19614, Cabazon, Riverside County, CA	Anonymous 1984
Riverside	RI-1785	Moreno to Whitewater	cultural resource study area	Survey of Portions of Section 8, T. 3S, R 3E, near Whitewater, Riverside County, CA	Anonymous 1984
Riverside	RI-1821	Moreno to Whitewater	records-search buffer area	Assessment of a Proposed Windpark, San Gorgonio Pass, Riverside County, CA	Archaeological Research Unit 1984
Riverside	RI-1837	Moreno to Whitewater	cultural resource study area	An Archaeological Assessment of the Proposed Devers-Valley 500 kV Transmission Line and Corridor and the Proposed Valley-Auld-Skylark 115 kV T/L Corridor, Riverside County, CA	Archaeological Research Unit 1984
Riverside	RI-1963	Adelanto to Moreno	cultural resource study area	Assessment, Jordan Parcel, TP 20965, Reche Canyon, Riverside County, CA	Reynolds 1985
Riverside	RI-1967	Moreno to Whitewater	records-search buffer area	Survey of Portions of Section 11, T.3S, R.3E, near Whitewater, Riverside County, CA	Anonymous 1985
Riverside	RI-2071	Moreno to Whitewater	cultural resource study area	Investigation for the Pacific Texas Pipeline Project—State of CA	Greenwood And Associates 1985
Riverside	RI-2094	Moreno to Whitewater	cultural resource study area	Report for Beaumont Concrete Company's Application for Surface Mining Permit No. 155 in Riverside County	Chambers Group 1987

APPENDIX C (Continued)

Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
Riverside	RI-2096	Adelanto to Moreno	records-search buffer area	Reconnaissance of the Moreno International Trade Center Specific Plan Property, Riverside County, CA Dated 1 July 1987.	RMW Paleo Associates 1987
Riverside	RI-2097	Adelanto to Moreno and Moreno to Whitewater	cultural resource study area	Reconnaissance of the Moreno International Trade Center Specific Plan Property, Riverside County, CA (Dated 15 September 1986)	RMW Paleo Associates 1987
Riverside	RI-2171	Adelanto to Moreno and Moreno to Whitewater	cultural resource study area	Inventory for the City of Moreno Valley, Riverside County, CA	Archaeological Research Unit 1987
Riverside	RI-2172	Adelanto to Moreno	cultural resource study area	Evaluation: Highway 60 Corridor Study, Moreno Valley, Riverside County, CA.	Randolph Hlubik Associates 1990
Riverside	RI-2203	Moreno to Whitewater	cultural resource study area	Assessment of the Hovchild Property, Riverside County, CA	Anonymous 1987
Riverside	RI-2210	Moreno to Whitewater	cultural resource study area	Report for the US Telecom Fiber Optic Cable Project, from San Timoteo Canyon to Socorro, Texas: The CA Segment	Dames And Moore 1986
Riverside	RI-2265	Moreno to Whitewater	records-search buffer area	Reconnaissance of the Cabazon Retail Outlet Property, 60.76 Acres in the San Gorgonio Pass Area, Riverside County, CA	RMW Paleo Associates 1988
Riverside	RI-2350	Moreno to Whitewater	cultural resource study area	Mci Rialto to El Paso Fiber Optics Project—Survey—San Bernardino and Riverside Counties, CA	Dames And Moore 1988
Riverside	RI-2430	Adelanto to Moreno and Moreno to Whitewater	cultural resource study area	Santa Ana River Upstream Alternatives Survey—Appendices a and B: Paleontological Resource Assessment and Geomorphic Observations and Considerations. Appendix C—Site Records	Ecos Management Criteria 1986
Riverside	RI-2775	Moreno to Whitewater	cultural resource study area	Assessment of the Willow Springs Specific Plan Beaumont Area, Riverside County, CA	Michael K. Lerch & Associates 1990

APPENDIX C (Continued)

Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
Riverside	RI-2876	Adelanto to Moreno	records-search buffer area	Reevaluation of 10 Archaeological Sites for the Cactus Corridor Specific Plan No. 214, Located in the City of Moreno Valley, Riverside County, CA	Archaeological Research Unit 1990
Riverside	RI-2917	Moreno to Whitewater	cultural resource study area	Survey of the Proposed Sewer System for the City of Beaumont CA.	Recon 1989
Riverside	RI-2927	Moreno to Whitewater	cultural resource study area	Cultural Resources, Palm Springs, General Plan EIR	Archaeological Research Unit 1992
Riverside	RI-2966	Moreno to Whitewater	cultural resource study area	I-10/Hwy 62 and Devers Hill Land Exchange Parcels Sections 4 and 18, T3S R4E, SBBM	Bureau of Land Management 1990
Riverside	RI-2967	Moreno to Whitewater	cultural resource study area	Assessment—Sea West Wind Energy Facility, Riverside County, CA	LSA Associates 1994
Riverside	RI-2969	Moreno to Whitewater	cultural resource study area	Historic Properties: Wecs 107 Windfarm Project near the Community of Whitewater, Riverside County, CA.	CRM Tech 2000
Riverside	RI-2974	Moreno to Whitewater	records-search buffer area	Grant Right-of-Way CA 15549—White Water Wind Park	Bureau of Land Management 1990
Riverside	RI-3002	Moreno to Whitewater	cultural resource study area	Assessment of Seneca Springs Project, Riverside County Beaumont, CA.	Douglas Wood and Associates 1990
Riverside	RI-3039	Moreno to Whitewater	cultural resource study area	Assessment of the "Sunset Crossing" Project, a 294.8 Acre Parcel as Shown on TPM 25541, Located Immediately South of the I-10 Freeway at Sunset Avenue in Banning, Riverside County, CA.	Archaeological Associates 1990
Riverside	RI-3054	Moreno to Whitewater	cultural resource study area	Cultural Resources, Palm Springs Annexation Eir	Archaeological Research Unit 1992

APPENDIX C (Continued)

Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
Riverside	RI-3101	Moreno to Whitewater	cultural resource study area	Report, State Route 79 Widening Project, Gilman Springs Road -First Street (Lamb Canyon), 08-RIV-79, PM 33.9/40.1	Dames And Moore 1992
Riverside	RI-3102	Moreno to Whitewater	cultural resource study area	Report, State Route 79 Widening Project, Gilman Springs Road—First Street (Lamb Canyon), 08-RIV-79, PM 33.9/40.1, 08214-465100	Dames And Moore 1992
Riverside	RI-3221	Moreno to Whitewater	cultural resource study area	Survey of a 150 Acre Parcel near Cabazon, Riverside County, CA	Chambers Group 1991
Riverside	RI-3503	Moreno to Whitewater	records-search buffer area	Assessment: Clear Water Spring Delivery Project, Cabazon, Riverside County	Archaeological Research Unit 1992
Riverside	RI-3548	Adelanto to Moreno	cultural resource study area	Assessment of an 18.37 Acre Parcel as Shown on TPM 27246 Located Adjacent to Reche Canyon Road, Riverside County	White 1992
Riverside	RI-3561	Moreno to Whitewater	cultural resource study area	Cultural Resources Overview, mid-Valley Parkway Project, Palm Springs, Riverside County, CA.	Archaeological Research Unit 1992
Riverside	RI-3606	Moreno to Whitewater	records-search buffer area	Reconnaissance of the City of Beaumont Phase I Water Facilities, Riverside County, CA	RMW Paleo Associates 1991
Riverside	RI-3615	Moreno to Whitewater	cultural resource study area	Survey of Cabazon County Water District Water Systems Improvement Project Areas Designated "C-P-S" and "M-Sc" on Cabazon	Archaeological Research Unit 1993
Riverside	RI-3618	Moreno to Whitewater	records-search buffer area	Assessment Archaeological Survey of the Beaumont Heights Specific Plan Project Located in the Beaumont Area of Riverside County	Archaeological Research Unit 1993
Riverside	RI-3651	Moreno to Whitewater	records-search buffer area	San Bernardino National Forest Report, Lake Fulmor Picnic Area Revegetation Project.	Mlazovsky 1992

APPENDIX C (Continued)

Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
Riverside	RI-3693	Adelanto to Moreno and Moreno to Whitewater	cultural resource study area	Investigation: Inland Feeder Project, Metropolitan Water District of Southern CA	Greenwood And Associates 1991
Riverside	RI-3726	Moreno to Whitewater	records-search buffer area	Reconnaissance of Property Proposed for Billboard Construction Adjacent to the Intersection of Interstate 10 and CA Highway 111, Riverside County, CA	RMW Paleo Associates 1993
Riverside	RI-3826	Adelanto to Moreno	records-search buffer area	Investigation for Realignment of the Gilman Springs and Opal Avenue Portals, Inland Feeder, Metropolitan Water District of Southern CA	Wells 1994
Riverside	RI-3946	Moreno to Whitewater	cultural resource study area	Report: Tentative Parcel Map No. 28145, near Sage, Riverside County, CA	CRM Tech 1996
Riverside	RI-3961	Moreno to Whitewater	records-search buffer area	Survey for the Proposed Morongo Convenience Center, Riverside County, CA	Brian F. Mooney Associates 1996
Riverside	RI-4014	Adelanto to Moreno and Moreno to Whitewater	cultural resource study area	Luiseno Rock Art and Sacred Landscape in Late Prehistoric Southern CA	Shepard 1996
Riverside	RI-4025	Adelanto to Moreno	cultural resource study area	Horizontal Realignment of Existing Reche Canyon Road from a Point 2950 Ft North of Arroyo Drive (300 Ft North of Manton Road) and a Point 1000 ft North of Keissel Road, Riverside County, CA	Shepard and McKenna 1996
Riverside	RI-4077	Moreno to Whitewater	records-search buffer area	Assessment, Banning Wastewater Treatment Facility Improvement Project, City of Banning, Riverside County, CA	Anonymous 1998
Riverside	RI-4118	Moreno to Whitewater	records-search buffer area	Report for a Pacific Bell Mobile Telecommunications Facility: CM 427-04, near Cabazon, Riverside County, CA	Chambers Group 1998
Riverside	RI-4132	Adelanto to Moreno	records-search buffer area	Report for a Pacific Bell Mobile Telecommunications Facility: CM 203-02, East of the City of Moreno Valley, CA	Mason et al. 1998
Riverside	RI-4280	Adelanto to Moreno	records-search buffer area	Report, 08-RIV-60, P.M. 22.8/26.3.	Caltrans 1999

APPENDIX C (Continued)

Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
Riverside	RI-4311	Moreno to Whitewater	cultural resource study area	Phase I Cultural Resources Assessment for PP16111, Cabazon Area of Unincorporated Riverside County, CA.	Archaeological Advisory Group 1999
Riverside	RI-4388	Adelanto to Moreno	cultural resource study area	Assessment of Eastern Municipal Water Districts "Manzanita Tank and Supply Pipeline Project", County of Riverside, and City of Moreno Valley, CA	Dice 2000
Riverside	RI-4421	Moreno to Whitewater	cultural resource study area	Appendix B-Cultural Resources. in: Measure a Program Project Alternatives Analysis-Environmental Component, Technical Appendix Volume I	LSA Associates 1990
Riverside	RI-4424	Moreno to Whitewater	cultural resource study area	Mark Technologies Corp Alta Mesa Pumped Storage Hydroelectric Project: Survey on Federal & Private Properties Located Win Sec 3, 4, 5, 9 and 10, T3S, R3E, Cabazon-White Water Area, County of Riverside, CA	L&L Environmental 2002
Riverside	RI-4427	Moreno to Whitewater	cultural resource study area	Inspection of Pipeline Relocation Areas in Union Pacific Railroad Corridor, Riverside and San Bernardino Counties, CA.	Self 2000
Riverside	RI-4428	Moreno to Whitewater	cultural resource study area	Assessment in Sections 2 and 12 of the Morongo Indian Reservation Riverside County, Banning, CA.	Anonymous 1990
Riverside	RI-4430	Moreno to Whitewater	cultural resource study area	Report for Williams Communications, Inc. Fiber Optic Cable System Installation Project, Riverside, CA to the CA/Az Border, Riverside, San Bernardino, & Imperial Counties, C	Jones And Stokes Associates 1999
Riverside	RI-4588	Adelanto to Moreno	cultural resource study area	Assessment of the Proposed Verizon Wireless Reche Canyon Unmanned Cellular Telecommunications Site to Be Located at 7600 Reche Canyon Road, Colton, Riverside County, CA	Tetra Tech 2001
Riverside	RI-4614	Moreno to Whitewater	records-search buffer area	Report: Palm Springs Deteriorated Pole Replacement Project (Pole Nos. 2071592E, 3565075S, and 2562995S), Riverside County	Compass Rose Technical Services 2002
Riverside	RI-4720	Moreno to Whitewater	cultural resource study area	Survey and Evaluations for the Sunset Crossing Project Footprint, South Banning Area, County of Riverside, CA	Michael Brandman Associates 2004

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
Riverside	RI-4727	Adelanto to Moreno	records-search buffer area	Assessment: Gavilan Hills, Harris Parcel, Riverside County, CA	LSA Associates 2002
Riverside	RI-4777	Adelanto to Moreno	records-search buffer area	Survey of 6-Acre Parcel, Smith Correctional Facility, Riverside County	Discovery Works 2003
Riverside	RI-4815	Adelanto to Moreno and Moreno to Whitewater	cultural resource study area	Evaluation of Oak Valley, Riverside County, CA	Dames And Moore 1987
Riverside	RI-4840	Moreno to Whitewater	records-search buffer area	Assessment of a 23-Acre Parcel in Beaumont, Riverside County	Archaeological Resource Management Corporation 2002
Riverside	RI-4982	Adelanto to Moreno	cultural resource study area	Resources for the Revised General Plan, City of Moreno Valley	Archaeological Associates 2003
Riverside	RI-4987	Moreno to Whitewater	cultural resource study area	Investigation for the Proposed Willow Springs Development Project Area in Beaumont, Riverside County, CA	Mckenna 2003
Riverside	RI-5032	Moreno to Whitewater	cultural resource study area	Investigation of the 140 Acre Robinson's Ready Mix Expansion Area near Cabazon, Riverside County, CA	Mckenna 2005
Riverside	RI-5088	Adelanto to Moreno and Moreno to Whitewater	cultural resource study area	Ethnographic Overview Inland Feeder Pipeline Project	Cultural Systems Research 2005
Riverside	RI-5136	Moreno to Whitewater	cultural resource study area	Assessment Hovchild Property, City of Beaumont, County of Riverside, CA	The Keith Companies 2003
Riverside	RI-5289	Adelanto to Moreno	records-search buffer area	Results for Sprint Pcs Facility RV54XC519B (Vacant Lot), near Moreno Valley, Riverside County, CA	White 2001

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
Riverside	RI-5291	Adelanto to Moreno	cultural resource study area	Assessment for Sprint Pcs Facility RV54XC525A (Yellow Barn), near Moreno Valley, Riverside County, CA	White, 2001
Riverside	RI-5292	Adelanto to Moreno	cultural resource study area	Results for Sprint Pcs Facility RV54XC525A (Yellow Barn), near Moreno Valley, Riverside County, CA	White, 2001
Riverside	RI-5293	Adelanto to Moreno	records-search buffer area	Assessment for Sprint Pcs Facility RV54XC519B (Vacant Lot), near Moreno Valley, Riverside County, CA	White 2001
Riverside	RI-5299	Adelanto to Moreno	cultural resource study area	Survey of the Proposed Moreno Valley Unified School District High School #5, Located in the City of Moreno Valley, Riverside County, CA	Mckenna 2005
Riverside	RI-5321	Moreno to Whitewater	cultural resource study area	Assessment, Central Avenue Parcels (Apts 377-120-007 and -008) City of Lake Elsinore, Riverside County, CA	LSA Associates 2004
Riverside	RI-5473	Adelanto to Moreno	records-search buffer area	Assessment of Apr 477-120-004, -005± 31.0 Acres of Land in Moreno Valley, Riverside County, CA	Keller 2005
Riverside	RI-5474	Adelanto to Moreno	records-search buffer area	Assessment of Tentative Tract Map 33901, ±17.95 Acres of Land in Moreno Valley, Riverside County, CA	Keller 2005
Riverside	RI-5495	Moreno to Whitewater	records-search buffer area	Results for Sprint Pcs Facility RV37XC928D (Trinity), Whitewater, Riverside County, CA	Michael Brandman Associates 2000
Riverside	RI-5496	Moreno to Whitewater	records-search buffer area	Assessment for Sprint Pcs Facility RV37XC928D (Trinity), Whitewater, Riverside County, CA	Michael Brandman Associates 2000
Riverside	RI-5521	Moreno to Whitewater	cultural resource study area	Report; District 8; Riverside County; Route 28.4; Kilo Post 28.4; Post Mile 16.9	LSA Associates 2004
Riverside	RI-5816	Moreno to Whitewater	records-search buffer area	Deteriorated Pole Replacement Project, Survey of 3 Pole Locations on the Arrowhead-Calelectric-Shandin 115kv + Gold Buckle 12kv T/L, San Bernardino Co, CA + the Banning-Garnet-Maraschino-Windfarm 115kv T/L, Riverside Co, CA	Statistical Research 2005

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
Riverside	RI-5945	Moreno to Whitewater	cultural resource study area	Report, Energy Technologies and Resources Complex, in the Community of Cabazon, Riverside County, CA	CRM Tech 2003
Riverside	RI-6030	Moreno to Whitewater	cultural resource study area	Assessment of Tentative Tract Map 31896 Amended No. 1, ±4.88 Acres of Land in Wildomar, Riverside County, CA	Jean A. Keller 2004
Riverside	RI-6088	Adelanto to Moreno	cultural resource study area	Report for the Improvement of Interstate Route 215/State Route 91/ State Route 60, Riverside County, CA	Caltrans 1998
Riverside	RI-6098	Moreno to Whitewater	records-search buffer area	Report for Parcel #532-025 Located at Hathaway and Wesley, City of Banning, CA	Michael Brandman Associates 2005
Riverside	RI-6099	Moreno to Whitewater	records-search buffer area	Results and Site Visit for Sprint Telecommunications Facility Candidate RV60XC847A (Vreken Property) 60 South Aola Street, Banning, Riverside County, CA	Michael Brandman Associates 2004
Riverside	RI-6150	Moreno to Whitewater	cultural resource study area	Search and Site Visit Results for Cingular Telecommunications Facility Candidate RS-043-01 (Sci Colo La Cadena), 220 East La Cadena, Riverside, Riverside County, CA	Michael Brandman Associates 2005
Riverside	RI-6230	Moreno to Whitewater	cultural resource study area	Survey for the Lockheed/Laborde Canyon off-Highway Vehicle (OHV) Park, Riverside County, CA	EDAW 2005
Riverside	RI-6253	Adelanto to Moreno	records-search buffer area	Report, Tentative Tract Map No. 31206, near the City of Moreno Valley, Riverside County, CA	Hogan et al. 2004
Riverside	RI-6256	Moreno to Whitewater	cultural resource study area	Survey of a 29-Acre Parcel, Located West of Manzanita Road near the City of Beaumont, Riverside County, CA	Ecorp Consulting 2006
Riverside	RI-6258	Moreno to Whitewater	cultural resource study area	Report, Union Pacific Railroad, Fingal-Thermal Phase II Expansion, Riverside County, CA	Chambers Group 2006
Riverside	RI-6525	Moreno to Whitewater	cultural resource study area	Report, the Cabazon Project, near the Community of Cabazon, Riverside County, CA	CRM Tech 2006

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
Riverside	RI-6707	Moreno to Whitewater	cultural resource study area	Surveys of Alternative Routes within CA for the Proposed Devers-Palo Verde 2 Transmission Project	Applied Earthworks 2006
Riverside	RI-6753	Adelanto to Moreno	records-search buffer area	Survey of the Proposed Moreno Valley Unified School District High School #5, Located West of Redlands Blvd. in the City of Moreno Calley, Riverside County, CA	Mckenna 2006
Riverside	RI-6853	Moreno to Whitewater	cultural resource study area	Survey of the Stubby and Townhall Transmission Lines, Banning to Desert Hot Springs, Riverside County, CA	Statistical Research 2005
Riverside	RI-6919	Adelanto to Moreno	records-search buffer area	Survey: Perform Routine Trail Maintenance on the Arch Rock Nature Trail, Joshua Tree National Park, CA	Robinson 2006
Riverside	RI-6992	Moreno to Whitewater	cultural resource study area	Assessment, of the Proposed, Banning 223-Acre Development Project, City of Banning, Riverside County, CA.	Bonterra Consulting 2006
Riverside	RI-7052	Moreno to Whitewater	records-search buffer area	Investigation, of the Proposed San Gorgonio Village, Project Area, Approximately 23 Acres, of Land in the City of Beaumont, Riverside County, CA.	Mckenna 2006
Riverside	RI-7110	Adelanto to Moreno	records-search buffer area	Report for TTM 34980, APN 259-040-018, ±2.5 Acres, County of Riverside, CA	Hoover 2006
Riverside	RI-7125	Moreno to Whitewater	records-search buffer area	Report for, the Cabazon Ridge Wind Turbine Project, Whitewater Area of the County of Riverside, CA.	L&L Environmental 2007
Riverside	RI-7126	Adelanto to Moreno	records-search buffer area	Records Searches for the 154-Acre Ironwood Project, County of Riverside	Wetherbee 2006
Riverside	RI-7223	Moreno to Whitewater	records-search buffer area	Report for Southern CA Edison Company Environment Project Riverside County, CA	Jones & Stokes 2007
Riverside	RI-7339	Moreno to Whitewater	cultural resource study area	Historic Properties: Wastewater Treatment Plant Expansion and Recycled Water System, City of Banning, Riverside, CA	CRM Tech 2007
Riverside	RI-7364	Moreno to Whitewater	records-search buffer area	Monitoring of a 29.7-Acre Project Area at the Northwest Corner of the First Street and Commerce Way Beaumont, Riverside County, CA	Chambers Group 2007

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
Riverside	RI-7375	Moreno to Whitewater	cultural resource study area	Report: Cabazon Sewer Project near the Community of Cabazon Riverside County, CA	CRM Tech 2007
Riverside	RI-7409	Moreno to Whitewater	cultural resource study area	Constraints Analysis for Lockheed Martin Beaumont Facility in Laborde Canyon (Site 2), Riverside County	Ecorp Consulting 2007
Riverside	RI-7428	Adelanto to Moreno	cultural resource study area	Assessment for 30-Acre Parcel (APN 679-320-003), Avenue 43, City of Indio, CA	Demcak 2007
Riverside	RI-7955	Moreno to Whitewater	records-search buffer area	Survey for the Cabazon Carmen Meadows Project, County of Riverside, CA, APNs 526-131-002 and 04; TR 33884; PDA-4450	Brian F. Smith And Associates 2008
Riverside	RI-7962	Adelanto to Moreno	records-search buffer area	Assessment of the Proposed Pole Replacements in the City of Moreno Valley, Riverside County, CA (DWO 4950-0472, 77-80012466)	Garcia and Vidal 2009
Riverside	RI-7970	Moreno to Whitewater	cultural resource study area	A Study of the past in San Timoteo Canyon and San Gorgonio Pass: Assessment Oak Valley Substation Project, Riverside County	LSA Associates 2006
Riverside	RI-7986	Moreno to Whitewater	cultural resource study area	Evaluation of Site CA-RIV-6380H for the Gabrych Pit Project, Riverside County, CA	Brian F. Smith And Associates 2008
Riverside	RI-7991	Adelanto to Moreno	records-search buffer area	Inventory of Two Proposed Pole Replacements in the City of Moreno Valley, Riverside County, CA (DWO 4950-0472, 77-80012466)	Chandler et al. 2009
Riverside	RI-8011	Moreno to Whitewater	cultural resource study area	Assessment, Study of the past in San Timoteo Canyon and San Gorgonio Pass: Oak Valley Substation Project Riverside County.	LSA Associates 2008
Riverside	RI-8027	Moreno to Whitewater	cultural resource study area	Beaumont Health Center	Earth Touch Inc. 2009
Riverside	RI-8200	Adelanto to Moreno	cultural resource study area	Assessment: Paradise Valley Specific Plan (SP339), Shavers Valley, Riverside County, CA	CRM Tech 2009
Riverside	RI-8241	Adelanto to Moreno	records-search buffer area	Investigations of the Proposed Westridge Commerce Center at Redlands Blvd. and the Moreno Valley, Riverside County, CA	Mckenna 2008

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
Riverside	RI-8242	Adelanto to Moreno	records-search buffer area	Survey of Two Alternative Moreno Valley Unified School District Sites, City of Moreno Valley, Riverside, County, CA	Mckenna 2008
Riverside	RI-8246	Moreno to Whitewater	records-search buffer area	Historical Properties: Assessor's Parcel Nos. 541-200-009, -010, -015, and -016, U.S. Department of Health and Human Services Grant No. C76Hf09417, City of Banning, Riverside County, CA	CRM Tech 2009
Riverside	RI-8281	Moreno to Whitewater	records-search buffer area	Collocation ("Co") Submission Packet, Fcc Form 621, Project Name: Towerco Colo CA2971 Vreeken Property, Project Number: La3237a	Earth Touch Inc. 2009
Riverside	RI-8301	Moreno to Whitewater	cultural resource study area	Report for the 217 Acre Beylik Parcels (APNs 516-070-022, 516-090-010, 522-040-001, 522-040-002, 522-040-003, 522-030-009, 522-030-008), Sections 9, 10, 15, and 16, Township 3 South, Range 3 East, Aqua Caliente Indian Reservation	Aqua Caliente Band of Cahuilla Indians 2008
Riverside	RI-8335	Adelanto to Moreno	records-search buffer area	Record Search for the Proposed AT&T Wireless Telecommunications Site LA6095 (Weeks Horse Ranch) 8950 Reche Canyon Road, Colton, CA 92324	Wlodarski 2009
Riverside	RI-8368	Adelanto to Moreno	cultural resource study area	Addendum Study: Survey of Two Alternative Sewer Pipeline Alignments for the Moreno Valley Unified School District Sites, City of Moreno Valley, Riverside County, CA.	Mckenna 2009
Riverside	RI-8374	Moreno to Whitewater	cultural resource study area	Inventory of the Proposed SCE Devers to Valley Substation Project, Riverside County, CA.	ICF Jones & Stokes 2009
Riverside	RI-8395	Adelanto to Moreno	cultural resource study area	Assessment Tentative Parcel Map No. 36229, Assessor Parcel No. 471-080-014	Brunzell 2010
Riverside	RI-8409	Adelanto to Moreno	cultural resource study area	Inventory of the Proposed Vista to Devers Transmission Line, Riverside and San Bernardino Counties, CA.	Mooney/Hayes Associates LLC 2004
Riverside	RI-8435	Adelanto to Moreno	records-search buffer area	Assessment for the Public Safety Enterprise Communication (PSEC) Project, Riverside, Orange, San Bernardino, and San Diego Counties, CA (MBA 2008a)—Timoteo Communications Site	Sanka 2010
Riverside	RI-8440	Moreno to Whitewater	cultural resource study area	Assessment: CA-RIV-8953, Blythe Solar 1 Project, Riverside County, CA.	URS Corporation 2008

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
Riverside	RI-8449	Moreno to Whitewater	cultural resource study area	Report: City of Banning General Plan.	CRM Tech 2004
Riverside	RI-8451	Moreno to Whitewater	records-search buffer area	Survey for the Proposed Morongo Convenience Center, Riverside County, CA	Brian F. Mooney Associates 1996
Riverside	RI-8452	Moreno to Whitewater	records-search buffer area	Cultural Resources Survey for the Proposed Morongo Casino/Hotel, Riverside County, California.	Tierra Environmental Services 2003
Riverside	RI-8457	Moreno to Whitewater	records-search buffer area	Field Review at Sycamore Canyon Wilderness Park for Burn Areas- the Letter Serves as an Archaeological Field Report of 60 Acres within Sycamore Canyon Wilderness Park	Discovery Works 2008
Riverside	RI-8525	Adelanto to Moreno	records-search buffer area	Report: Wo 6031-4800; E-4830: Placid 12kv Deteriorated Pole Replacement Project, Reche Canyon Area, Riverside County, CA	Schmidt 2010
Riverside	RI-8531	Moreno to Whitewater	records-search buffer area	Evaluation 280 E. Ramsey Street, Assessor's Parcel No. 541-183-004 City of Banning, Riverside County, CA, CRM Tech Contract No. 2518	CRM Tech 2011
Riverside	RI-8574	Moreno to Whitewater	cultural resource study area	The Proposed Sce Devers to Valley Substation Project Riverside County CA: Volume I	ICF Jones & Stokes 2009
Riverside	RI-8644	Adelanto to Moreno	records-search buffer area	Assessment for the Public Safety Enterprise Communication (PSEC) Project, Riverside, Orange, San Bernardino, and San Diego Counties, CA (MBA 2008A)—Timoteo Communications Site	Sanka and Gillean 2011
Riverside	RI-8652	Adelanto to Moreno	cultural resource study area	Results for T-Mobile Usa Candidate IE25565-C	Bonner et al. 2011
Riverside	RI-8672	Moreno to Whitewater	cultural resource study area	Construction of Energy Technologies and Resource Complex	Office of Historic Preservation Department of Parks And Recreation 2010
Riverside	RI-8702	Adelanto to Moreno	records-search buffer area	Assessment for the Public Safety Enterprise Communication Project	Gillean 2011

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
Riverside	RI-8750	Moreno to Whitewater	cultural resource study area	Report for the Sunset Avenue Grade Separation Project, Riverside County, CA	SWCA Environmental Consultants 2010
Riverside	RI-8802	Adelanto to Moreno	cultural resource study area	Assessment: Moreno Master Drainage Plan Revision	CRM Tech 2012
Riverside	RI-8839	Moreno to Whitewater	cultural resource study area	Records Search and Site Visit Results for Sitemaster, Inc. Candidate CA201 (Banning EON)	Michael Brandman Associates 2012
Riverside	RI-8852	Moreno to Whitewater	cultural resource study area	Records Search and Site Visit Results for Sitemaster, Inc. Candidate Ca201 (Banning EON)	Michael Brandman Associates 2012
Riverside	RI-8876	Moreno to Whitewater	records-search buffer area	Inventory of a Proposed Pole Replacement in the City of Palm Springs, Riverside County, CA (TD543773)	Ecorp Consulting 2011
Riverside	RI-8879	Moreno to Whitewater	cultural resource study area	Report, Gilman Springs Road Shoulder Widening and Realignment Project, in and near the City of Moreno Valley, Riverside County, CA	Applied Earthworks 2012
Riverside	RI-8895	Adelanto to Moreno	cultural resource study area	Assessment: Borrego Medical Center Expansion Project	Tang and Hogan 2012
Riverside	RI-8928	Moreno to Whitewater	records-search buffer area	Historic Properties, Morongo Outdoor Entertainment Center Project, Morongo Indian Reservation, Cabazon Area, Riverside County, CA	CRM Tech 2013
Riverside	RI-8981	Moreno to Whitewater	cultural resource study area	Inventory, Proposed Southern CA Edison Devers-Palo Verde 2 500kv Transmission Line Project, Riverside County, CA	ASM Affiliates 2013
San Bernardino	10678	Adelanto to Moreno	cultural resource study area	Life And Adventure along The Mojave River Trail	Walker 1967
San Bernardino	10689	Adelanto to Moreno	cultural resource study area	The Sayles Complex: A Late Milling Stone Assemblage from Cajon Pass and the Ecological Implications of Its Scraper Planes	Kowta 1969

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
San Bernardino	106101	Adelanto to Moreno	records-search buffer area	Survey of the Deep Creek Drainage, San Bernardino Mountains, CA	White and Reeder 1970
San Bernardino	106103	Adelanto to Moreno	records-search buffer area	Jeffrey's Stones	Turner 1971
San Bernardino	106176	Adelanto to Moreno	records-search buffer area	The Archaeological Impact on a Residential Development in San Bernardino, CA	Decker 1973
San Bernardino	106183	Adelanto to Moreno	cultural resource study area	Archaeological Environmental Impact Analysis—Gem Ranch Kamp	Schuling 1973
San Bernardino	106191	Adelanto to Moreno	cultural resource study area	Survey for County Service Area No. 70 Improvement Zone "J", Assessment of Impact and Recommendations	Smith 1973
San Bernardino	106211	Adelanto to Moreno	records-search buffer area	Assessment of the Scott Canyon Dam Site	Smith 1974
San Bernardino	106248	Adelanto to Moreno	records-search buffer area	Report of Environmental Survey and Research, Redlands Quadrangle, Proposed Dump Sites	San Bernardino County Museum Association 1975
San Bernardino	106264	Adelanto to Moreno	records-search buffer area	Reconnaissance and Evaluation: Beaumont Avenue Water Resources Project	Smith 1975
San Bernardino	106273	Adelanto to Moreno	cultural resource study area	Santa Ana River Project, Description and Evaluation of Cultural Resources and Appendices: Field Data	Leonard 1975
San Bernardino	106274	Adelanto to Moreno	cultural resource study area	Survey of the Proposed Santa Ana River Hiking/Biking Trail in the Prado Flood Control Basin	Rosenthal and Jane 1979
San Bernardino	106275	Adelanto to Moreno	cultural resource study area	Survey, Prado Flood Control Basin, San Bernardino and Riverside Counties, CA	Tobey et al. 1977
San Bernardino	106337	Adelanto to Moreno	records-search buffer area	Assessment of Tract 7301, San Bernardino	Harris 1976

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
San Bernardino	106447	Adelanto to Moreno	cultural resource study area	Development of Water Facilities in the Santa Ana River Basin, CA, 1810-1968	Scott 1976
San Bernardino	106468	Adelanto to Moreno	records-search buffer area	Archaeological Impact of Proposed Civic Center Construction, Loma Linda	Mone et al. 1977
San Bernardino	106492	Adelanto to Moreno	cultural resource study area	Assessment of Proposed Bloomington Wastewater Facilities Plan	Simpson et al. 1977
San Bernardino	106522	Adelanto to Moreno	records-search buffer area	Assessment of the South Side of Date Street between Golden Avenue and Del Rosa Avenue, San Bernardino Area	Hearn 1977
San Bernardino	106531	Adelanto to Moreno	cultural resource study area	Assessment of Southeast Industrial Park, San Bernardino	Hearn 1977
San Bernardino	106647	Adelanto to Moreno	records-search buffer area	Assessment of 63 Acre Parcel of Land Located on the North Side of Redlands Boulevard between Mountain View Avenue and Bryn Mawr Avenue, Loma Linda-Redlands Area	Hearn 1978
San Bernardino	106719	Adelanto to Moreno	cultural resource study area	The Archaeology of the Western Mohave (Inventory of the Calico, Kramer, Stoddard, Johnson-Morongo and 29 Palms Planning Units)	Coombs et al. 1979
San Bernardino	106790	Adelanto to Moreno	records-search buffer area	Assessment: Marshall Boulevard at Del Rosa Channel, S.O.S.—Ho 7324	Simpson 1979
San Bernardino	106819	Adelanto to Moreno	records-search buffer area	Assessment Report for Swarthout Canyon Road at Atchinson, Topeka and Santa Fe Railroad Crossing, Ho 6753	Simpson 1979
San Bernardino	106865	Adelanto to Moreno	cultural resource study area	Assessment: Tentative Tract No. 11239, San Bernardino Area	San Bernardino County Museum Association 1979
San Bernardino	106878	Adelanto to Moreno	cultural resource study area	Allen-Warner Valley Energy System: Western Transmission System Ethnographic and Historical Resources	Bean And Vane 1979

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
San Bernardino	106891	Adelanto to Moreno and Compressor Station	cultural resource study area	An Overview of the Cultural Resources of the Western Mojave Desert	Gary and Weinman-Roberts 1980
San Bernardino	106967	Adelanto to Moreno	cultural resource study area	Survey of the Cooley Ranch East, San Bernardino County, CA	WESTEC Services 1980
San Bernardino	106986	Adelanto to Moreno	cultural resource study area	Baldy Mesa Water Lines, Cultural Resources Assessment	Reynolds, 1980
San Bernardino	1061025	Adelanto to Moreno	cultural resource study area	Survey for County Service Area No. 70 Improvement Zone "J", Assessments of Impact and Recommendations	Harris 1973
San Bernardino	1061026	Adelanto to Moreno	cultural resource study area	Survey for County Service Area No. 70, Improvement Zone "J", Assessments of Impact and Recommendations	Harris 1974
San Bernardino	1061027	Adelanto to Moreno	cultural resource study area	Assessment: Baldy Mesa Water Lines, County Service Area 70, Improvement Zone J, San Bernardino County, CA	Reynolds 1980
San Bernardino	1061048	Adelanto to Moreno	records-search buffer area	Survey of a 104±- Acre Parcel in Devore, in San Bernardino County, CA	Cooley 1980
San Bernardino	1061111	Adelanto to Moreno	records-search buffer area	Assessment of the Proposed Patton Farms Residential Housing Project, San Bernardino	Smith et al. 1981
San Bernardino	1061115	Adelanto to Moreno	cultural resource study area	Native American Places in the San Bernardino National Forest, San Bernardino and Riverside Counties, CA	Bean And Vane 1981
San Bernardino	1061160	Adelanto to Moreno	records-search buffer area	Assessment of the Old San Bernardino Mission District, 315 Acres Northeasterly Planning Area, City of Loma Linda	Smith et al. 1981
San Bernardino	1061202	Adelanto to Moreno	records-search buffer area	Monitoring for Construction at Swarthout Canyon Road at A.T. & S.F. Railroad Crossing—Ho 6763	Lerch 1981
San Bernardino	1061219	Adelanto to Moreno	cultural resource study area	Survey of the Proposed Southern CA Edison Ivanpah Generating Station, Plant Site, and Related Rail, Coal Slurry, Water and Transmission Line Corridors	Hall et al. 1981

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
San Bernardino	1061220	Adelanto to Moreno	cultural resource study area	The Ivanpah Generating Station Project: Ethnographic (Native American) Resources	Bean et al. 1981
San Bernardino	1061285	Adelanto to Moreno	cultural resource study area	Assessment of the Cajon Creek Project (Wilson Property and Surrounding Properties), San Bernardino County, CA	Lerch 1982
San Bernardino	1061300	Adelanto to Moreno	cultural resource study area	Cultural Resource Overview: San Bernardino National Forest, CA	Carrico et al. 1982
San Bernardino	1061374	Adelanto to Moreno	records-search buffer area	Assessment of Tentative Tract 10600 near San Bernardino, CA	Drover 1983
San Bernardino	1061425	Adelanto to Moreno	cultural resource study area	Man and Settlement in the Upper Santa Ana River Drainage: A Cultural Resources Overview	Altschul et al. 1984
San Bernardino	1061434	Adelanto to Moreno	records-search buffer area	Report: Route 15, P.M. 25.8/26.2, Proposed Truck Safety Check Area	Hammond 1984
San Bernardino	1061441	Adelanto to Moreno	records-search buffer area	Recording for Site CA-SBR-4265, SEC 7, T3N R5W, Cajon 7.5' Quadrangle	Lerch 1984
San Bernardino	1061456	Adelanto to Moreno	records-search buffer area	Survey: Norton Air Force Base Excess Lands	Schwartz 1984
San Bernardino	1061488	Adelanto to Moreno	cultural resource study area	Archaeological Investigations in Crowder Canyon, 1973-1984: Excavations at Sites SBR-421B, SBR-421C, SBR-421D, and SBR-713	Basgall and True 1985
San Bernardino	1061499	Adelanto to Moreno	cultural resource study area	Cultural Resources Overview: CA Portion, Proposed Pacific Texas Pipeline Project	Foster And Greenwood 1985
San Bernardino	1061670	Adelanto to Moreno	records-search buffer area	Assessment of the Proposed Crowder Canyon Recreational Vehicle Park, San Bernardino County, CA	Schroth et al. 1987
San Bernardino	1061700	Adelanto to Moreno	records-search buffer area	Evaluation: An Archaeological Assessment of the Barton Road Residential Development Project in the City of Loma Linda, San Bernardino	De Munck et al. 1987

APPENDIX C (Continued)

Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
San Bernardino	1061709	Adelanto to Moreno	records-search buffer area	Evaluation: An Archaeological Assessment of 40 Acres of Land Located on Baldy Mesa in San Bernardino County, CA	Swope 1987
San Bernardino	1061732	Adelanto to Moreno	records-search buffer area	Statement of Significance for the Anson Van Leuven Residence, 10664 Mountain View Ave., Loma Linda	Hatheway 1987
San Bernardino	1061764	Adelanto to Moreno	cultural resource study area	A Windshield Survey and Preliminary Architectural/Historical Inventory of Loma Linda, CA	Hatheway 1988
San Bernardino	1061791	Adelanto to Moreno	records-search buffer area	Survey of Tentative Tract 13887, 14 Acres in Loma Linda, San Bernardino County, CA	Swanson 1988
San Bernardino	1061793	Adelanto to Moreno	records-search buffer area	Assessment of a Parcel on Barton Road, Situated between Mountain and Bryn Mawr Avenues in the City of Loma Linda	De Barros 1988
San Bernardino	1061804	Adelanto to Moreno	records-search buffer area	Survey of Tract 13943, 30 Acres in Loma Linda, San Bernardino County, CA	Swanson 1988
San Bernardino	1061806	Adelanto to Moreno	cultural resource study area	Cresta Linda Tract, Judgmental Survey	Swanson 1988
San Bernardino	1061808	Adelanto to Moreno	cultural resource study area	Upper Santa Ana River, CA	Hampson et al. 1988
San Bernardino	1061837	Adelanto to Moreno	cultural resource study area	Prehistoric Sites in the Prado Basin, CA: Regional Context and Significance Evaluation	Goldberg and Arnold 1988
San Bernardino	1061852	Adelanto to Moreno	cultural resource study area	Survey, San Timoteo Wash Flood Control Project	Hampson and Swanson 1989
San Bernardino	1061870	Adelanto to Moreno	records-search buffer area	Assessment of a 15.65 Acre Parcel of Land Designated as Tentative Tract No. 14328 Located in the City of San Bernardino, San Bernardino County, CA	De Munck 1989
San Bernardino	1061874	Adelanto to Moreno	records-search buffer area	Reconnaissance of the Oasis Townhouse Apartments Property, 30 Acres in Loma Linda, San Bernardino County, CA	Bissell 1989
San Bernardino	1061915	Adelanto to Moreno	cultural resource study area	Survey of the Mojave River Area and Adjacent Regions	Smith 1963

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
San Bernardino	1061941	Adelanto to Moreno	cultural resource study area	Archival Research and Site Documentation, Prado Basin, CA	Hatheway 1989
San Bernardino	1061955	Adelanto to Moreno	records-search buffer area	Reconnaissance of a Small Parcel of Land in Loma Linda, San Bernardino County, CA	Bissell 1989
San Bernardino	1061956	Adelanto to Moreno	records-search buffer area	Report for the Sterling Heights Property	Hatheway and Duffield 1989
San Bernardino	1061958	Adelanto to Moreno	cultural resource study area	Assessment of Five Public Works Infrastructure Improvements, Verdemont Area Assessment District #987, City of San Bernardino, CA	Lerch 1989
San Bernardino	1061971	Adelanto to Moreno	cultural resource study area	An Analysis of the Lithic Material from the Sayles Site	Sumner 1981
San Bernardino	1062010	Adelanto to Moreno	cultural resource study area	Rev. Juan Caballeria: Historian or Storyteller?: Rethinking the 1810 Dumetz Expedition	Harley 1988
San Bernardino	1062036	Adelanto to Moreno	cultural resource study area	Report for the Proposed Crowder Canyon Controlled Access Highway, San Bernardino County, CA	Hammond 1989
San Bernardino	1062042	Adelanto to Moreno	records-search buffer area	Report for the 10 Acre Verdemont Site in San Bernardino County, CA	Macko et al. 1989
San Bernardino	1062065	Adelanto to Moreno	records-search buffer area	Survey of the 110-Acre Pacific Hills Project Area, Loma Linda, CA	Manley and Cheever 1990
San Bernardino	1062172	Adelanto to Moreno	cultural resource study area	Reconnaissance for the Proposed Devore Substation, San Bernardino County, CA	White 1987
San Bernardino	1062182	Adelanto to Moreno	records-search buffer area	Assessment of Huntridge Project, San Bernardino County, Loma Linda, CA	Drover 1990
San Bernardino	1062223	Adelanto to Moreno	cultural resource study area	Assessment of Oak Hills Creative Boundaries	Brown 1991
San Bernardino	1062250	Adelanto to Moreno	records-search buffer area	Investigation for the Proposed Site and Well Location(s) in the Cajon Canyon, Devore, San Bernardino County, CA	Mckenna 1991

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
San Bernardino	1062260	Adelanto to Moreno	cultural resource study area	Cultural Resources at Norton Air Force Base, CA	Carmichael 1991
San Bernardino	1062261	Adelanto to Moreno	cultural resource study area	San Bernardino National Forest: A Century of Federal Stewardship	
San Bernardino	1062266	Adelanto to Moreno	cultural resource study area	Revision and Discovery in a Milling Stone Horizon Context	Donnelly 1991
San Bernardino	1062288	Adelanto to Moreno	records-search buffer area	Survey of a 129-Acre Parcel, the Devore Property, San Bernardino, County, CA	Bowden 1990
San Bernardino	1062405	Adelanto to Moreno	cultural resource study area	Survey of 6.32 Miles along Phelan Road between Johnson and Baldy Mesa Roads, Phelan Community, San Bernardino County, CA	Swanson 1991
San Bernardino	1062417	Adelanto to Moreno	cultural resource study area	Assessment of a 3±-Acre Parcel as Shown on TTM 15187 Located at 2576 Kendall Drive in San Bernardino, San Bernardino County, CA	White 1991
San Bernardino	1062437	Adelanto to Moreno	records-search buffer area	Assessment of Tentative Tract 14735, 34.1 Acres, City of San Bernardino, San Bernardino County, CA	Jertberg 1991
San Bernardino	1062507	Adelanto to Moreno	cultural resource study area	Survey for a Three Mile Segment of Phelan Road, San Bernardino County, CA	Sundberg and Whitney-Desautels 1992
San Bernardino	1062545	Adelanto to Moreno	records-search buffer area	Investigations of the Willis Crocker Property, 38± Acres in the Baldy Mesa/Phelan Area, San Bernardino County, CA	Mckenna 1992
San Bernardino	1062587	Adelanto to Moreno	cultural resource study area	World War II Structures at Norton Air Force Base in San Bernardino County, CA	Schmuecker 1991
San Bernardino	1062625	Adelanto to Moreno	records-search buffer area	Assessment of the Barton Center of Redlands, Marigold Farms, City of Redlands, San Bernardino County, CA	Swope and Lerch 1992
San Bernardino	1062627	Adelanto to Moreno	records-search buffer area	Investigations of the Robert Beck Property, 13.3+ Acres in the Baldy Mesa/Phelan Area, San Bernardino County, CA	Mckenna 1992

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
San Bernardino	1062641	Adelanto to Moreno	records-search buffer area	Tentative Parcel 14143 Located in Baldy Mesa Area, San Bernardino County, CA	Taskiran 1992
San Bernardino	1062655	Adelanto to Moreno	records-search buffer area	Investigations of CA-SBR-7152H, Located on the Willis Crocker Property, Baldy Mesa, San Bernardino County, CA	Mckenna 1992
San Bernardino	1062712	Adelanto to Moreno	cultural resource study area	Survey of the Cajon Creek Specific Plan Project, San Bernardino County, CA	Cook 1990
San Bernardino	1062733	Adelanto to Moreno	records-search buffer area	Assessment of a 10-Acre Parcel as Shown on TPM 13991 Located Adjacent to Fir Street in the Baldy Mesa Region of San Bernardino County	White 1992
San Bernardino	1062791	Adelanto to Moreno	cultural resource study area	Survey of Cozy Dell Ranch, Cajon Pass, San Bernardino County, CA	Laska and Swanson 1990
San Bernardino	1062839	Adelanto to Moreno	cultural resource study area	Cleghorn Canyon Research Natural Area	Mlazovsky 1993
San Bernardino	1062882	Adelanto to Moreno	records-search buffer area	Lost Lake Project	Mlazovsky 1988
San Bernardino	1062883	Adelanto to Moreno	cultural resource study area	Dosecc Drill Pad Expansion	Fountain 1987
San Bernardino	1062963	Adelanto to Moreno	cultural resource study area	Mormons in San Bernardino	Haenszel 1992
San Bernardino	1063018	Adelanto to Moreno	cultural resource study area	On the Subsistence Ecology of the "Late Inland Millingstone Horizon" in Southern CA	Sutton 1993
San Bernardino	1063062	Adelanto to Moreno	cultural resource study area	Calnev Pipeline Company Cajon Pump Station Expansion Project	William et al. 1995
San Bernardino	1063086	Adelanto to Moreno	records-search buffer area	Assessment of Proposed Development for the CA State University, San Bernardino Master Plan	Maxon 1996
San Bernardino	1063110	Adelanto to Moreno	cultural resource study area	Report for the Widening of Phelan Road from Baldy Mesa Road to State Hwy 395, San Bernardino County, CA	Brock and D'Lorio 1996

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
San Bernardino	1063117	Adelanto to Moreno	records-search buffer area	Archaeological Record Search Results, San Bernardino Vegetation Management Project	Love 1996
San Bernardino	1063153	Adelanto to Moreno	records-search buffer area	L.A. Cellular Project-Devore, CA, Site 697.1.	Jertberg 1996
San Bernardino	1063157	Adelanto to Moreno	records-search buffer area	Report: Two Proposed Well Sites in Cajon Canyon near the Community of Devore, San Bernardino County, CA	Love and Tang 1997
San Bernardino	1063287	Adelanto to Moreno	records-search buffer area	Survey of the Mission Road Project, City of Loma Linda, San Bernardino County, CA	Swope 1997
San Bernardino	1063426	Adelanto to Moreno	records-search buffer area	Butte Resources #1-23 & 1-26	Anthony 1982
San Bernardino	1063427	Adelanto to Moreno	records-search buffer area	Arco Recon #05-12-CA-025	Cooper 1979
San Bernardino	1063428	Adelanto to Moreno	records-search buffer area	Summit Unit #4.	Sloat n.d.
San Bernardino	1063429	Adelanto to Moreno	cultural resource study area	Proposed Expansion of Summit Allotment	Cooper 1978
San Bernardino	1063430	Adelanto to Moreno	records-search buffer area	Report to Assist Preparation of Environmental Assessment and Supporting Documents for the Eradication of Selected Exotic Plant Species in Cajon Wash	Mckeehan 1998
San Bernardino	1063539	Adelanto to Moreno	cultural resource study area	Historic Properties: Segments of Bakersfield-Rialto Fiber Optic Line within the Son, San Bernardino County, CA	Love 1998
San Bernardino	1063644	Adelanto to Moreno	cultural resource study area	Report: A 165 Acre ± Parcel Located South of Kendall Drive near San Bernardino, CA	Van Horn 1979
San Bernardino	1063650	Adelanto to Moreno	cultural resource study area	Assessment of TT 15977, a 39 Acre Parcel Located Adjacent to Kendall Drive in the Verdernont Area of San Bernardino, CA	White and White 1999
San Bernardino	1063656	Adelanto to Moreno	cultural resource study area	The Hub Project, City of San Bernardino, San Bernardino County, CA	Love 2000

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
San Bernardino	1063658	Adelanto to Moreno	cultural resource study area	Historic Property: AT&T Wireless Site C921, Community of Baker, San Bernardino County, CA	Love 2000
San Bernardino	1063708	Adelanto to Moreno	cultural resource study area	Assessment of a 28.05 Acre Parcel (TPM 15154) Adjacent to Kendall Drive at University Parkway, San Bernardino, CA	White and White n.d.
San Bernardino	1063711	Adelanto to Moreno	cultural resource study area	Report for Level 3 Fiber Optic Project: WSO 4 Devore Alternatives, San Bernardino County, CA	Shepard 2000
San Bernardino	1063714	Adelanto to Moreno	records-search buffer area	Joint Task Force-6 Proposed Facilities Improvements at the Existing San Bernardino Police Force Firing Range, San Bernardino County, CA	Fickel 2001
San Bernardino	1063739	Adelanto to Moreno	records-search buffer area	Cingular Wireless Facility SB220-02, San Bernardino County, CA	Duke 2002
San Bernardino	1063747	Adelanto to Moreno	records-search buffer area	Assessment for AT&T Wireless Facility C578, County of San Bernardino, CA	Duke 1999
San Bernardino	1063751	Adelanto to Moreno	records-search buffer area	Monitoring of an AT&T Wireless Services Facility C578, County of San Bernardino, CA	Duke 2000
San Bernardino	1063752	Adelanto to Moreno	records-search buffer area	Report for a Pacific Bell Mobile Services Telecommunications Facility: CMO12-21 in the City of San Bernardino, CA	Bonner 1998
San Bernardino	1063759	Adelanto to Moreno	records-search buffer area	Results for Spring PCS Facility SB38XC927E (Driving Range), Loma Linda, CA	White 2001
San Bernardino	1063925	Adelanto to Moreno	cultural resource study area	Report for Montecito Memorial Park, City of Colton, County of San Bernardino, CA	Irish 2003
San Bernardino	1063939	Adelanto to Moreno	cultural resource study area	Spectra Site R7258-01-Del Rosa, San Bernardino, CA	Billat 2001
San Bernardino	1064042	Adelanto to Moreno	records-search buffer area	Assessment of the Mission Glen Project, Eastern Section, a 41± Acre Site Located in the City of Loma Linda, San Bernardino County, CA	Dice 2002
San Bernardino	1064045	Adelanto to Moreno	records-search buffer area	Historic Properties: East Valley Water District-Arroyo Verde Mutual Water Company Water System Improvement Project in the City of Highland, San Bernardino County, CA	Dahdul 2002

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
San Bernardino	1064048	Adelanto to Moreno	records-search buffer area	Historic Properties: City of Redlands Recycled Water Project in the City of Redlands, San Bernardino County, CA	Love 2001
San Bernardino	1064076	Adelanto to Moreno	records-search buffer area	Assessment: AT&T Wireless Facility #24008A, City of San Bernardino, San Bernardino County, CA	Pletka 2003
San Bernardino	1064077	Adelanto to Moreno	cultural resource study area	Reconnaissance of the Proposed Arrowhead Parkway Alignments Located in San Bernardino, CA	Brown 2003
San Bernardino	1064078	Adelanto to Moreno	records-search buffer area	Assessment: Cingular Wireless Facility #SB 239-01, San Bernardino County, CA	Duke 2002
San Bernardino	1064080	Adelanto to Moreno	records-search buffer area	AT&T Site 9500-24008b, San Bernardino, CA	Mckenna 2003
San Bernardino	1064081	Adelanto to Moreno	cultural resource study area	Proposed AT&T Wireless Telecommunication Equipment Installation, 3205 Kendall Dr, San Bernardino, CA.	Strickland 2002
San Bernardino	1064220	Adelanto to Moreno	records-search buffer area	Survey of 30 Acres on the J.B. Gold Property for the Natural Resources Conservation Service	Mirro 2004
San Bernardino	1064287	Adelanto to Moreno	cultural resource study area	Investigation at 9722 Phelan Rd, Oak Hills, San Bernardino County, CA	Alexandrowicz 2003
San Bernardino	1064292	Adelanto to Moreno	cultural resource study area	Report: Tentative Parcel Map 15918, near the City of Hesperia, San Bernardino County, CA	Wetherbee 2004
San Bernardino	1064295	Adelanto to Moreno	records-search buffer area	Survey Bechtel/AT&T Telecommunications Facility Candidate 950023023A (Quail Valley Middle School), 10058 Arrowhead Road, Phelan, San Bernardino County, CA	Dice 2003
San Bernardino	1064331	Adelanto to Moreno	cultural resource study area	Assessment for AT&T Wireless Site #C962 (Barton & Waterman), City of San Bernardino, San Bernardino County, CA	White 2000
San Bernardino	1064333	Adelanto to Moreno	records-search buffer area	Assessment: New High School, San Bernardino, CA	Goodwin and Reynolds 2002
San Bernardino	1064336	Adelanto to Moreno	records-search buffer area	A Phase I Archaeological Study for Telacu Senior Housing, Located at Commercial Rd, City of San Bernardino, San Bernardino County, CA.	Wlodarski 2002

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
San Bernardino	1064351	Adelanto to Moreno	cultural resource study area	Assessment: Tentative Tract No. 16289, San Bernardino County, CA	Mclean 2002
San Bernardino	1064352	Adelanto to Moreno	records-search buffer area	Records Search & Site Visit Results for Cingular Wireless Site SB421-02 (Airport RI)	Bonner 2004
San Bernardino	1064365	Adelanto to Moreno	records-search buffer area	Report for Williams Communications, Inc. Fiber Optic Cable System Installation Project, Riverside CA to the CA/AZ Border	Jones & Stokes 2000
San Bernardino	1064366	Adelanto to Moreno	records-search buffer area	Proposed Wireless Device Monopole and Equipment Cabinet, Little League Site 3652 W. Little League Dr, San Bernardino CA	Budinger 2002
San Bernardino	1064551	Adelanto to Moreno	records-search buffer area	Report: BNSF Railway Bridge over Cajon Blvd, Bnsf Mile Post 72.31 Devore-Verdemont Area, San Bernardino County, CA	Tang and Hogan 2005
San Bernardino	1064584	Adelanto to Moreno	records-search buffer area	Assessment within "The Trails at Mission Park" a Single-Family Residential Development Located in the City of Loma Linda County of San Bernardino, CA	Dice 2003
San Bernardino	1064585	Adelanto to Moreno	records-search buffer area	Monitoring Results for "The Trails at Mission Park" Project, City of Loma Linda, CA	Dice 2004
San Bernardino	1064586	Adelanto to Moreno	records-search buffer area	The Zanja on Mission Road Location and Evaluation of CA-SBR-8092H, University Village Project Area, Loma Linda, CA	Lerch 2004
San Bernardino	1064643	Adelanto to Moreno	records-search buffer area	Survey of the Proposed North Reche Canyon Cellular Site, 12490 Reche Canyon Road, Colton, San Bernardino County, CA	Miller et al. 2004
San Bernardino	1064644	Adelanto to Moreno	records-search buffer area	Monitoring of Reche Canyon, Tentative Tract No. 16289, City of Colton, San Bernardino County, CA	Hogan-Conrad 2005
San Bernardino	1064719	Adelanto to Moreno	records-search buffer area	Report, ARR Number: 05-12-CA-115	Cooper 2003
San Bernardino	1064720	Adelanto to Moreno	records-search buffer area	Assessment for the Verdemont Heights Towne Center Project, San Bernardino County, CA	Fulton and Mclean 2006
San Bernardino	1064721	Adelanto to Moreno	records-search buffer area	Survey of the Ranch Country View Estates Project, near Cable Creek and Interstate 215, Count of San Bernardino, CA	Dice 2005

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
San Bernardino	1064723	Adelanto to Moreno	records-search buffer area	Request for Shpo Review of FCC Undertaking, CA-8533-A/Bailey Canyon	Lambert 2004
San Bernardino	1064728	Adelanto to Moreno	records-search buffer area	Assessment Results for Cingular Telecommunications Facility Candidate SB-367-02 (Elks Lodge SB) 2055 Elks Drive, San Bernardino, San Bernardino County, CA	Taniguchi 2004
San Bernardino	1064732	Adelanto to Moreno	records-search buffer area	Cultural Resource Records Search and Site Visit Results for Cingular Telecommunications Facility Candidate ES-0089-01 (Grace Church), 1333 East 39th Street, San Bernardino, San Bernardino County, CA	Bonner et al. 2006
San Bernardino	1064798	Adelanto to Moreno	records-search buffer area	Inventory of 13 Acres in Phelan, San Bernardino County, CA	Anonymous 2006
San Bernardino	1064815	Adelanto to Moreno	records-search buffer area	Excavations and Monitoring at the Mission Lane Project, Tract #16323, City of Loma Linda, CA	Dice 2005
San Bernardino	1064830	Adelanto to Moreno	records-search buffer area	Results and Site Visit for T-Mobile Use Facility Candidate IE04843G (Scotty's), 1679 East Baseline Street, San Bernardino, San Bernardino County, CA	Aislin-Kay 2006
San Bernardino	1064896	Adelanto to Moreno	cultural resource study area	Report Kmp Calnev 8" Mainline Inspection Colton to Barstow & Barstow to Bracken San Bernardino County, CA and Clark County, Nv 60 Day Condition Digs	Price and Allan 2004
San Bernardino	1065092	Adelanto to Moreno	records-search buffer area	Deteriorated Pole Replacement Project Archaeological Survey of One Pole Location on the Bluecut 12 kV Transmission Line, San Bernardino County, CA	Pollock and Hull 2005
San Bernardino	1065129	Adelanto to Moreno	records-search buffer area	Ronald Spears Apiary Site	Storey 2003
San Bernardino	1065133	Adelanto to Moreno	records-search buffer area	CA Department of Transportation Brake Check Area	Cooper 2003
San Bernardino	1065134	Adelanto to Moreno	cultural resource study area	Report Verdemont Deteriorated Pole Replacement Project San Bernardino National Forest Lands San Bernardino County, CA	Taylor 2001
San Bernardino	1065139	Adelanto to Moreno	records-search buffer area	Investigation of the Burlington Northern Santa Fe Railroad Electronic Site Upgrade Project Area Cajon Summit, San Bernardino County, CA	Chandler 2003

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
San Bernardino	1065248	Adelanto to Moreno	cultural resource study area	Assessment of the 24.1 Acre Northpointe Project Site, Northwest Corner of East Hospitality Lane and Tippecanoe Avenue, City of San Bernardino, San Bernardino County	White and White 2005
San Bernardino	1065272	Adelanto to Moreno	cultural resource study area	Archaeological Survey: Palm Connector, Verdemont Phase I Project, City of San Bernardino, San Bernardino County, CA	
San Bernardino	1065275	Adelanto to Moreno	records-search buffer area	Holly Vista/CA-8819A, San Bernardino County, CA	Billat 2006
San Bernardino	1065546	Adelanto to Moreno	cultural resource study area	Report: Verdemont Area Water Infrastructure Improvements Project in and near the City of San Bernardino, San Bernardino County, CA	Bodemer and Ballester 2007
San Bernardino	1065593	Adelanto to Moreno	cultural resource study area	Proposed Wireless Device Monopalm and Associated Equipment; Hill Park Site, 1235 E. Baseline Street, San Bernardino, CA 62410	Budinger 2005
San Bernardino	1065604	Adelanto to Moreno	records-search buffer area	Results for Sprint Nextel Telecommunications Facility Candidate CA7244 (Avery), 370 Industrial Road, San Bernardino, San Bernardino County, CA	Bonner and Aislin-Kay 2006
San Bernardino	1065605	Adelanto to Moreno	cultural resource study area	Proposed Wireless Device Monopalm and Associated Equipment; Rosarita Site, 494 E. Commercial Road, San Bernardino, CA 92408	Budinger 2005
San Bernardino	1065607	Adelanto to Moreno	cultural resource study area	Results for Cingular Telecommunications Facility Candidate ES-0086-01 (American Inn), 1235 East Rosewood Drive, San Bernardino, San Bernardino County, CA	Bonner 2005
San Bernardino	1065619	Adelanto to Moreno	cultural resource study area	Report: Tippecanoe Avenue Widening Project in the City of San Bernardino, San Bernardino County, CA	Encarnacion, 2008
San Bernardino	1065647	Adelanto to Moreno	records-search buffer area	Monitoring for the New Curtis Middle School and Elementary School No. 48, City of San Bernardino, CA	Fulton 2006
San Bernardino	1065673	Adelanto to Moreno	records-search buffer area	Report: San Bernardino International Airport Future Fuel Farm Project, City of San Bernardino, San Bernardino County, CA	Wetherbee 2005
San Bernardino	1065693	Adelanto to Moreno	records-search buffer area	Cajon Pass Spur Road Re-Establishment (0610-3109-5154), and Deteriorated Pole Replacement Project (Poles #1745597E and #2181414E), San Bernardino County, CA	Romani 2007
San Bernardino	1065698	Adelanto to Moreno	cultural resource study area	Report: U.S. Highway 395 Realignment EAR, Victor Valley Area, San Bernardino County, CA	Ballester and Shaker 2007

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
San Bernardino	1065756	Adelanto to Moreno	records-search buffer area	Lost Lake and Baldy Mesa Toilets Installation	Zimmerman 2004
San Bernardino	1065772	Adelanto to Moreno	records-search buffer area	Assessment and Paleontological Records Review, APN 1178341090000, Colton, San Bernardino County, CA	Dice 2007
San Bernardino	1065806	Adelanto to Moreno	records-search buffer area	Report: Mountain View Avenue Widening Project, Cities of Redlands and San Bernardino, San Bernardino County, CA	Tang et al. 2007
San Bernardino	1065864	Adelanto to Moreno	records-search buffer area	Investigation at the Heritage Estates Tract #2005-04 Project, Curtis Street, City of Loma Linda, San Bernardino County, CA	Alexandrowicz 2008
San Bernardino	1065883	Adelanto to Moreno	cultural resource study area	Results for Southern CA Edison's Pole Repair Access Road Grading after Cajon (Devore Heights) Fire Incident along Historic Route 66/Cajon Boulevard and Kenwood Avenue, San Bernardino County, CA	Norton 2007
San Bernardino	1065888	Adelanto to Moreno	records-search buffer area	Assessment of the Loma Linda Holiday Inn Project, City of Loma Linda, San Bernardino County	Dorrier 2008
San Bernardino	1065897	Adelanto to Moreno	records-search buffer area	Report for the Palm Avenue Distribution Center	Jurich 2007
San Bernardino	1065900	Adelanto to Moreno	cultural resource study area	Results for T-Mobile Facility Candidate IE04897A (Wildwood Park), 536 East 40th Street, San Bernardino, San Bernardino County, CA	Bonner and Aislin-Kay 2007
San Bernardino	1065901	Adelanto to Moreno	cultural resource study area	SB62XC003/New Retail Center, 3981 North Sierra Way, San Bernardino, San Bernardino County, CA	Gordon 2007
San Bernardino	1065931	Adelanto to Moreno	records-search buffer area	Results for T-Mobile Candidate IE24766d (Colony Park), East Hardwick Drive and South Wier Road, San Bernardino, San Bernardino County, CA	Bonner and Aislin-Kay 2007
San Bernardino	1065953	Adelanto to Moreno	cultural resource study area	Survey and Monitoring for the Lugo-Mira Loma 2 Tower M5-T4 Stabilization Project, San Bernardino National Forest, San Bernardino County, CA	Lerch 2006
San Bernardino	1065954	Adelanto to Moreno	records-search buffer area	Inventory: Calnev 14" Plmp 26 Downstream and Upstream East of I-15 Calnev 14" PLMP 25 West of I-15 Calnev 1" PLMP 20 Downstream, Lone Pine Canyon	Drover 2007

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
San Bernardino	1065955	Adelanto to Moreno	records-search buffer area	Report: Deadman Junction Pipeline Washout Repair Proposed Access Route, San Bernardino County, CA	TRC Solutions 2007
San Bernardino	1066055	Adelanto to Moreno	records-search buffer area	Results for T-Mobile Facility Candidate IE04832D (Northpark University Park), Northpark Boulevard and University Parkway, San Bernardino, San Bernardino County, CA	Bonner and Aislin-Kay 2008
San Bernardino	1066057	Adelanto to Moreno	records-search buffer area	Historic Properties: Palm No. 3 Reservoir Project, City of San Bernardino, San Bernardino County, CA	Encarnacion, 2007
San Bernardino	1066059	Adelanto to Moreno	records-search buffer area	Proposed Wireless Monopalm and Associated Equipment; Institution Site, 5685 Industrial Parkway, San Bernardino, CA 92407	Budinger 2007
San Bernardino	1066139	Adelanto to Moreno	records-search buffer area	Results for Cingular Wireless Candidate LSANCAC697, 18181 Cajon Boulevard, San Bernardino, San Bernardino County, CA	Bonner and Aislin-Kay 2006
San Bernardino	1066141	Adelanto to Moreno	records-search buffer area	Inventory of Proposed Pole Replacement in Devore, San Bernardino County, CA (DWO 6030-4800, AI 8-4836).	Chandler et al. 2008
San Bernardino	1066170	Adelanto to Moreno	records-search buffer area	Rehabilitation of 5 Unauthorized OHV Trails on Baldy Mesa	Gillean 2008
San Bernardino	1066171	Adelanto to Moreno	records-search buffer area	Ohv Area Reduction Plan, BNSF Third Main Track	Scrivner 2008
San Bernardino	1066192	Adelanto to Moreno	records-search buffer area	Inventory of Proposed Pole Replacement near Redlands, San Bernardino County, CA	Howard and Chandler 2009
San Bernardino	1066194	Adelanto to Moreno	cultural resource study area	Report: East Valley Water District's Perchlorate Treatment and Water Distribution Facilities, in and near the Cities of San Bernardino and Highland, San Bernardino County, CA	Hogan et al. 2005
San Bernardino	1066265	Adelanto to Moreno	cultural resource study area	Direct APE Historic Structural Assessment for Cingular Telecommunications Facility Candidate SV-029-02 (Sce M3-T5 Chp & Grand) Phillips Ranch Road, Chino Hills, San Bernardino County, CA	Bonner and Crawford 2005
San Bernardino	1066291	Adelanto to Moreno	cultural resource study area	Cultural Resource Technical Report: SBX E Street Corridor BRT Project, Cities of Loma Linda and San Bernardino, San Bernardino County, CA	Smith et al. 2008

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
San Bernardino	1066329	Adelanto to Moreno	cultural resource study area	Archaeological Evaluation and Testing at Baldy Mesa near Cajon Pass for the Baldy Mesa Off-Highway Vehicle Plan, San Bernardino National Forest, San Bernardino County, CA	
San Bernardino	1066331	Adelanto to Moreno	cultural resource study area	Assessment of the Riverside-Corona Realignment, San Bernardino and Riverside Counties, CA	Cannon and Lerch 2009
San Bernardino	1066393	Adelanto to Moreno	records-search buffer area	Screaming Chicken/LA3318A	Billat 2009
San Bernardino	1066395	Adelanto to Moreno	cultural resource study area	Report Kmpc Calnev 8" Mainline Inspection Colton to Barstow and Barstow to Bracken, San Bernardino County, CA and Clark County, NV 18 Anomalies	Kearney et al. 2005
San Bernardino	1066436	Adelanto to Moreno	cultural resource study area	Reconnaissance: Fifth and Third Street Road Improvement, Cities of Highland and San Bernardino, San Bernardino County, CA	Tang 2009
San Bernardino	1066446	Adelanto to Moreno	cultural resource study area	Determinations of Effect Report: SBX E Street Corridor Bus Rapid Transit (BRT) Project, Cities of Loma Linda and San Bernardino, San Bernardino County, CA	Chasteen 2008
San Bernardino	1066447	Adelanto to Moreno	cultural resource study area	Report: SBX E Street Corridor Brt Project, Cities of Loma Linda and San Bernardino, San Bernardino County, CA	Chasteen 2009
San Bernardino	1066494	Adelanto to Moreno	records-search buffer area	Screaming Chicken/LA3318A	Billat 2009
San Bernardino	1066498	Adelanto to Moreno	cultural resource study area	Ethnographic Overview of the Northern San Bernardino Forest	Northwest et al. 2004
San Bernardino	1066562	Adelanto to Moreno	cultural resource study area	Report: Range 500 Upgrades, Cleghorn Pass Training Area, Marine Corps Air Ground Combat Center, Twentynine Palms, San Bernardino County, CA	Hale 2003
San Bernardino	1066599	Adelanto to Moreno	records-search buffer area	Caltrans Historic Bridges Inventory Update: Concrete Box Girder Bridges	Feldman 2004
San Bernardino	1066648	Adelanto to Moreno	records-search buffer area	Results for the Proposed Royal Street Communications, CA, LLC, Site LA3588A (Bailey Canyon Towerco CA2794) Located at 6707 Little League Drive, San Bernardino, San Bernardino County, CA 92407	Wlodarski 2009

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
San Bernardino	1066652	Adelanto to Moreno	cultural resource study area	Report for 98 Linear Miles of the East Branch Extension of the CA Aqueduct for the DWR East Branch Enlargement Project Los Angeles and San Bernardino Counties (CA)	Esa 2010
San Bernardino	1066710	Adelanto to Moreno	cultural resource study area	Technological Organization of the Millingstone Pattern in Southern CA	Hale 2001
San Bernardino	1066722	Adelanto to Moreno	records-search buffer area	Place of the Pine: Data Recovery Investigations at Muscupiabit (CA-SBR-425/H): Bnsf Railway Co. Cajon Subdivision on the Third Main Track, Keenbrook to Summit Project. Cajon Pass, San Bernardino County, CA	Gardner and Sutton 2009
San Bernardino	1066723	Adelanto to Moreno	cultural resource study area	From Trails to Rails, Traversing Cajon Pass: Cultural Resources Investigations for the Bnsf Railway Co. Cajon Subdivision Third Main Track Keenbrook to Summit Project Cajon Pass, San Bernardino County, CA	Grenda and Ciolek-Torrello 2008
San Bernardino	1066724	Adelanto to Moreno	records-search buffer area	Data Recovery Report for the Upper Keenbrook Site (CA-SBR-12876H), Bnsf Cajon Third Main Track, Summit to Keenbrook, San Bernardino County, CA	Gregory 2008
San Bernardino	1066725	Adelanto to Moreno	records-search buffer area	Out of the Blue: Data Recovery Investigations at the Blue Cut Site (CA-SBR-12569/H): Bnsf Railway Co. Cajon Subdivision Third Main Track Keenbrook to Summit Project, Cajon Pass, San Bernardino County, CA	Sutton and Gardner 2008
San Bernardino	1066726	Adelanto to Moreno	cultural resource study area	Cultural Resources Monitoring Report Bnsf Railway Co. Cajon Subdivision Third Main Track Keenbrook to Summit Project Cajon Pass, San Bernardino County, CA	Becker and Galder 2009
San Bernardino	1066727	Adelanto to Moreno	cultural resource study area	Burlington Northern Santa Fe Railroad, Cajon Subdivision, between Cajon Summit and Keenbrook Devore Vicinity, San Bernardino County, CA	Goodman 2008
San Bernardino	1066743	Adelanto to Moreno	cultural resource study area	Report for Southern CA Edison's Pole Replacement Project: Loma Linda and San Bernardino, San Bernardino County, CA	Sander 2010
San Bernardino	1066751	Adelanto to Moreno	records-search buffer area	Historic Properties: Plant 150 Project, City of Highland, San Bernardino County, CA	Tang and Hogan 2010
San Bernardino	1066752	Adelanto to Moreno	cultural resource study area	Historic Properties: East Valley Water District Eastwood Farms Mutual Water Company Water System Improvement Project in and near the City of Highland, San Bernardino County, CA	Tang and Hogan 2009

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Previous Cultural Resource Studies in the Records-Search Area

County	Report No.	Project Segment	Location	Title	Citation
San Bernardino	1066785	Adelanto to Moreno	records-search buffer area	Results for Towerco Assets LLC Candidate CA2358 (Cajon Summit), 5900 Mariposa Road, Hesperia, San Bernardino County, CA	Bonner and Aislin-Kay 2010
San Bernardino	1066802	Adelanto to Moreno	records-search buffer area	Report for Southern CA Edison's Deteriorated Pole Replacements in Redlands, San Bernardino County, CA	Heidelberg 2010
San Bernardino	1067067	Adelanto to Moreno	records-search buffer area	Assessment for the Replacement of Two Southern CA Edison Company Deteriorated Power Poles on the Blue Cut 12 kV Circuit, San Bernardino National Forest, San Bernardino County, CA	Parr 2011
San Bernardino	1067068	Adelanto to Moreno	records-search buffer area	Report: IO319026: Hill Fire Emergency Pole Replacement Monitoring Program, Cajon 7.5' Quadrangle, San Bernardino National Forest, San Bernardino County, CA	Schimidt 2011
San Bernardino	1067069	Adelanto to Moreno	records-search buffer area	Inventory of Proposed Pole Replacement near the Community of Cajon Junction, San Bernardino County, CA	Chandler et al. 2011
San Bernardino	1067093	Adelanto to Moreno	records-search buffer area	Survey for the Southern CA Edison Company: Replacement of Four Deteriorated Power Poles near Del Rosa and Mentone in San Bernardino County, CA (WO. 6031-4800, 2-4851)	Orfila 2011
San Bernardino	1067140	Adelanto to Moreno	records-search buffer area	A Historic Water Control Feature near Bryn Mawr, CA: Archaeological Investigations at CA-SBR-9861 H	Vargas et al. 1999

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Previously Recorded Cultural Resources in the Records-Search Area

County	Primary No.	Trinomial	Forest Service No.	Additional Label	Project Segment	Geographical Zone	Age	Category	Resource Type	Description	Date Recorded	Date(s) Updated	NRHP and CRHR Eligibility	Other State and Local Listings	Location
Riverside	P-33-000131	CA-RIV-131			Adelanto to Moreno	Inland Valleys	prehistoric	archaeological site	bedrock milling site	single bedrock milling outcrop with two mortar holes	1962		unknown		cultural resource study area
Riverside	P-33-000361	CA-RIV-361			Adelanto to Moreno	Inland Valleys	prehistoric	archaeological site	habitation site	includes rockshelter, petroglyphs, midden, burials. possibly village of Homuba	1959	1970, 1981, 1987, 2004	unknown		cultural resource study area
Riverside	P-33-001080				Adelanto to Moreno	Inland Valleys	prehistoric	archaeological site	campsite	includes a variety of flaked stone and ground stone artifacts	1981		unknown		records-search buffer area
Riverside	P-33-001403	CA-RIV-1403			Moreno to Whitewater	Inland Valleys	prehistoric	archaeological site	bedrock milling site	three oval basins and five slicks on five outcrops	1976		unknown		records-search buffer area
Riverside	P-33-002236				Adelanto to Moreno	Inland Valleys	prehistoric	archaeological site	campsite	includes a variety of flaked stone and ground stone artifacts	1981		unknown		records-search buffer area
Riverside	P-33-002386	CA-RIV-2386			Moreno to Whitewater	Inland Valleys	prehistoric	archaeological site	bedrock milling site	single bedrock milling outcrop with one milling slick	1982		unknown		records-search buffer area
Riverside	P-33-003014				Adelanto to Moreno	Inland Valleys	historical period	historic building or structure	homestead	two house sites and associated features	1985		unknown		cultural resource study area
Riverside	P-33-003236	CA-RIV-3236			Adelanto to Moreno	Inland Valleys	prehistoric	archaeological site	bedrock milling site	two bedrock milling outcrops with one mortar each	1987		unknown		records-search buffer area
Riverside	P-33-003283	CA-RIV-3283			Moreno to Whitewater	Inland Valleys	prehistoric	archaeological site	bedrock milling site	a single oval grinding basin	1986		unknown		records-search buffer area
Riverside	P-33-003442	CA-RIV-3442H			Moreno to Whitewater	Inland Valleys	historical period	archaeological site	artifact concentration	historical-period artifacts including ceramics, glass, and metal	1999		unknown		cultural resource study area
Riverside	P-33-003444	CA-RIV-3444H			Moreno to Whitewater	Inland Valleys	historical period	transportation resource	train station	banning station	1988		unknown		records-search buffer area
Riverside	P-33-004038	CA-RIV-4038	-		Moreno to Whitewater	Inland Valleys	prehistoric	archaeological site	lithic scatter	ground stone and flaked stone artifacts	1990		unknown		records-search buffer area
Riverside	P-33-004210	CA-RIV-4210H			Adelanto to Moreno	Inland Valleys	historical period	historic building or structure	homestead	octagonal wood-framed structure and trash deposit	1990		unknown		cultural resource study area
Riverside	P-33-004715	CA-RIV-4715H			Moreno to Whitewater	Inland Valleys	historical period	transportation resource	stagecoach trail	most of the trail has been destroyed or paved over	1992	2005, 2009	unknown		cultural resource study area

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Previously Recorded Cultural Resources in the Records-Search Area

County	Primary No.	Trinomial	Forest Service No.	Additional Label	Project Segment	Geographical Zone	Age	Category	Resource Type	Description	Date Recorded	Date(s) Updated	NRHP and CRHR Eligibility	Other State and Local Listings	Location
Riverside	P-33-005054	CA-RIV-5054H			Moreno to Whitewater	Inland Valleys	historical period	transportation resource	road	part of old highway 60	1993		unknown		records-search buffer area
Riverside	P-33-006229				Moreno to Whitewater	Inland Valleys	historical period	transportation resource	road	jackrabbit trail	1983		unknown	local listing only	cultural resource study area
Riverside	P-33-007275				Adelanto to Moreno	Inland Valleys	historical period	historic building or structure	house	vernacular wood-frame house	1983		unknown		records-search buffer area
Riverside	P-33-007291				Adelanto to Moreno	Inland Valleys	historical period	historic building or structure	house	three homes on one property	1983		unknown		records-search buffer area
Riverside	P-33-007873				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	structure	abandoned casino	1993		unknown		records-search buffer area
Riverside	P-33-007874				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	Cabazon Inn manager's quarters	1993		unknown		records-search buffer area
Riverside	P-33-007875				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood and stucco house	1993		unknown		records-search buffer area
Riverside	P-33-007876				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	amusement area	Cabazon dinosaurs	1993		unknown		records-search buffer area
Riverside	P-33-007879				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	commercial building	Reid Building	1991		eligible		records-search buffer area
Riverside	P-33-007880				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	commercial building	Copland House/Spokane Hotel	1991		unknown	State Historical Landmark	records-search buffer area
Riverside	P-33-008332				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	vernacular wood-frame house	1983		unknown	local listing only	records-search buffer area
Riverside	P-33-008333				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	vernacular wood-frame house	1983		unknown	local listing only	records-search buffer area
Riverside	P-33-008334				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	vernacular wood-frame house	1983	2005	recommended eligible	local listing only	records-search buffer area
Riverside	P-33-008335				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	Spanish-style house	1983		unknown	local listing only	records-search buffer area
Riverside	P-33-008336				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	vernacular wood-frame house	1983		unknown	local listing only	records-search buffer area

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Previously Recorded Cultural Resources in the Records-Search Area

County	Primary No.	Trinomial	Forest Service No.	Additional Label	Project Segment	Geographical Zone	Age	Category	Resource Type	Description	Date Recorded	Date(s) Updated	NRHP and CRHR Eligibility	Other State and Local Listings	Location
Riverside	P-33-008337				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	vernacular ranch house	1983		eligible		cultural resource study area
Riverside	P-33-008338				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	vernacular wood-frame house	1983		unknown	local listing only	cultural resource study area
Riverside	P-33-008351				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	commercial building	Banning Women's Club	1983		unknown	State Historical Landmark	records-search buffer area
Riverside	P-33-008352				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	vernacular wood-frame house	1983		unknown	local listing only	records-search buffer area
Riverside	P-33-008356				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	commercial building	San Gorgonio Inn	1983		unknown	local listing only	records-search buffer area
Riverside	P-33-008357				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	commercial building	Fox Theatre	1983		eligible		records-search buffer area
Riverside	P-33-008358				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	commercial building	Hotel Banning	1983		eligible		records-search buffer area
Riverside	P-33-008362				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	commercial building	Holcomb Building	1983		unknown		records-search buffer area
Riverside	P-33-008363				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	vernacular wood-frame house	1983		unknown	local listing only	records-search buffer area
Riverside	P-33-009129				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	commercial building	vernacular with art deco elements	1984		not evaluated		records-search buffer area
Riverside	P-33-009130				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	commercial building	Banning Hardware Store	1984		unknown	local listing only	records-search buffer area
Riverside	P-33-009131				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	commercial building	Mason-Moore Building	1984		not evaluated		records-search buffer area
Riverside	P-33-009134				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	commercial building	Odd Fellows Building	1984		eligible		records-search buffer area
Riverside	P-33-009150				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	vernacular wood-frame house	1985		unknown	local listing only	cultural resource study area
Riverside	P-33-009153				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	commercial building	Hopper Café	1985	-	unknown	local listing only	records-search buffer area

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Previously Recorded Cultural Resources in the Records-Search Area

County	Primary No.	Trinomial	Forest Service No.	Additional Label	Project Segment	Geographical Zone	Age	Category	Resource Type	Description	Date Recorded	Date(s) Updated	NRHP and CRHR Eligibility	Other State and Local Listings	Location
Riverside	P-33-009154				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	government building	Banning City Hall	1985		not evaluated		records-search buffer area
Riverside	P-33-009155				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	commercial building	commercial building with mission revival elements	1985	-	not evaluated		records-search buffer area
Riverside	P-33-009156				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	vernacular wood-frame house	1985		not evaluated		records-search buffer area
Riverside	P-33-009157				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	Craftsman style	1985		unknown	local listing only	records-search buffer area
Riverside	P-33-009158				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	Craftsman style	1985		not evaluated		records-search buffer area
Riverside	P-33-009159				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	vernacular wood-frame house	1985		not evaluated		records-search buffer area
Riverside	P-33-009176				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	Craftsman style	1986		unknown		cultural resource study area
Riverside	P-33-009177				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	vernacular stone house	1986		unknown		records-search buffer area
Riverside	P-33-009194	CA-RIV-6374H			Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	commercial building	dog kennel	1999	-	unknown		records-search buffer area
Riverside	P-33-009195				Moreno to Whitewater	Inland Valleys	historical period	agricultural resource	irrigation system	weirs, cobble and concrete channels, and concrete pipe lines	1999		unknown		cultural resource study area
Riverside	P-33-009496	CA-RIV-6379H			Moreno to Whitewater	Colorado Desert	historical period	water-conveyance system	canal/aqueduct	concrete and stone canal	2000	2010	unknown		cultural resource study area
Riverside	P-33-009498	CA-RIV-6381H			Moreno to Whitewater	Colorado Desert, Inland Valleys	historical period	transportation resource	railroad	Southern Pacific Railroad	1999	2005, 2012	unknown		cultural resource study area
Riverside	P-33-009754				Adelanto to Moreno	Inland Valleys	historical period	transportation resource	road	Reche Vista Road	2000		unknown		records-search buffer area
Riverside	P-33-011265	CA-RIV-6726H			Moreno to Whitewater	Peninsular Ranges, Inland Valleys	historical period	water-conveyance system	canal/aqueduct	Colorado River Aqueduct	2000	2001, 2003, 2005, 2008, 2009	unknown		cultural resource study area

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Previously Recorded Cultural Resources in the Records-Search Area

County	Primary No.	Trinomial	Forest Service No.	Additional Label	Project Segment	Geographical Zone	Age	Category	Resource Type	Description	Date Recorded	Date(s) Updated	NRHP and CRHR Eligibility	Other State and Local Listings	Location
Riverside	P-33-012425				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	historic district	downtown Banning	1991		unknown		records-search buffer area
Riverside	P-33-012626				Moreno to Whitewater	Inland Valleys	historical period	archaeological site	artifact concentration	small scatter of sun-colored amethyst glass and aqua glass insulators	1988		unknown		records-search buffer area
Riverside	P-33-012817	-	-		Adelanto to Moreno	Inland Valleys	prehistoric	archaeological site	lithic scatter	small scatter of ground stone artifacts	1981	2006	unknown		records-search buffer area
Riverside	P-33-012893	CA-RIV-7166H			Moreno to Whitewater	Inland Valleys	historical period	water-conveyance system	canal/aqueduct	stone and mortar canal	2003		unknown		records-search buffer area
Riverside	P-33-013158	-	-		Moreno to Whitewater	Inland Valleys	prehistoric	archaeological site	lithic scatter	one core and six pieces of debitage	2003		unknown		records-search buffer area
Riverside	P-33-013313				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	scientific testing area	Beaumont Site No. 2 Rocket Test Area	2003		unknown		records-search buffer area
Riverside	P-33-013778				Moreno to Whitewater	Inland Valleys	historical period	archaeological site	foundation	five concrete foundations	2004		recommended not eligible	local listing only	cultural resource study area
Riverside	P-33-013779	CA-RIV-7544H			Moreno to Whitewater	Inland Valleys	historical period	water-conveyance system	canal/aqueduct	water-conveyance system	2004		unknown		cultural resource study area
Riverside	P-33-014367	CA-RIV-7816H			Moreno to Whitewater	Inland Valleys	historical period	archaeological site	foundation	concrete foundations and other features	2004		unknown		cultural resource study area
Riverside	P-33-014368	CA-RIV-7817H			Moreno to Whitewater	Inland Valleys	historical period	archaeological site	artifact concentration	scatter of metal fragments and car tires	2004		unknown		records-search buffer area
Riverside	P-33-015189				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	vernacular wood-frame house	2005		unknown		records-search buffer area
Riverside	P-33-015190				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	Spanish revival house	2005		unknown		records-search buffer area
Riverside	P-33-015191				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	vernacular wood-frame house	2005		unknown		records-search buffer area
Riverside	P-33-015192				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	Craftsman style house converted to a church	2005		unknown		records-search buffer area
Riverside	P-33-015193				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	Craftsman style house	2005		unknown		records-search buffer area

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County	Primary No.	Trinomial	Forest Service No.	Additional Label	Project Segment	Geographical Zone	Age	Category	Resource Type	Description	Date Recorded	Date(s) Updated	NRHP and CRHR Eligibility	Other State and Local Listings	Location
Riverside	P-33-015242				Moreno to Whitewater	Inland Valleys	historical period	water-conveyance system	canal/aqueduct	concrete and stone canal	2005		unknown		cultural resource study area
Riverside	P-33-015243				Moreno to Whitewater	Inland Valleys	historical period	agricultural resource	agricultural feature	collapsed wooden animal pen	2005		unknown		records-search buffer area
Riverside	P-33-015675	CA-RIV-8168H			Adelanto to Moreno	Inland Valleys	historical period	agricultural resource	irrigation system	cistern, pipelines, and other features	2006		unknown		records-search buffer area
Riverside	P-33-015731	-			Moreno to Whitewater	Inland Valleys	prehistoric	archaeological site	bedrock milling site	two milling slicks, each on a separate bedrock outcrop	2005		unknown		records-search buffer area
Riverside	P-33-015802				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	government building	City of Banning Public Works Department	2006		unknown		cultural resource study area
Riverside	P-33-015804				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area
Riverside	P-33-015806				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	commercial building	vernacular wood-frame commercial building	2006	-	unknown		cultural resource study area
Riverside	P-33-015807				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area
Riverside	P-33-015808				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area
Riverside	P-33-015809				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area
Riverside	P-33-015810				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area
Riverside	P-33-015811				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	vernacular wood-frame house	2006		unknown		records-search buffer area
Riverside	P-33-015812				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	vernacular wood-frame house	2006		unknown		records-search buffer area
Riverside	P-33-015813				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	Spanish eclectic-style house	2006		unknown		records-search buffer area
Riverside	P-33-015814				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	vernacular wood-frame house	2006		unknown		records-search buffer area

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County	Primary No.	Trinomial	Forest Service No.	Additional Label	Project Segment	Geographical Zone	Age	Category	Resource Type	Description	Date Recorded	Date(s) Updated	NRHP and CRHR Eligibility	Other State and Local Listings	Location
Riverside	P-33-015815				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area
Riverside	P-33-015816				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area
Riverside	P-33-015817				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area
Riverside	P-33-015818				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area
Riverside	P-33-015819				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area
Riverside	P-33-015820				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	Craftsman bungalow house	2006		unknown		records-search buffer area
Riverside	P-33-015821				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area
Riverside	P-33-015822				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area
Riverside	P-33-015823				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area
Riverside	P-33-015824				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area
Riverside	P-33-015825				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area
Riverside	P-33-015826				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area
Riverside	P-33-015827				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area
Riverside	P-33-015828				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		not eligible		records-search buffer area
Riverside	P-33-015829				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area

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County	Primary No.	Trinomial	Forest Service No.	Additional Label	Project Segment	Geographical Zone	Age	Category	Resource Type	Description	Date Recorded	Date(s) Updated	NRHP and CRHR Eligibility	Other State and Local Listings	Location
Riverside	P-33-015830				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area
Riverside	P-33-015831				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area
Riverside	P-33-015832				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area
Riverside	P-33-015833				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	vernacular wood-frame house	2006		unknown		records-search buffer area
Riverside	P-33-015834				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	vernacular wood-frame house	2006		unknown		records-search buffer area
Riverside	P-33-015835				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	vernacular wood-frame house	2006		unknown		records-search buffer area
Riverside	P-33-015836				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area
Riverside	P-33-015837				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area
Riverside	P-33-015838				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area
Riverside	P-33-015839				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	vernacular wood-frame house	2006		unknown		records-search buffer area
Riverside	P-33-015840				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	vernacular wood-frame house	2006		unknown		records-search buffer area
Riverside	P-33-015841				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2006		unknown		records-search buffer area
Riverside	P-33-015842				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	vernacular wood-frame house	2006		unknown		records-search buffer area
Riverside	P-33-015843				Moreno to Whitewater	Inland Valleys	historical period	utility resource	transmission line	electrical substation	2006		unknown		cultural resource study area
Riverside	P-33-015847	CA-RIV-8227H			Moreno to Whitewater	Inland Valleys	historical period	archaeological site	foundation	two driveways and remains of house	2007		unknown		records-search buffer area

APPENDIX C (Continued)

Previously Recorded Cultural Resources in the Records-Search Area

County	Primary No.	Trinomial	Forest Service No.	Additional Label	Project Segment	Geographical Zone	Age	Category	Resource Type	Description	Date Recorded	Date(s) Updated	NRHP and CRHR Eligibility	Other State and Local Listings	Location
Riverside	P-33-015848	CA-RIV-8228H			Moreno to Whitewater	Inland Valleys	historical period	archaeological site	foundation	house foundation and associated features	2007		unknown		cultural resource study area
Riverside	P-33-015849	CA-RIV-8229H			Moreno to Whitewater	Inland Valleys	historical period	archaeological site	foundation	house foundation and associated features	2007		unknown		records-search buffer area
Riverside	P-33-015924				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	structure	rock and mortar structure	2007		unknown		records-search buffer area
Riverside	P-33-016207				Moreno to Whitewater	Inland Valleys	historical period	agricultural resource	landscape features	tree line, irrigation line, fence line, partial foundation	2007		unknown		records-search buffer area
Riverside	P-33-016208	CA-RIV-8364H			Moreno to Whitewater	Inland Valleys	historical period	archaeological site	artifact concentration	domestic household refuse, including consumer and kitchen items	2007	2008	unknown		records-search buffer area
Riverside	P-33-016944				Moreno to Whitewater	Inland Valleys	historical period	agricultural resource	irrigation system	partial weir	2008		unknown		records-search buffer area
Riverside	P-33-017730				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2009		unknown		records-search buffer area
Riverside	P-33-017731				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2009		unknown		records-search buffer area
Riverside	P-33-017732				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2009		unknown		records-search buffer area
Riverside	P-33-017749				Moreno to Whitewater	Inland Valleys	historical period	historic building or structure	house	wood-frame ranch house	2009		unknown		records-search buffer area
Riverside	P-33-017925	-			Adelanto to Moreno	Inland Valleys	prehistoric	archaeological site	bedrock milling site	one milling slick	2010		unknown		records-search buffer area
Riverside	P-33-017931	CA-RIV-9465/H			Adelanto to Moreno	Inland Valleys	multicomponent	archaeological site	bedrock milling site and school site	bedrock milling site with 6 bedrock mortars; and old Ferndale School site.	2010		unknown		cultural resource study area
Riverside	P-33-017946	CA-RIV-9473H			Moreno to Whitewater	Colorado Desert; Peninsular Ranges; Inland Valleys	historical period	agricultural resource	ranch/farm	Whitewater Ranch	2008		unknown		records-search buffer area
Riverside	P-33-017947				Moreno to Whitewater	Inland Valleys	historical period	archaeological site	artifact concentration	food and beverage cans, nails, wire	2008		unknown		records-search buffer area

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Previously Recorded Cultural Resources in the Records-Search Area

County	Primary No.	Trinomial	Forest Service No.	Additional Label	Project Segment	Geographical Zone	Age	Category	Resource Type	Description	Date Recorded	Date(s) Updated	NRHP and CRHR Eligibility	Other State and Local Listings	Location
Riverside	P-33-018020	CA-RIV-9265H			Adelanto to Moreno	Inland Valleys	historical period	agricultural resource	ranch/farm	house and barn	2010		unknown		cultural resource study area
Riverside	P-33-018090	CA-RIV-9292H			Moreno to Whitewater	Colorado Desert	historical period	transportation resource	road	dirt trail bounded by granite cobbles	2010		unknown		records-search buffer area
Riverside	P-33-018091	CA-RIV-9293H			Moreno to Whitewater	Colorado Desert	historical period	historic building or structure	wall features	three rock walls and associated artifact scatter	2010		unknown		records-search buffer area
Riverside	P-33-018092				Moreno to Whitewater	Colorado Desert	historical period	archaeological site	artifact concentration	fragments of sun-colored amethyst glass and metal cans	2010		unknown		records-search buffer area
Riverside	P-33-020559	CA-RIV-10460H			Moreno to Whitewater	Inland Valleys	historical period	transportation resource	road	one-lane asphalt-paved road	2011		unknown		records-search buffer area
Riverside	P-33-020562	CA-RIV-10463H			Moreno to Whitewater	Inland Valleys	historical period	utility resource	transmission line	electrical transmission lines	2011		unknown		cultural resource study area
Riverside	P-33-020722	CA-RIV-10644H			Moreno to Whitewater	Inland Valleys	historical period	transportation resource	road	South California Avenue	2011		unknown		records-search buffer area
Riverside	P-33-022389				Moreno to Whitewater	Colorado Desert	historical period	utility resource	transmission line	Devers-Vista #1 220 kV transmission line	2012		unknown		records-search buffer area
Riverside	P-33-023484				Moreno to Whitewater	Inland Valleys	historical period	utility resource	transmission line	Dental and Intern 12 kV distribution line	2013		unknown		cultural resource study area
Riverside	P-33-023798				Adelanto to Moreno	Inland Valleys	historical period	historic building or structure	structure	brick and wood structure	2013		unknown		cultural resource study area
San Bernardino	P-36-000421	CA-SBR-421	05-12-53-00016		Adelanto to Moreno	Transverse Ranges	prehistoric	archaeological site	habitation site	heavy concentration of flaked stone and ground stone with midden; part of Sayles complex	1965	1971	recommended eligible		cultural resource study area

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Previously Recorded Cultural Resources in the Records-Search Area

County	Primary No.	Trinomial	Forest Service No.	Additional Label	Project Segment	Geographical Zone	Age	Category	Resource Type	Description	Date Recorded	Date(s) Updated	NRHP and CRHR Eligibility	Other State and Local Listings	Location
San Bernardino	P-36-000425	CA-SBR-425/H			Adelanto to Moreno	Transverse Ranges	multicomponent	archaeological site	habitation site and artifact concentration	Muscupiabit village site; flaked stone and ground stone fragments; possible burial area; historical-period debris, including bricks, automobiles, glass fragments and cut bone; Santa Fe and Salt LAKE Trail Monument; trail segment	1938	1962, 1987, 2007	recommended eligible		records-search buffer area
San Bernardino	P-36-001027	CA-SBR-1027			Adelanto to Moreno	Mojave Desert	prehistoric	archaeological site	campsite	two FAR rock clusters	1975		unknown		records-search buffer area
San Bernardino	P-36-002207	CA-SBR-2207	05-12-53-7A		Adelanto to Moreno	Transverse Ranges	prehistoric	archaeological site	lithic scatter	ground stone scatter	1939		unknown		records-search buffer area
San Bernardino	P-36-002670	CA-SBR-2670	05-12-53-18		Adelanto to Moreno	Transverse Ranges	prehistoric	archaeological site	habitation site	village in canyon	1963		unknown		records-search buffer area
San Bernardino	P-36-002910	CA-SBR-2910H	05-12-53-075		Adelanto to Moreno	Transverse Ranges, Inland Valleys	historical period	transportation resource	road	two historic road alignments (Route 66 and National Old Trails Road) and associated refuse scatter	2000		eligible		cultural resource study area
San Bernardino	P-36-003089	CA-SBR-3089	-		Adelanto to Moreno	Mojave Desert	prehistoric	archaeological site	lithic scatter	cobble and ground stone scatter	1976		unknown		records-search buffer area
San Bernardino	P-36-003680	CA-SBR-3680			Adelanto to Moreno	Transverse Ranges	prehistoric	archaeological site	bedrock milling site	lithic scatter with grinding slicks and midden	1979	1981	unknown		records-search buffer area
San Bernardino	P-36-004182	CA-SBR-4182H			Adelanto to Moreno	Mojave Desert	historical period	archaeological site	artifact concentration	historical-period refuse scatter with cans and blue and clear glass fragments	1980		unknown		records-search buffer area
San Bernardino	P-36-004252	CA-SBR-4252H	05-12-53-44		Adelanto to Moreno	Transverse Ranges, Mojave Desert	historical period	transportation resource	road	Baldy Mesa Road	1986	2000	unknown		cultural resource study area
San Bernardino	P-36-004253	CA-SBR-4253H			Adelanto to Moreno	Transverse Ranges	historical period	transportation resource	road	Brown's toll road	n.d.	1997, 2006	unknown		cultural resource study area
San Bernardino	P-36-004255	CA-SBR-4255H			Adelanto to Moreno	Transverse Ranges	historical period	utility resource	utility line	Hesperia pole line; wooden pole utility line	1980	1991, 1993, 1997	unknown		cultural resource study area

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Previously Recorded Cultural Resources in the Records-Search Area

County	Primary No.	Trinomial	Forest Service No.	Additional Label	Project Segment	Geographical Zone	Age	Category	Resource Type	Description	Date Recorded	Date(s) Updated	NRHP and CRHR Eligibility	Other State and Local Listings	Location
San Bernardino	P-36-004259	CA-SBR-4259	-		Adelanto to Moreno	Mojave Desert	prehistoric	archaeological site	lithic scatter	scatter of flaked stone debitage and a metate	1980	n.d	unknown		records-search buffer area
San Bernardino	P-36-004268	CA-SBR-4268H			Adelanto to Moreno	Mojave Desert	historical period	transportation resource	road	Oro Grande Wash-White Road cutoff	1980	1995	unknown		cultural resource study area
San Bernardino	P-36-004271	CA-SBR-4271H			Adelanto to Moreno	Mojave Desert	historical period	transportation resource	road	Patterson Ranch/Warner Ranch Road	1980	1995	unknown		cultural resource study area
San Bernardino	P-36-004272	CA-SBR-4272H	05-12-53-20		Adelanto to Moreno	Transverse Ranges	historical period	transportation resource	road	Salt Lake-Santa Fe Trail (Old Spanish Trail); a flaked pebble was found near the road	n.d	1992, 1993	unknown		cultural resource study area
San Bernardino	P-36-004418	CA-SBR-4418H			Adelanto to Moreno	Mojave Desert	historical period	transportation resource	road	Tejon Road/Lane's cutoff	1981	2005, 2006	unknown		cultural resource study area
San Bernardino	P-36-005268	CA-SBR-5268H			Adelanto to Moreno	Mojave Desert	historical period	archaeological site	artifact concentration	historical-period refuse deposit consisting of ceramic, cans, wire, and other debris	1984		unknown		records-search buffer area
San Bernardino	P-36-005568	CA-SBR-5568/H	05-12-53-09		Adelanto to Moreno	Transverse Ranges	multicomponent	archaeological site	artifact concentration and foundations	large lithic scatter including debitage, cores, core fragments, and milling implements as well as two foundations, bottle fragments, a possible placer mining pit, and a prehistoric thermal feature	1986	2000, 2006	eligible		cultural resource study area
San Bernardino	P-36-006793	CA-SBR-6793H			Adelanto to Moreno	Transverse Ranges, Inland Valleys	historical period	transportation resource	railroad	railroad alignment	1990	1992	eligible		cultural resource study area
San Bernardino	P-36-006847	CA-SBR-6847H			Adelanto to Moreno	Transverse Ranges, Inland Valleys	historical period	transportation resource	railroad	segment of the Highlands Division of the AT&SF railroad	1990	1995, 1998, 2000, 2008, 2010	unknown		cultural resource study area
San Bernardino	P-36-006848	CA-SBR-6848H			Adelanto to Moreno	Inland Valleys	historical period	water-conveyance system	canal/aqueduct	segment of the Cram - Van Leuven drainage ditch	1990	1992, 1993, 2006	not eligible		records-search buffer area
San Bernardino	P-36-007091	CA-SBR-7091H			Adelanto to Moreno	Mojave Desert	historical period	archaeological site	artifact concentration	plastic-lined cistern with associated refuse consisting of cans, ceramic, and glass fragments	1991		unknown		cultural resource study area

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San Bernardino	P-36-007092	CA-SBR-7092	-		Adelanto to Moreno	Mojave Desert	prehistoric	archaeological site	lithic scatter	includes milling stones and lithic debitage	1991	n.d	unknown		records-search buffer area
San Bernardino	P-36-007093	CA-SBR-7093H			Adelanto to Moreno	Transverse Ranges	historical period	transportation resource	bridge	two-lane, concrete highway bridge constructed in 1930	1991	n.d	unknown		records-search buffer area
San Bernardino	P-36-007168	CA-SBR-7168H			Adelanto to Moreno	Inland Valleys	historical period	water-conveyance system	canal/aqueduct	gage canal	1992	1995, 2003, 2008	unknown		cultural resource study area
San Bernardino	P-36-007294	CA-SBR-7294H			Adelanto to Moreno	Transverse Ranges	historical period	transportation resource	bridge	railroad bridge constructed in 1924	1992		unknown		records-search buffer area
San Bernardino	P-36-007295	CA-SBR-7295H	05-12-53-110		Adelanto to Moreno	Transverse Ranges	historical period	transportation resource	bridge	railroad bridge over Baldy Mesa Road constructed in 1931	1992		unknown		records-search buffer area
San Bernardino	P-36-007694	CA-SBR-7694H			Adelanto to Moreno	Transverse Ranges, Mojave Desert	historical period	utility resource	transmission line	Boulder Dam 287.5 kV power lines	1986	1993, 1995, 2001	eligible		cultural resource study area
San Bernardino	P-36-008082	CA-SBR-8082H			Adelanto to Moreno	Mojave Desert	historical period	transportation resource	road	Phelan Road	1995		unknown		cultural resource study area
San Bernardino	P-36-008126	CA-SBR-8126H	05-12-53-017T		Adelanto to Moreno	Transverse Ranges	historical period	archaeological site	artifact concentration	historical-period and modern refuse scatter of cans, glass, and asphalt	1995	2000	unknown		records-search buffer area
San Bernardino	P-36-008127	CA-SBR-8127H	05-12-53-018T		Adelanto to Moreno	Transverse Ranges	historical period	archaeological site	artifact concentration	historical-period refuse scatter, including cans and glass fragments	1995	2000	unknown		cultural resource study area
San Bernardino	P-36-008128	CA-SBR-8128H	05-12-53-019T		Adelanto to Moreno	Transverse Ranges	historical period	archaeological site	artifact concentration	historical-period refuse scatter, including cans, glass, and ceramic	1995		unknown		cultural resource study area
San Bernardino	P-36-008129	CA-SBR-8129H	05-12-53-020T		Adelanto to Moreno	Transverse Ranges	historical period	archaeological site	artifact concentration	historical-period refuse scatter, including cans and glass fragments	1995		unknown		cultural resource study area
San Bernardino	P-36-008130	CA-SBR-8130H	05-12-53-021T		Adelanto to Moreno	Transverse Ranges	historical period	archaeological site	artifact concentration	historical-period refuse scatter, including cans, glass, and ceramic	1995		unknown		records-search buffer area
San Bernardino	P-36-008131	CA-SBR-8131H	05-12-53-022T		Adelanto to Moreno	Transverse Ranges	historical period	archaeological site	artifact concentration	historical-period refuse scatter, including cans, glass, and ceramic	1995		unknown		records-search buffer area
San Bernardino	P-36-008133	CA-SBR-8133H	05-12-53-024T		Adelanto to Moreno	Transverse Ranges	historical period	water-conveyance system	canal/aqueduct	concrete and wood drainage ditch	1995		unknown		records-search buffer area
San Bernardino	P-36-008857	CA-SBR-8857H			Adelanto to Moreno	Transverse Ranges	historical period	utility resource	transmission line	Lyle Creek transmission lines constructed in 1915	1986	1997	unknown		cultural resource study area

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County	Primary No.	Trinomial	Forest Service No.	Additional Label	Project Segment	Geographical Zone	Age	Category	Resource Type	Description	Date Recorded	Date(s) Updated	NRHP and CRHR Eligibility	Other State and Local Listings	Location
San Bernardino	P-36-009592	CA-SBR-9592H			Adelanto to Moreno	Transverse Ranges	historical period	agricultural resource	water tank	concrete valve box for a water tank	1999		unknown		records-search buffer area
San Bernardino	P-36-010067	CA-SBR-10067			Adelanto to Moreno	Transverse Ranges	prehistoric	archaeological site	campsite	remains of one to two thermal features and midden-like sediment	2006	2008	unknown		records-search buffer area
San Bernardino	P-36-010069	CA-SBR-10069	05-12-53-49		Adelanto to Moreno	Transverse Ranges	prehistoric	archaeological site	lithic scatter	ground stone and flaked stone scatter; possible plant-processing area	2000		unknown		records-search buffer area
San Bernardino	P-36-010072	CA-SBR-10072	05-12-53-58		Adelanto to Moreno	Transverse Ranges	prehistoric	archaeological site	campsite	remains of a possible thermal feature	2000	2006	unknown		records-search buffer area
San Bernardino	P-36-010073	CA-SBR-10073	05-12-53-59		Adelanto to Moreno	Transverse Ranges	prehistoric	archaeological site	campsite	remains of two thermal features, ground stone, and flaked stone	2000	2006	unknown		records-search buffer area
San Bernardino	P-36-010075	CA-SBR-10075	05-12-53-70		Adelanto to Moreno	Transverse Ranges	prehistoric	archaeological site	lithic scatter	ground stone and flaked stone scatter with possible FAR; possible plant-processing area	2000		unknown		records-search buffer area
San Bernardino	P-36-010221	CA-SBR-10221H			Adelanto to Moreno	Transverse Ranges	historical period	archaeological site	foundation	concrete building foundations, wall remnant, and trash scatter	2000		unknown		cultural resource study area
San Bernardino	P-36-010285	CA-SBR-10285H			Adelanto to Moreno	Transverse Ranges	historical period	archaeological site	artifact concentration	remains of the 1923 Union Pacific Oro Grande train wreck	2000		unknown		records-search buffer area
San Bernardino	P-36-010316	CA-SBR-10316H			Adelanto to Moreno	Transverse Ranges, Inland Valleys	historical period	utility resource	transmission line	tower line 115 kV transmission line	2000	2004, 2008, 2009	eligible		cultural resource study area
San Bernardino	P-36-010820	CA-SBR-10820H			Adelanto to Moreno	Inland Valleys	historical period	transportation resource	railroad	San Bernardino, Arrowhead & Waterman Railroad; Harlem Motor Road	2002	2008	unknown		cultural resource study area
San Bernardino	P-36-011282	CA-SBR-11282H			Adelanto to Moreno	Inland Valleys	historical period	cemetery	cemetery	Montecito memorial park	2003		unknown		cultural resource study area
San Bernardino	P-36-012316				Adelanto to Moreno	Transverse Ranges	historical period	transportation resource	culvert	concrete railroad culvert	2005		unknown		records-search buffer area
San Bernardino	P-36-012319				Adelanto to Moreno	Transverse Ranges	historical period	transportation resource	bridge	wood and concrete railroad bridge	2005		unknown		records-search buffer area

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County	Primary No.	Trinomial	Forest Service No.	Additional Label	Project Segment	Geographical Zone	Age	Category	Resource Type	Description	Date Recorded	Date(s) Updated	NRHP and CRHR Eligibility	Other State and Local Listings	Location
San Bernardino	P-36-012320				Adelanto to Moreno	Transverse Ranges	historical period	transportation resource	culvert	concrete railroad culvert	2005		unknown		records-search buffer area
San Bernardino	P-36-012321				Adelanto to Moreno	Transverse Ranges	historical period	transportation resource	culvert	concrete railroad culvert	2005		unknown		records-search buffer area
San Bernardino	P-36-012322				Adelanto to Moreno	Transverse Ranges	historical period	transportation resource	culvert	concrete railroad culvert	2005		unknown		records-search buffer area
San Bernardino	P-36-012323				Adelanto to Moreno	Transverse Ranges	historical period	transportation resource	culvert	concrete railroad culvert	2005		unknown		records-search buffer area
San Bernardino	P-36-012325				Adelanto to Moreno	Transverse Ranges	historical period	transportation resource	culvert	concrete railroad culvert	2005		unknown		records-search buffer area
San Bernardino	P-36-012326				Adelanto to Moreno	Transverse Ranges	historical period	transportation resource	culvert	concrete railroad culvert	2005		unknown		records-search buffer area
San Bernardino	P-36-012327				Adelanto to Moreno	Transverse Ranges	historical period	transportation resource	culvert	concrete railroad culvert	2005		unknown		records-search buffer area
San Bernardino	P-36-012331				Adelanto to Moreno	Transverse Ranges	historical period	archaeological site	foundation	concrete foundation for river-side dock	2005		unknown		records-search buffer area
San Bernardino	P-36-012332				Adelanto to Moreno	Transverse Ranges	historical period	transportation resource	wall features	formed-concrete retaining wall and cat-walk associated with bridge construction	2005		unknown		records-search buffer area
San Bernardino	P-36-012333				Adelanto to Moreno	Transverse Ranges	historical period	transportation resource	bridge	concrete railroad bridge	2005		unknown		records-search buffer area
San Bernardino	P-36-012334				Adelanto to Moreno	Transverse Ranges	historical period	archaeological site	unknown	unknown function formed-concrete structure	2005		unknown		records-search buffer area
San Bernardino	P-36-012514				Adelanto to Moreno	Inland Valleys	historical period	historic building or structure	house	single-family residence	2004		unknown		records-search buffer area
San Bernardino	P-36-012618				Adelanto to Moreno	Transverse Ranges	historical period	transportation resource	foundation	building foundation possibly associated with railroad work camp	2006		unknown		records-search buffer area
San Bernardino	P-36-012619				Adelanto to Moreno	Transverse Ranges	historical period	transportation resource	well	concrete-lined water well	2006		unknown		records-search buffer area

APPENDIX C (Continued)

Previously Recorded Cultural Resources in the Records-Search Area

County	Primary No.	Trinomial	Forest Service No.	Additional Label	Project Segment	Geographical Zone	Age	Category	Resource Type	Description	Date Recorded	Date(s) Updated	NRHP and CRHR Eligibility	Other State and Local Listings	Location
San Bernardino	P-36-012708				Adelanto to Moreno	Transverse Ranges	historical period	historic building or structure	house	historical-period residence and outlying structures	2006		unknown		cultural resource study area
San Bernardino	P-36-012845				Adelanto to Moreno	Inland Valleys	historical period	water-conveyance system	canal/aqueduct	Bledsoe Gulch runoff channel	2006		unknown		records-search buffer area
San Bernardino	P-36-012850				Adelanto to Moreno	Inland Valleys	historical period	archaeological site	artifact concentration	historical-period refuse deposit consisting of numerous bottles, broken asphalt and brick fragments and braided wire	2006		unknown		records-search buffer area
San Bernardino	P-36-012955	CA-SBR-12431			Adelanto to Moreno	Transverse Ranges	prehistoric	archaeological site	bedrock milling site	bedrock milling station with two bedrock mortars and several cupules; metate	2006		unknown		records-search buffer area
San Bernardino	P-36-013389	CA-SBR-12569/H			Adelanto to Moreno	Transverse Ranges	multicomponent	archaeological site	campsite	Blue Cut site; the prehistoric component represents a temporary camp consisting of a dense artifact concentration with multiple thermal features and the historical-period component involves the remains of a utility-pole line and scattered historical-period artifacts	2007		recommended eligible		records-search buffer area
San Bernardino	P-36-013546	CA-SBR-12596H			Adelanto to Moreno	Inland Valleys	historical period	agricultural resource	landscape features	remains of demolished structure(s), two poured-concreted slabs, an olive-tree grove and several ornamental trees	2006		unknown		cultural resource study area
San Bernardino	P-36-013547				Adelanto to Moreno	Inland Valleys	historical period	archaeological site	foundation	square, concrete slab foundation	2006		unknown		records-search buffer area
San Bernardino	P-36-013548				Adelanto to Moreno	Inland Valleys	historical period	archaeological site	foundation	concrete slab foundation	2006		unknown		records-search buffer area
San Bernardino	P-36-013612				Adelanto to Moreno	Transverse Ranges	historical period	archaeological site	foundation	concrete slab foundation	2007		unknown		records-search buffer area

APPENDIX C (Continued)

Previously Recorded Cultural Resources in the Records-Search Area

County	Primary No.	Trinomial	Forest Service No.	Additional Label	Project Segment	Geographical Zone	Age	Category	Resource Type	Description	Date Recorded	Date(s) Updated	NRHP and CRHR Eligibility	Other State and Local Listings	Location
San Bernardino	P-36-013613				Adelanto to Moreno	Transverse Ranges	historical period	archaeological site	foundation	concrete slab foundation	2007		unknown		records-search buffer area
San Bernardino	P-36-013614				Adelanto to Moreno	Transverse Ranges	historical period	archaeological site	foundation	concrete slab foundation with debris and dirt road	2007		unknown		records-search buffer area
San Bernardino	P-36-013878				Adelanto to Moreno	Inland Valleys	historical period	historic building or structure	house	single-family residence	2007		unknown		records-search buffer area
San Bernardino	P-36-013881	CA-SBR-12707H	05-12-53-145		Adelanto to Moreno	Transverse Ranges	historical period	archaeological site	artifact concentration	historical-period and modern concentrations of railroad and utility-pole debris	2007		unknown		cultural resource study area
San Bernardino	P-36-013882	CA-SBR-12708	05-12-53-146		Adelanto to Moreno	Transverse Ranges	prehistoric	archaeological site	campsite	remains of a thermal feature represented by an ash lens	2007		unknown		cultural resource study area
San Bernardino	P-36-014216				Adelanto to Moreno	Transverse Ranges	historical period	archaeological site	artifact concentration	large, low-density scatter of historical-period refuse, including cans, ceramics, and glass fragments	2007		unknown		records-search buffer area
San Bernardino	P-36-014507	CA-SBR-12986H			Adelanto to Moreno	Transverse Ranges	historical period	archaeological site	artifact concentration	historical-period can scatter	2008		unknown		records-search buffer area
San Bernardino	P-36-014508	CA-SBR-12987H			Adelanto to Moreno	Transverse Ranges	historical period	archaeological site	artifact concentration	historical-period can, ceramic, and glass scatter	2008		unknown		cultural resource study area
San Bernardino	P-36-014509	CA-SBR-12988H			Adelanto to Moreno	Transverse Ranges	historical period	archaeological site	foundation	concrete slabs and debris	2008		unknown		records-search buffer area
San Bernardino	P-36-015497				Adelanto to Moreno	Inland Valleys	historical period	transportation resource	road	Baseline Road	1973		unknown	State Historic Landmark and/ or Point of Historic Interest	records-search buffer area
San Bernardino	P-36-015548				Adelanto to Moreno	Inland Valleys	historical period	historic building or structure	structure	unknown structure; site record missing	1988		not eligible		records-search buffer area
San Bernardino	P-36-015549				Adelanto to Moreno	Inland Valleys	historical period	historic building or structure	structure	unknown structure; site record missing	1988		not eligible		records-search buffer area

APPENDIX C (Continued)

Previously Recorded Cultural Resources in the Records-Search Area

County	Primary No.	Trinomial	Forest Service No.	Additional Label	Project Segment	Geographical Zone	Age	Category	Resource Type	Description	Date Recorded	Date(s) Updated	NRHP and CRHR Eligibility	Other State and Local Listings	Location
San Bernardino	P-36-016417				Adelanto to Moreno	Inland Valleys	historical period	transportation resource	road	San Bernardino-Sonora road	1973		unknown	State Historic Landmark and/ or Point of Historic Interest	cultural resource study area
San Bernardino	P-36-017715				Adelanto to Moreno	Inland Valleys	historical period	historic building or structure	structure	unknown structure; site record missing	1992		not eligible		records-search buffer area
San Bernardino	P-36-017716				Adelanto to Moreno	Inland Valleys	historical period	historic building or structure	structure	unknown structure; site record missing	1992		not eligible	State Historic Landmark and/ or Point of Historic Interest	records-search buffer area
San Bernardino	P-36-017732				Adelanto to Moreno	Transverse Ranges	historical period	water-conveyance system	canal/aqueduct	concrete and rock flume	1984	2005	unknown		cultural resource study area
San Bernardino	P-36-019660				Adelanto to Moreno	Transverse Ranges	historical period	historic building or structure	structure	unknown structure; site record missing	2000		not eligible		cultural resource study area
San Bernardino	P-36-019661				Adelanto to Moreno	Transverse Ranges	historical period	historic building or structure	structure	unknown structure; site record missing	2000		not eligible		records-search buffer area
San Bernardino	P-36-019662				Adelanto to Moreno	Transverse Ranges	historical period	historic building or structure	structure	unknown structure; site record missing	2000		not eligible		records-search buffer area
San Bernardino	P-36-019663				Adelanto to Moreno	Transverse Ranges	historical period	historic building or structure	structure	unknown structure; site record missing	2000		not eligible		records-search buffer area
San Bernardino	P-36-020252				Adelanto to Moreno	Inland Valleys	historical period	historic building or structure	commercial building	Arrowhead Hotel/Café	1987	-	unknown		records-search buffer area
San Bernardino	P-36-020253				Adelanto to Moreno	Inland Valleys	historical period	historic building or structure	educational building	Loma Linda Academy	1987	-	unknown		records-search buffer area
San Bernardino	P-36-020368				Adelanto to Moreno	Inland Valleys	historical period	historic building or structure	house	single-family residence	2001		unknown		cultural resource study area
San Bernardino	P-36-020811				Adelanto to Moreno	Inland Valleys	historical period	historic building or structure	commercial building	commercial building	2008	-	unknown		cultural resource study area
San Bernardino	P-36-020812				Adelanto to Moreno	Inland Valleys	historical period	historic building or structure	commercial building	commercial building	2008	-	unknown		cultural resource study area

APPENDIX C (Continued)

Previously Recorded Cultural Resources in the Records-Search Area

County	Primary No.	Trinomial	Forest Service No.	Additional Label	Project Segment	Geographical Zone	Age	Category	Resource Type	Description	Date Recorded	Date(s) Updated	NRHP and CRHR Eligibility	Other State and Local Listings	Location
San Bernardino	P-36-020813				Adelanto to Moreno	Inland Valleys	historical period	historic building or structure	house	single-family residence	2008		unknown		cultural resource study area
San Bernardino	P-36-020814				Adelanto to Moreno	Inland Valleys	historical period	historic building or structure	commercial building	commercial building	2008	-	unknown		cultural resource study area
San Bernardino	P-36-020816				Adelanto to Moreno	Inland Valleys	historical period	historic building or structure	commercial building	commercial building	2008	-	unknown		records-search buffer area
San Bernardino	P-36-020826				Adelanto to Moreno	Inland Valleys	historical period	historic building or structure	commercial building	commercial building	2009	-	unknown		records-search buffer area
San Bernardino	P-36-021108				Adelanto to Moreno	Transverse Ranges	historical period	transportation resource	bridge	debris, cone creek bridge; concrete bypass vehicular bridge	2003	2008	unknown		records-search buffer area
San Bernardino	P-36-021325	CA-SBR-13699H			Adelanto to Moreno	Transverse Ranges	historical period	transportation resource	road	institution road	2009		unknown		records-search buffer area
San Bernardino	P-36-021326	CA-SBR-13700H			Adelanto to Moreno	Transverse Ranges	historical period	transportation resource	railroad	segment of the union Pacific Colton-Palmdale cutoff and bridge	2009		unknown		records-search buffer area
San Bernardino	P-36-021351				Adelanto to Moreno	Mojave Desert	historical period	water-conveyance system	canal/aqueduct	California Aqueduct segment	2008	2009	unknown		cultural resource study area
San Bernardino	P-36-021532	CA-SBR-13838H			Adelanto to Moreno	Transverse Ranges	historical period	historic building or structure	wall features	historical-period cobble wall	2008		unknown		records-search buffer area
San Bernardino	P-36-021549	CA-SBR-13855			Adelanto to Moreno	Mojave Desert	prehistoric	archaeological site	campsite	a single rock-lined hearth	2008		unknown		cultural resource study area
San Bernardino	P-36-021556	CA-SBR-13862H			Adelanto to Moreno	Transverse Ranges	historical period	archaeological site	artifact concentration	historical-period refuse scatter, including cans, glass, ceramics, and miscellaneous metal	2008		unknown		cultural resource study area
San Bernardino	P-36-021557				Adelanto to Moreno	Transverse Ranges	historical period	water-conveyance system	culvert	concrete drainage culvert	2008		unknown		records-search buffer area
San Bernardino	P-36-021617				Adelanto to Moreno	Transverse Ranges	historical period	agricultural resource	ranch/farm	gem ranch; cluster of agricultural-related buildings on a parcel of rural property	2008		unknown		cultural resource study area
San Bernardino	P-36-021619	CA-SBR-15910H			Adelanto to Moreno	Mojave Desert	historical period	utility resource	transmission line	historical-period 500 kV transmission line	2008	2010, 2011	unknown		cultural resource study area

APPENDIX C (Continued)

Previously Recorded Cultural Resources in the Records-Search Area

County	Primary No.	Trinomial	Forest Service No.	Additional Label	Project Segment	Geographical Zone	Age	Category	Resource Type	Description	Date Recorded	Date(s) Updated	NRHP and CRHR Eligibility	Other State and Local Listings	Location
San Bernardino	P-36-022651	CA-SBR-14421H			Adelanto to Moreno	Transverse Ranges	historical period	agricultural resource	water tank	concrete and cinder block, open-top, rectangular water tank	2010		unknown		records-search buffer area
San Bernardino	P-36-022652	CA-SBR-14422H			Adelanto to Moreno	Transverse Ranges	historical period	archaeological site	artifact concentration	historical-period refuse scatter including cans, glass, ceramics, and miscellaneous metal	2010		not eligible		cultural resource study area
San Bernardino	P-36-022663	CA-SBR-14427H			Adelanto to Moreno	Transverse Ranges	historical period	archaeological site	artifact concentration	galvanized steel post survey markers and concentrations of historical-period refuse, including cans and glass and ceramic fragments	2010		unknown		records-search buffer area
San Bernardino	P-36-023468	CA-SBR-14814H			Adelanto to Moreno	Transverse Ranges	historical period	archaeological site	artifact concentration	historical-period refuse scatter including cans and glass fragments	2011		unknown		records-search buffer area
San Bernardino	P-36-023469	CA-SBR-14815H			Adelanto to Moreno	Transverse Ranges	historical period	historic building or structure	commercial building	Devore garage; commercial building	2011	-	unknown		cultural resource study area
San Bernardino	P-36-023470	CA-SBR-14816H			Adelanto to Moreno	Transverse Ranges	historical period	agricultural resource	ranch/farm	poultry farm	2011		unknown		records-search buffer area
San Bernardino	P-36-023612				Adelanto to Moreno	Transverse Ranges	historical period	historic building or structure	house	single-family residence	2007		unknown		records-search buffer area
San Bernardino	P-36-023614				Adelanto to Moreno	Transverse Ranges	historical period	historic building or structure	house	single-family residence	2009		unknown		records-search buffer area
San Bernardino	P-36-023615				Adelanto to Moreno	Transverse Ranges	historical period	historic building or structure	house	single-family residence	2009		unknown		records-search buffer area
San Bernardino	P-36-023616				Adelanto to Moreno	Transverse Ranges	historical period	historic building or structure	educational building	two former rural school buildings	2009	-	unknown		records-search buffer area
San Bernardino	P-36-023617				Adelanto to Moreno	Transverse Ranges	historical period	historic building or structure	house	single-family residence	2009		unknown		records-search buffer area
San Bernardino	P-36-023618				Adelanto to Moreno	Transverse Ranges	historical period	historic building or structure	house	single-family residence	2009		unknown		cultural resource study area
San Bernardino	P-36-023619				Adelanto to Moreno	Transverse Ranges	historical period	historic building or structure	house	single-family residence	2009		unknown		cultural resource study area

APPENDIX C (Continued)

Previously Recorded Cultural Resources in the Records-Search Area

County	Primary No.	Trinomial	Forest Service No.	Additional Label	Project Segment	Geographical Zone	Age	Category	Resource Type	Description	Date Recorded	Date(s) Updated	NRHP and CRHR Eligibility	Other State and Local Listings	Location
San Bernardino	P-36-023620				Adelanto to Moreno	Transverse Ranges	historical period	historic building or structure	government building	California Department of Forestry and fire protection building	2009		unknown		records-search buffer area
San Bernardino	P-36-030001				Adelanto to Moreno	Inland Valleys	historical period	historic building or structure	house	wood frame, single-family home	1996		unknown		records-search buffer area
San Bernardino	unknown	unknown	unknown	P1333-10H	Adelanto to Moreno	Transverse Ranges	unknown	unknown	unknown	unknown site type	unknown	unknown	unknown		records-search buffer area
San Bernardino	unknown	unknown	unknown	P1072-47	Adelanto to Moreno	Transverse Ranges	unknown	unknown	unknown	unknown site type	unknown	unknown	unknown		records-search buffer area
San Bernardino	unknown	unknown	unknown	P1072-46	Adelanto to Moreno	Transverse Ranges	unknown	unknown	unknown	unknown site type	unknown	unknown	unknown		records-search buffer area
San Bernardino	unknown	unknown	unknown	no number	Adelanto to Moreno	Inland Valleys	unknown	unknown	unknown	unknown site type	unknown	unknown	unknown		records-search buffer area
San Bernardino	unknown	unknown	unknown	P1333-09	Adelanto to Moreno	Transverse Ranges	unknown	unknown	unknown	unknown site type	unknown	unknown	unknown		records-search buffer area
San Bernardino	unknown	unknown	unknown	unknown	Adelanto to Moreno	Transverse Ranges	unknown	unknown	unknown	unknown site type	unknown	unknown	unknown		records-search buffer area
San Bernardino	unknown	unknown	unknown	unknown	Adelanto to Moreno	Transverse Ranges	unknown	unknown	unknown	unknown site type	unknown	unknown	unknown		records-search buffer area
San Bernardino	unknown	unknown	unknown	unknown	Adelanto to Moreno	Mojave Desert	unknown	unknown	unknown	unknown site type	unknown	unknown	unknown		cultural resource study area
San Bernardino	unknown	unknown	unknown	unknown	Adelanto to Moreno	Mojave Desert	unknown	unknown	unknown	unknown site type	unknown	unknown	unknown		records-search buffer area
San Bernardino	unknown	unknown	unknown	unknown	Adelanto to Moreno	Transverse Ranges	unknown	unknown	unknown	unknown site type	unknown	unknown	unknown		records-search buffer area
San Bernardino	unknown	unknown	unknown	unknown	Adelanto to Moreno	Inland Valleys	unknown	unknown	unknown	unknown site type	unknown	unknown	unknown		records-search buffer area

APPENDIX C (Continued)

Previously Recorded Isolated Finds in the Records-Search Area

County	Primary No.	Trinomial	Forest Service No.	Additional Label	Project Segment	Geographical Zone	Age	Category	Resource Type	Description	Date Recorded	Date(s) Updated	NRHP and CRHR Eligibility	Other State and Local Listings	Location
Riverside	P-33-013151				Moreno to Whitewater	Inland Valleys	prehistoric	isolated find	isolated find	granite hammerstone	2003		unknown		records-search buffer area
Riverside	P-33-013162				Moreno to Whitewater	Inland Valleys	prehistoric	isolated find	isolated find	one flake	2003		unknown		records-search buffer area
Riverside	P-33-015293				Moreno to Whitewater	Inland Valleys	historical period	isolated find	isolated find	sun-colored amethyst glass fragments	2005		unknown		records-search buffer area
Riverside	P-33-015294				Moreno to Whitewater	Inland Valleys	historical period	isolated find	isolated find	sun-colored amethyst glass fragments	2005		unknown		records-search buffer area
Riverside	P-33-015296				Moreno to Whitewater	Inland Valleys	historical period	isolated find	isolated find	sun-colored amethyst glass bottle	2005		unknown		records-search buffer area
Riverside	P-33-015648				Adelanto to Moreno	Inland Valleys	prehistoric	isolated find	isolated find	granite metate	2006		unknown		records-search buffer area
Riverside	P-33-015923				Moreno to Whitewater	Inland Valleys	historical period	isolated find	isolated find	glass and metal fragments	2007		unknown		records-search buffer area
Riverside	P-33-022336				Moreno to Whitewater	Inland Valleys	historical period	isolated find	isolated find	can	2013		unknown		records-search buffer area
San Bernardino	P-36-012870				Adelanto to Moreno	Inland Valleys	historical period	isolated find	isolated find	clear glass bottle	2006		unknown		records-search buffer area
San Bernardino	P-36-021600				Adelanto to Moreno	Mojave Desert	prehistoric	isolated find	isolated find	mano	2008		unknown		cultural resource study area
San Bernardino	P-36-022655				Adelanto to Moreno	Transverse Ranges	prehistoric	isolated find	isolated find	chert/jasper flake	2010		unknown		records-search buffer area
San Bernardino	P-36-022656				Adelanto to Moreno	Transverse Ranges	prehistoric	isolated find	isolated find	granite mano	2010		unknown		records-search buffer area
San Bernardino	P-36-022657				Adelanto to Moreno	Transverse Ranges	prehistoric	isolated find	isolated find	rhyolite flake	2010		unknown		cultural resource study area
San Bernardino	P-36-060211				Adelanto to Moreno	Transverse Ranges	prehistoric	isolated find	isolated find	mortar fragment	1963		unknown		records-search buffer area
San Bernardino	P-36-060212				Adelanto to Moreno	Transverse Ranges	prehistoric	isolated find	isolated find	metate fragment	1963		unknown		cultural resource study area
San Bernardino	P-36-060448		05-12-53-11		Adelanto to Moreno	Transverse Ranges	prehistoric	isolated find	isolated find	metate fragment	1986		unknown		records-search buffer area
San Bernardino	P-36-060474				Adelanto to Moreno	Transverse Ranges	prehistoric	isolated find	isolated find	obsidian blade	1985		unknown		records-search buffer area
San Bernardino	P-36-060476				Adelanto to Moreno	Transverse Ranges	historical period	isolated find	isolated find	glass bottle	1995		unknown		records-search buffer area
San Bernardino	P-36-060852				Adelanto to Moreno	Mojave Desert	prehistoric	isolated find	isolated find	possible fused shale knife	1976		unknown		records-search buffer area

APPENDIX C (Continued)

Previously Recorded Isolated Finds in the Records-Search Area

County	Primary No.	Trinomial	Forest Service No.	Additional Label	Project Segment	Geographical Zone	Age	Category	Resource Type	Description	Date Recorded	Date(s) Updated	NRHP and CRHR Eligibility	Other State and Local Listings	Location
San Bernardino	P-36-060853				Adelanto to Moreno	Mojave Desert	prehistoric	isolated find	isolated find	schist metate	1977		unknown		records-search buffer area
San Bernardino	P-36-060940				Adelanto to Moreno	Transverse Ranges	historical period	isolated find	isolated find	glass bottle fragment	2000		unknown		records-search buffer area
San Bernardino	P-36-061241				Adelanto to Moreno	Mojave Desert	prehistoric	isolated find	isolated find	chalcedony scraper	1976		unknown		records-search buffer area
San Bernardino	P-36-061242				Adelanto to Moreno	Mojave Desert	prehistoric	isolated find	isolated find	projectile point fragment	1976		unknown		records-search buffer area
San Bernardino	P-36-064328				Adelanto to Moreno	Transverse Ranges	prehistoric	isolated find	isolated find	chert biface	2007		unknown		records-search buffer area
San Bernardino	P-36-064349				Adelanto to Moreno	Transverse Ranges	prehistoric	isolated find	isolated find	metate	2007		unknown		cultural resource study area
San Bernardino	P-36-064350				Adelanto to Moreno	Transverse Ranges	prehistoric	isolated find	isolated find	core	2007		unknown		records-search buffer area
San Bernardino	P-36-064351				Adelanto to Moreno	Transverse Ranges	prehistoric	isolated find	isolated find	mano	2007		unknown		records-search buffer area
San Bernardino	P-36-064354				Adelanto to Moreno	Transverse Ranges	prehistoric	isolated find	isolated find	metate	2007		unknown		records-search buffer area

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Section 5.5 References

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APPENDIX C (Continued)

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APPENDIX D
Soil Series Descriptions

Appendix D

Official Soil Series Descriptions for SoCal Gas Project Area

(source: <https://soilseries.sc.egov.usda.gov/osdname.asp>, accessed on May 9, 2014)

AVAWATZ SERIES

LOCATION AVAWATZ CA
Established Series
Rev. GAW/JWF/GWH
8/78

The Avawatz series consists of deep, somewhat excessively drained soils that formed in mixed, but dominantly granitic alluvium. Avawatz soils are on lower margins of alluvial fans and narrow drainageways and have slopes of 2 to 9 percent. The mean annual precipitation is about 13 inches and the mean annual temperature is about 55 degrees F.

TAXONOMIC CLASS: Sandy, mixed, mesic Mollic Xerofluvents

TYPICAL PEDON: Avawatz sandy loam, on a NE facing convex slope of 3 percent under big sagebrush, buckwheat, Joshua tree, Utah juniper and annual grasses at 4,850 feet elevation. (Colors are for dry soil unless otherwise stated. When described the soil was dry throughout.)

A1--0 to 15 inches; brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; moderate medium subangular blocky structure; slightly hard, friable, nonsticky and nonplastic; common very fine, few fine roots; few very fine interstitial pores; about 5 percent (1/2 inch) pebbles; neutral (pH 6.8); gradual smooth boundary. (8 to 16 inches thick)

C--15 to 60 inches; pale brown (10YR 6/3) loamy sand, dark brown (10YR 4/3) moist; massive; slightly hard, very friable; few very fine roots; few very fine interstitial pores; fine strata (1/2 to 1 inch) of sandy loam above a 40 inch depth; about 10 percent (1/2 to 2 inch) pebbles; neutral (pH 6.8).

TYPE LOCATION: San Bernardino County, California; about 1/2 mile west of Phelan and 1 1/4 mile south in the SE1/4 SW1/4 section 26, T.4N., R.7W.

RANGE IN CHARACTERISTICS: The mean annual soil temperature is about 53 to 59 degrees F. The soil between depths of 12 and 35 inches becomes moist in some part from early December to May, is continuously moist for 90 to 120 days when the soil is above 47 degrees F. and is continuously dry the rest of the year. Organic carbon ranges from 0.2 to 0.6 percent.

The A1 horizon is grayish brown, dark brown, or brown (10YR 5/2, 4/3, 5/3). Moist colors are dark brown or very dark grayish brown (10YR 3/3, 3/2). This horizon is sandy loam or loamy sand and averages 5 to 15 percent gravel. It has weak to moderate, fine to medium subangular blocky structure. Base saturation is assumed to be 75 to 100 percent. Reaction is slightly acid or neutral.

The C horizon is brown, pale brown, light yellowish brown, or light brownish gray (10YR 5/3, 6/3, 6/4, 6/2). Moist colors are dark brown, dark yellowish brown or dark grayish brown (10YR 4/3, 4/4, 4/2).

This horizon has thin strata of sandy loam between depths of 20 to 40 inches and averages 5 to 15 percent fine gravel.

COMPETING SERIES: These are the [Ledow](#) series in the same family and the [Danskin](#), [Metz](#), [Mottsville](#), Newruss and Shaffer series. Ledow soils are usually moist and have a mean annual soil temperature of 47 to 53 degrees F. Danskin soils have a regular decrease in organic matter with increasing depth, are underlain by bedrock at a depth of 40 to 60 inches and have moist value of 4 or more in the A horizon. Metz soils are thermic. Mottsville and Shaffer soils have a mollic epipedon. Newruss soils have a coarse, loamy control section.

GEOGRAPHIC SETTING: Avawatz soils are on alluvial fans and intermittent drainageways at elevations of 3,400 to 5,200 feet. Slopes are 2 to 9 percent. The soils are subject to rare flooding in places. They formed in alluvium from mixed but dominantly granitic sources. The climate is subhumid mesothermal having warm, dry summers and cool, moist winters. The mean annual precipitation is 12 to 14 inches of which about 1/4 to 1/3 falls as snow of short duration. The average January temperature is 42 to 44 degrees F.; the average July temperature is 72 to 74 degrees F.; and the mean annual temperature is 55 to 57 degrees F. The frost free season is about 160 to 190 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Bull Trail](#) and [Oak Glen](#) soils. Bull Trail soils have a sandy clay loam B2t horizon. Oak Glen soils have a mollic epipedon more than 20 inches thick.

DRAINAGE AND PERMEABILITY: Somewhat excessively drained; slow runoff; rapid permeability.

USE AND VEGETATION: Used mainly for range and wildlife habitat. Vegetation is big sagebrush, Utah juniper, scrub oak, buckwheat, desert needlegrass, rubber rabbitbrush, annual grasses and forbs.

DISTRIBUTION AND EXTENT: Alluvial fans and drainageways of the San Bernardino Mountains adjacent to Mojave Desert. The soils are inextensive.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: San Bernardino County, California, Mojave River Area, 1978.

REMARKS: Organic carbon determination show this soil has less than 0.6 percent organic carbon and is classified as a ochric epipedon.

ADDITIONAL DATA: Reference sample for organic carbon for a soil just a short distance away. Pedon number 77CA-071-1 and 77CA-071-2.

National Cooperative Soil Survey
U. S. A.

BRYMAN SERIES

LOCATION BRYMAN CA
Established Series
Rev. GAW/JWE/GWH
01/2003

The Bryman series consists of deep, well drained soils that formed in alluvium from dominantly granitic sources. Bryman soils are on terraces and older alluvial fans and have slopes of 0 to 15 percent. The mean annual precipitation is about 4 inches and the mean annual temperature is about 63 degrees F.

TAXONOMIC CLASS: Fine-loamy, mixed, superactive, thermic Typic Haplargids

TYPICAL PEDON: Bryman loamy fine sand, on a 1 1/2 percent slope under creosotebush, bursage and a few annual grasses at 3,160 feet elevation. (Colors are for dry soil unless otherwise stated. When described the soil was dry throughout.)

A11--0 to 4 inches; pale brown (10YR 6/3) loamy fine sand, dark brown (10YR 4/3) moist; moderate medium and thick platy structure; slightly hard, very friable, nonsticky and nonplastic; common very fine roots; many very fine interstitial pores; moderately alkaline (pH 8.0); abrupt smooth boundary. (3 to 8 inches thick)

A12--4 to 9 inches; light yellowish brown (10YR 6/4) loamy fine sand, yellowish brown (10YR 5/4) moist; massive; slightly hard, very friable, nonsticky and nonplastic; few very fine roots; many very fine interstitial pores; moderately alkaline (pH 8.0); clear smooth boundary. (3 to 10 inches thick)

B1t--9 to 12 inches; brown (7.5YR 5/4) sandy loam, dark brown (7.5YR 4/4) moist; weak fine and medium subangular blocky structure; very fine tubular pores; few thin clay films in bridges between

mineral grains; about 3 percent pebbles (1/4 inch); moderately alkaline (pH 8.0); clear smooth boundary. (2 to 5 inches thick)

B21t--12 to 24 inches; reddish brown (5YR 5/4) sandy clay loam, reddish brown (5YR 4/4) moist; strong coarse prismatic structure; hard, firm, sticky and plastic; few fine roots; common very fine tubular pores; many moderately thick clay films on peds and in pores; about 4 percent pebbles (1/4 inch); moderately alkaline (pH 8.0); gradual smooth boundary. (8 to 16 inches thick)

B22t--24 to 32 inches; reddish brown 9.5YR 5/4 sandy clay loam, reddish brown (5YR 4/4) moist; moderate medium angular blocky structure; hard, firm, sticky and plastic; few fine roots; roots oriented along surfaces of peds; common very fine tubular pores; common moderately thick clay films on peds and in pores; about 4 percent pebbles (1/4 inch); moderately alkaline (pH 8.0); gradual wavy boundary. (8 to 24 inches thick)

B31tca--32 to 46 inches; pink (7.5YR 7/4) sandy loam near loam; brown (7.5YR 5/4) moist; moderate fine and medium subangular blocky structure; slightly hard, firm, slightly sticky and slightly plastic; few very fine tubular pores; common thin clay films in bridges between mineral grains and in pores; one krotovina at about 45 inches; slightly effervescent with disseminated lime, segregated lime as common fine seams coating peds (1 to 2 mm thick); moderately alkaline (pH 8.4); gradual wavy boundary. (6 to 18 inches thick)

B32t--46 to 66 inches; light brown (7.5YR 6/4) loamy sand, dark brown (7.5YR 4/4) moist; moderate medium and fine subangular blocky structure; slightly hard, firm; common thin clay films in bridges between mineral grains; moderately alkaline (pH 8.2); gradual wavy boundary. (0 to 20 inches thick)

B33t--66 to 80 inches; light brown (7.5YR 6/4) loamy sand, dark brown (7.5YR 4/4) moist; massive; hard, firm; few thin clay films between mineral grains; moderately alkaline (pH 8.2); gradual wavy boundary. (0 to 16 inches thick)

C--80 to 100 inches; light yellowish brown (10YR 6/4) sand, dark yellowish brown (10YR 4/4) moist; massive; slightly hard, very friable; about 5 percent pebbles (1/2 inch); moderately alkaline (pH 8.2).

TYPE LOCATION: San Bernardino County, California; approximately 2 miles west of Adobe Corners; 100 yards north of the intersection of Palmdale Road and Duncan Road; SW1/4 SE1/4 SE1/4, section 16, T.4N., R.1E.

RANGE IN CHARACTERISTICS: Solum thickness is more than 30 inches. Depth to carbonates is usually about 30 inches, and ranges from 24 to 32 inches, but the series lacks a calcic horizon. The mean annual soil temperature at a depth of about 20 inches is about 65 degrees F., and the soil temperature usually is not below 47 degrees F. at any time. The soil is usually dry and is not continuously moist for as long as 60 days.

The A horizon is usually pale brown, light yellowish brown or very pale brown (10YR 6/3, 6/4, 5/4, 7/3, 7/4). In some pedons, it is pink or pinkish gray (7.5YR 7/4, 7/2). It is loamy sand, loamy fine sand, or stony sand and averages 3 to 8 percent clay. It is sandy clay loam in overwash areas and averages 20 to 23 percent clay. Structure ranges from moderate fine to thick platy, but is weak or moderate, very fine to medium subangular blocky in some pedons or is massive. Typically this horizon is noncalcareous and mildly alkaline or moderately alkaline, but some pedons are neutral or slightly calcareous in the upper few inches. The surface has been largely reworked by wind action and thickness ranges from 6 to 18 inches.

The B2t horizon is reddish brown or reddish yellow (5YR 5/4, 5/3, 4/4, 6/6, 6/8). It is typically sandy clay loam or clay loam and averages 20 to 35 percent clay. A few pedons are gravelly sandy clay loam with coarse fragments that range up to 30 percent by volume. This horizon typically has strong or moderate coarse prismatic structure. A few pedons have moderate or strong, fine to coarse, angular or subangular blocky structure. This horizon is mildly alkaline or moderately alkaline.

The B31tca horizon is usually pink, or strong brown (7.5YR 7/4, 5/6, 5/8); or less commonly very pale brown (10YR 7/3, 7/4). It is sandy loam, loam or gravelly sandy loam. Some pedons are massive. This horizon is slightly calcareous to strongly calcareous. Segregated lime ranges from few to common, fine to medium, seams, threads, or soft masses, but do not qualify for a calcic horizon. Fine gravel usually ranges from 0 to 5 percent but some pedons have individual strata with up to 20 percent.

The B3 horizon is light brown, reddish yellow (7.5YR 6/4, 6/6, 6/8) or light yellowish brown (10YR 6/4). It has 0 to 5 percent fine gravel. Thin clay bridges between mineral grains are absent in some pedons. The C horizon is light yellowish brown, very pale brown (10YR 6/4, 7/3, 7/4) or strong brown (7.5YR 5/6, 5/8). It ranges from loamy coarse sand to sand. This horizon is generally moderately alkaline but is strongly alkaline (pH 8.5 to 8.6) in some pedons and has some segregated lime seams or threads. Fine gravel usually ranges from 5 to 10 percent but some pedons have individual strata with up to 20 percent. **COMPETING SERIES:** These are the [Anway](#), Avena (T), [Berino](#), [Bucklebar](#), [Chimenea](#) (T), [Cornville](#), [Dona Ana](#), [Garlock](#), [Hap](#), [Hi Vista](#), [Madurez](#), [Milham](#), [Mirage](#), Mojave, [Neuralia](#), [Palomas](#), [Palo Verdes](#), [Tijeras](#), and [Tres Hermanos](#) series. With the exception of [Avenal](#), Garlock, Hi Vista, Milham and Neuralia, the soils are moist for 30 to 60 cumulative days in July, August and September. Anway, Madurez, and Palos Vedes soils have a sola less than 20 inches thick. Avenal soils have less than 35 percent total sand throughout, 35 to 45 percent total silt and have hue of 2.5Y. Berino, Cronville, Hap and Mojave soils have a calcic horizon above a depth of 40 inches. Bucklebar soils have an A1 horizon less than 3 inches thick. Chimenea soils are underlain by highly weathered granite at 6 to 20 inches. Hi Vista soils have a lithic contact at a depth of less than 40 inches. Neuralia soils have hue of 7.5YR or 10YR in the argillic horizon and lack prismatic structure. Dona Ana and Tres Hermanos soils are calcareous throughout, have a calcic horizon at a depth of 20 to 36 inches and have sola 12 to 35 inches thick. Garlock soils are noneffervescent to a depth of at least 40 inches and have hue of 7.5YR or 10YR in the argillic horizon. Milham soils have hue of 10YR in the argillic horizon. Palomas soils are deeper than 36 inches to carbonates. Tijeras soils have sola 10 to 24 inches thick and lack prismatic structure in the B2t horizon.

GEOGRAPHIC SETTING: The climate is arid with hot, dry summers and cool somewhat moist winters. The mean annual precipitation is 4 to 6 inches with most of the moisture occurring as rain in late autumn and winter. Some moisture falls occasionally as snow. The mean annual temperature is 61 to 65 degrees F.; the average July temperature is about 44 degrees F.; and the average July temperature is about 83 degrees F. The frost free season is 190 to 255 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are [Helendale](#), [Cajon](#) and [Rosamond](#) soils. Helendale soils have a coarse, loamy particle size control section. Cajon and Rosamond soils lack an argillic horizon.

DRAINAGE AND PERMEABILITY: Well drained; slow runoff; moderately slow permeability. Some areas are subject to flooding for 1 to 2 weeks from December to early February.

USE AND VEGETATION: Use for irrigated crops such as alfalfa, small grains and pasture. They are also used for homesites and recreation. Vegetation is mostly creosotebush, bursage, Mormon-tea, Joshua tree, and annual forbs and grasses.

DISTRIBUTION AND EXTENT: Terraces and older alluvial fans of the Mojave Desert of California, in MLRA 30. The soils are moderately extensive.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: San Bernardino County, California, Mojave River Area, 1978.

REMARKS: The activity class was added to the classification in January of 2003. Competing series were not checked at that time.

National Cooperative Soil Survey
U.S.A.

BULL TRAIL SERIES

LOCATION BULL TRAIL CA
Established Series
Rev. AAK/LAB/TDC

01/2003

The Bull Trail series consists of deep, well drained soils that formed in material on alluvial fans and terraces. Bull Trail soils are gently sloping to moderately steep. The mean annual precipitation is about 19 inches and the mean annual temperature is about 54 degrees F.

TAXONOMIC CLASS: Fine-loamy, mixed, active, mesic Mollic Haploxeralfs

TYPICAL PEDON: Bull Trail sandy loam, annual grass pasture. (Colors are for dry soil unless otherwise noted.)

Ap--0 to 8 inches; grayish brown (10YR 5/2) sandy loam, very dark grayish brown (10YR 3/2) moist; weak granular structure; soft, very friable, nonsticky and nonplastic; many fine roots; moderately acid (pH 6.0); clear smooth boundary. (6 to 12 inches thick)

B21t--8 to 11 inches; brown (10YR 5/3) coarse sandy clay loam, dark grayish brown (10YR 4/2) moist; moderate medium subangular blocky structure; very hard, friable, slightly sticky and slightly plastic; common fine and medium roots; many fine and few medium tubular pores; common moderately thick clay films on faces of peds; moderately acid (pH 6.0); clear smooth boundary. (2 to 8 inches thick)

B22t--11 to 16 inches; brown (10YR 5/3) coarse sandy clay loam, dark grayish brown (10YR 4/2) moist; moderate medium angular blocky structure; very hard, firm, slightly sticky and slightly plastic; common fine roots; common fine tubular pores; common moderately thick clay films on faces of peds; moderately acid (pH 6.0); gradual smooth boundary. (5 to 9 inches thick)

B23t--16 to 22 inches; brown (10YR 5/3) coarse sandy clay loam, dark grayish brown (10YR 4/2) moist; moderate medium angular blocky structure; very hard, firm, sticky and slightly plastic; common fine roots; common fine tubular pores; few moderately thick clay films on faces of peds; moderately acid (pH 6.0); gradual smooth boundary. (4 to 12 inches thick)

B3t--22 to 30 inches; yellowish brown (10YR 5/4) coarse sandy loam, dark yellowish brown (10YR 4/4) moist; massive; hard, firm, slightly sticky and slightly plastic; common fine roots; common fine tubular pores; common thin clay films on faces of peds; slightly acid (pH 6.5); gradual smooth boundary. (4 to 12 inches thick)

C1--30 to 45 inches; yellowish brown (10YR 5/4) loam, dark yellowish brown (10YR 4/4) moist; massive; hard, friable, slightly sticky and slightly plastic; few fine roots; many fine interstitial pores; neutral (pH 6.7); gradual smooth boundary. (10 to 20 inches thick)

C2--45 to 55 inches; yellowish brown (10YR 5/4) coarse sandy loam, dark yellowish brown (10YR 4/4) moist; massive; slightly hard, friable, nonsticky and nonplastic; many fine interstitial pores; neutral (pH 7.0); abrupt smooth boundary. (8 to 12 inches thick)

C3--55 to 60 inches; pale brown (10YR 6/3) fine sandy loam, brown (10YR 4/3) moist; massive; very hard, firm, slightly sticky and slightly plastic; few very fine tubular pores; neutral (pH 7.0).

TYPE LOCATION: Riverside County, California; about 6 miles northeast of Aguanga; approximately 1,280 feet west, 1,000 feet south of E1/4 corner section 5, T.8S., R.2E.

RANGE IN CHARACTERISTICS: The mean annual soil temperature at a depth of 20 inches is about 56 to 58 degrees F. and the soil temperature is not below 47 degrees F. after about the 10th of February. Soil between the depths of about 6 and 18 inches usually is moist in some or all parts from about December 1 until late May and usually is dry all the rest of the year. The A and B horizons have up to 15 percent rock fragments, mostly 2 mm to 3/4 inch in diameter. Some pedons have stones and cobblestones on the surface. The C horizon has up to 35 percent rock fragments but most pedons have less than 15 percent.

The A or Ap horizon is grayish brown or brown in 10YR or 7.5YR hue and is coarse sandy loam, sandy loam or fine sandy loam. It has 1.5 to 3 percent organic matter in the upper part that decreases regularly to less than 1 percent 5 to 9 inches below the surface.

The B2t horizon is brown, light brown, light yellowish brown or yellowish brown in 10YR or 7.5YR hue and is heavy sandy loam, sandy clay loam or loam and has 18 to 27 percent clay. It is moderately acid to slightly alkaline and the base saturation is more than 75 percent.

The C horizon is pale brown, light yellowish brown, yellowish brown or light brownish gray. It is dominantly sandy loam, but is somewhat stratified and texture ranges from loamy sand to loam. In some pedons there are some lenses weakly cemented by silica or lime or both.

COMPETING SERIES: These are the [Bancas](#), Blakeport, Chualer, Dozel, [Hilt](#), [Kitchen Creek](#), [Mary](#) and [Morical](#) series. Bancas, Dozel, and Hilt soils have a paralithic contact 20 to 40 inches below the surface. Blakeport and Morical soils have a paralithic contact within 40 inches of the surface and are dry for 60 to 80 days. Chualer and Kitchen Creek soils have a mollic epipedon. Also, [Chualar](#) soils have a 59 to 63 degree F. mean annual soil temperature and Kitchen Creek soils have less than 18 percent clay. Mary soils have a lithic contact at a depth of 20 to 40 inches.

GEOGRAPHIC SETTING: The Bull Trail soils are on gently sloping to moderately steep and are on alluvial fans and terraces at elevations of 2,700 to 5,600 feet. The climate is subhumid mesothermal with long dry summers and terraces at elevations of 2,700 to 5,600 feet. The climate is subhumid mesothermal with long dry summers and moist winters. The average annual precipitation is 13 to 25 inches of which about 1/2 falls as snow. The average January temperature is 40 degrees F.; the average July temperature is 68 degrees F.; and the average annual temperature is 52 to 56 degrees F. The average frost free season is 150 to 200 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Calpine](#), [Crouch](#), [La Posta](#), [Mottsville](#), [Oak Glen](#), and [Tollhouse](#) soils. Calpine, Crouch, La Posta, Mottsville, and Oak Glen soils have a mollic epipedon and lack an argillic horizon. Tollhouse soils lack an argillic horizon and have a paralithic contact at a depth of less than 20 inches.

DRAINAGE AND PERMEABILITY: Well drained; medium runoff; moderately slow permeability.

USE AND VEGETATION: Used mainly for range or pasture. Native vegetation is mainly chaparral shrubs, and naturalized annual forbs and grasses.

DISTRIBUTION AND EXTENT: Mountain valleys of southern California. They are moderately extensive.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: Riverside County, California, 1973.

REMARKS: Where the colors are dark the organic carbon or thickness of the epipedon does not qualify for a mollic epipedon.

The activity class was added to the classification in January of 2003. Competing series were not checked at that time. - ET

National Cooperative Soil Survey
U.S.A.

CAJON SERIES

LOCATION CAJON CA
Established Series
Rev. GAW/TDC/MAV/KJO/ET
01/2002

The Cajon series consists of very deep, somewhat excessively drained soils that formed in sandy alluvium from dominantly granitic rocks. Cajon soils are on alluvial fans, fan aprons, fan skirts, inset fans and river terraces. Slopes are 0 to 15 percent. The average annual precipitation is about 6 inches and the mean annual temperature is about 65 degrees F.

TAXONOMIC CLASS: Mixed, thermic Typic Torripsamments

TYPICAL PEDON: Cajon sand, on a 1 1/2 percent slope under creosotebush, spiny hopsage, and Mormon-tea at 3,060 feet elevation. (Colors are for dry soil unless otherwise stated. When described on 4/29/75 the soil was moist to 18 inches and dry below).

A--0 to 2 inches; light gray (10YR 7/2) sand, light brownish gray (10YR 6/2) moist; weak fine and medium subangular blocky structure; soft, very friable; few fine roots; many very fine interstitial pores; strongly effervescent; moderately alkaline (pH 8.0); abrupt smooth boundary. (0 to 14 inches thick).

C1--2 to 7 inches; very pale brown (10YR 7/3) sand, light gray (10YR 7/2) moist; single grained; loose; common fine roots; many very fine interstitial pores; 1 to 2 percent 3/8 to 1/2 inch gravel; strongly effervescent; moderately alkaline (pH 8.0); clear wavy boundary. (3 to 6 inches thick).

C2--7 to 13 inches; very pale brown (10YR 7/3) sand, brown (10YR 5/3) moist; single grained; loose; common fine roots; common very fine interstitial pores; strongly effervescent; moderately alkaline (pH 8.0); clear wavy boundary. (3 to 7 inches thick).

C3--13 to 18 inches; very pale brown (10YR 7/3) sand, brown (10YR 5/3) moist; single grained; loose; common fine roots; many very fine interstitial pores; strongly effervescent; moderately alkaline (pH 8.0); clear wavy boundary. (3 to 7 inches thick).

C4--18 to 25 inches; very pale brown (10YR 7/3) sand, pale brown (10YR 6/3) moist; single grained; loose; common fine roots; many very fine interstitial pores; about 4 percent 1/2 inch gravel; strongly effervescent; moderately alkaline (pH 8.0); abrupt wavy boundary. (3 to 8 inches thick).

2C5--25 to 38 inches; very pale brown (10YR 7/4) gravelly sand, light yellowish brown (10YR 6/4) moist; single grained; loose; common fine roots; many fine interstitial pores; 25 percent 1/2 to 1 inch gravel; strongly effervescent; moderately alkaline (pH 8.0); clear wavy boundary. (10 to 15 inches thick).

2C6--38 to 45 inches; very pale brown (10YR 7/3) gravelly sand, pale brown (10YR 6/3) moist; single grained; loose; few very fine roots; many fine interstitial pores; 20 percent 1/2 to 1 inch gravel; strongly effervescent; moderately alkaline (pH 8.0); clear wavy boundary. (3 to 8 inches thick).

2C7--45 to 60 inches; very pale brown (10YR 7/4) sand, light yellowish brown (10YR 6/4) moist; single grained; loose; few very fine roots; common fine interstitial pores; strongly effervescent; moderately alkaline (pH 8.0).

TYPE LOCATION: San Bernardino County, California; about 5 miles east of Lucerne Valley, 0.5 mile east of intersection of Visalia Avenue and Foothill Road; and 0.3 mile north in NE1/4, SE1/4, SE1/4 section 16, T.4N., R.1E.

RANGE IN CHARACTERISTICS:

Soil moisture- usually dry from mid March to mid December and is not continuously moist for as long as 90 days in the winter.

Soil temperature: 59 degrees to 72 degrees F. and soil temperature usually is not below 47 degrees F. at any time.

Control section - Rock fragments are mostly gravel size and they make up as much as 35 percent though many pedons have less than 15 percent gravel. There is weak stratification of sandy material in some or all parts.

Typically the soil is slightly effervescent to strongly effervescent throughout although some pedons are noneffervescent in the A horizon.

Typically the profile is slightly alkaline or moderately alkaline although some pedons are neutral.

Some pedons are strongly alkaline and mildly saline-alkali to strongly saline-alkali. Electrical conductivity ranges up to 16 ds/m and the SAR to 20.

The A - Hue: 10YR or 2.5Y

Value: 5 through 7 dry and 3 through 6 moist

Chroma: 2 through 6 dry and moist.

Texture: Coarse sand, loamy coarse sand, sand and loamy sand. Some pedons have sandy loam overblown phases. Some pedons have as much as 60 percent gravel within 2 inches.

The C horizon - Hue: 10YR or 2.5Y

Value: 5 through 7 dry and 3 through 6 moist

Chroma: 2 through 6 dry and moist

Texture: Coarse sand, loamy coarse sand, sand, loamy sand, fine sand, or loamy fine sand or their gravelly or cobbly equivalents. Some pedons have a sandy loam horizon at a depth of more than 40 inches.

COMPETING SERIES: These are the [Bluepoint](#) (NV), [Brazito](#) (NM), [Maynard Lake](#) (NV), [Moapa](#) (NV), [Pintura](#) (UT), [Toquop](#) (NV), [University](#) (T NM) and [Yturbide](#) (NM) series in the same family and the [Carsitas](#) series in another family. Bluepoint soils are dominantly in hue of 5YR and have chroma of 3 through 6. Brazito soils are not dry in all parts of the moisture control section for months following the summer solstice. Carsitas and [Myoma](#) soils have a hyperthermic temperature regime. Maynard Lake soils contain a significant amount of volcanic ash. Moapa soils have a paralithic contact at a depth of 20 to 40 inches. Pintura soils have hue of 5YR or redder and lack stratification. Toquop soils typically have hue redder than 10YR. Yturbide soils are noncalcareous or have small amounts of disseminated lime. Also, Yturbide soils are moist in the summer.

GEOGRAPHIC SETTING: The Cajon soils have gradients of 0 to 15 percent and are on recent fans, fan skirts, fan aprons, inset fans and river terraces at elevations of 200 to 4,300 feet. The lower elevations commonly occur in the San Joaquin Valley. They formed in sandy alluvium, mostly granitic rock sources, but also a variety of sources are included. The climate is arid with hot dry summers and somewhat moist winters. Average annual precipitation is 2 to 9 inches, mostly in the form of winter rain. Mean January temperature is 43 degrees to 48 degrees F., mean July temperature is 82 degrees to 84 degrees F., mean annual temperature is 57 degrees to 70 degrees F. Frost-free season is 150 to 340 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Adelanto](#), [Arizo](#), [Calcio](#), [Edalph](#), [Golddivide](#), [Gravesumit](#), [Hesperia](#), [Livefire](#) and [Rosamond](#) soils. Adelanto soils have an argillic horizon. Arizo soils have a sandy skeletal particle size control section. Calcio, Golddivide and Gravesumit soils have an argillic horizon and a calcic horiaon. Edalph and Hesperia soils have a coarse-loamy control section. Livefire soils have sandy loam textures within the particle size control section. Rosamond soils have a fine-loamy particl r size control section.

DRAINAGE AND PERMEABILITY: Somewhat excessively drained; negligible to low runoff; rapid permeability. Cajon soils with sandy loam surface textures have moderately rapid over rapid permeability. Flooding is none to rare.

USE AND VEGETATION: Used mostly for range, watershed, and recreation. A few areas are irrigated and are used for growing alfalfa and other crops. Vegetation is mostly desert shrubs including creosotebush, saltbush, Mormon-tea, Joshua trees, some Indian ricegrass, annual grasses and forbs.

DISTRIBUTION AND EXTENT: Southeastern California, southern Nevada, and Arizona. The soils are extensive. The central concept for the series is in MLRA 30. Use in other MLRA's should be reevaluated.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California.

SERIES ESTABLISHED: Central-Southern California Reconnaissance, 1917.

REMARKS: The ranges of the Bluepoint, Cajon and Toquop series overlap.

Runoff classes based on Ksat and slope as described in "Terminology Used in Soil Survey Data Entry or Manuscript Editing of: 9-23-94 MAV." Runoff changed from slow or very slow; runoff is now negligible to low.

National Cooperative Soil Survey
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CARRIZO SERIES

LOCATION CARRIZO CA+AZ NV
Established Series
Rev. LJL/PBF/CAH/ET
08/2013

The Carrizo series consists of very deep, excessively drained soils formed in mixed igneous alluvium. Carrizo soils are on numerous landforms on flood plains, fan piedmonts and bolson floors. Slopes range from 0 to 15 percent. The mean annual precipitation is about 100 millimeters (4 inches) and the mean annual air temperature is about 21.5 degrees C (71 degrees F).

TAXONOMIC CLASS: Sandy-skeletal, mixed, hyperthermic Typic Torriorthents

TYPICAL PEDON: Carrizo extremely gravelly sand, rangeland and wildlife habitat. (Colors are for dry soil unless otherwise noted.) The soil surface is covered by approximately 70 percent gravel, 6 percent cobbles and 4 percent stones.

A -- 0 to 5 centimeters (0 to 2 inches); pale brown (10YR 6/3) extremely gravelly sand, brown (10YR 4/3) moist; massive; slightly hard, very friable, nonsticky and nonplastic; few very fine roots; common very fine interstitial pores; 55 percent gravel, 6 percent cobbles and 4 percent stones; slightly effervescent; moderately alkaline (pH 8.0); abrupt smooth boundary. (2.5 to 10 centimeters thick)

C -- 5 to 152 centimeters (2 to 60 inches); pale brown (10YR 6/3) stratified extremely gravelly and very gravelly coarse sand, brown (10YR 4/3) moist; massive to single grain; soft, slightly hard, or loose, very friable, nonsticky and nonplastic; common very fine and few fine roots; many very fine and few fine and medium interstitial pores; averages 55 percent gravel, 10 percent cobbles and 5 percent stones; very slightly effervescent and slightly effervescent; moderately alkaline (pH 8.4) and slightly alkaline (pH 7.8).

TYPE LOCATION: San Bernardino County, California; approximately 18.5 kilometers (11.5 miles) southwest of Amboy; about 610 meters (2,000 feet) south and 305 meters (1,000 feet) west of the NE corner of section 18, T. 4 N., R. 11 E., San Bernardino Base and Meridian; USGS Lead Mountain Northeast, CA 7.5 minute topographic quadrangle; 34 degrees, 26 minutes, 11.1 seconds north latitude and 115 degrees, 51 minutes, 47.8 seconds west longitude; UTM 11S, 0604440e 3810938n (DTM: NAD83).

RANGE IN CHARACTERISTICS:

Soil moisture control section: usually dry, moist in some parts for short periods during winter and early spring and for 10 to 20 days cumulative between July and September following convection storms. The soils have a typic-aridic soil moisture regime.

Soil temperature: 22 to 25 degrees C (72 to 77 degrees F)

Surface rock fragments: 25 to 100 percent

25 to 95 percent gravel

0 to 40 percent cobbles

0 to 25 percent stones

0 to 2 percent boulders.

Control section

Rock fragments: averages 35 to 80 percent, gravel, cobbles and stones

Clay content: averages 0 to 8 percent

Effervescence: noneffervescent through violently effervescent

Reaction: slightly acid through strongly alkaline

A horizon

Hue: 7.5YR, 10YR, 2.5Y

Value: 4 to 7 dry, 2 to 6 moist

Chroma: 2 to 6 dry, 2 to 4 moist

Clay content: 1 to 10 percent

Texture of the fine earth fraction: coarse sand, sand, loamy sand, loamy coarse sand, sandy loam or fine sandy loam

Rock fragments: 5 to 65 percent, with 5 to 65 percent gravel, 0 to 25 percent cobbles and 0 to 5 percent stones

Effervescence: noneffervescent through violently effervescent

Reaction: slightly acid through strongly alkaline

C horizons

Hue: 7.5YR, 10YR, 2.5Y

Value: 4 to 7 dry, 2 to 6 moist

Chroma: 2 to 6 dry, 2 to 4 moist

Clay content: averages 0 to 8 percent, ranges from 0 to 12 percent

Texture of the fine earth fraction: coarse sand, sand, loamy coarse sand or loamy sand. Some pedons have thin strata of fine sand, loamy fine sand or sandy loam

Rock fragments: 10 to 85 percent, with 10 to 80 percent gravel with more than 50 percent as medium or coarse-sized, 0 to 25 percent cobbles and 0 to 10 percent stones

Effervescence: noneffervescent through violently effervescent

Reaction: slightly acid through strongly alkaline

Silica: 0 to 25 percent as films on rock fragments

COMPETING SERIES: These are the [Carrwash](#) (NV), [Chemwash](#) (CA), [Descent](#) (CA), [Goldenhills](#) (CA), and [Rizzo](#) (CA) series. Carrwash and Chemwash soils are dominated by 2 to 5 millimeter (fine) gravel. Chemwash and Rizzo soils have mean annual soil temperatures that average greater than 25 degrees C, do not receive appreciable summer precipitation, and are generally dry throughout the moisture control section for most of the year. Descent soils have a calcium carbonate equivalent of 5 percent or greater throughout the profile without a diagnostic calcic horizon and are dominated by channers and flagstones. Goldenhills soils are formed in colluvium and residuum, have a surface C horizon with more than 80 percent rock cover, and are deep to a lithic contact.

GEOGRAPHIC SETTING: Carrizo soils are on numerous landforms on flood plains, fan piedmonts and bolson floors. Slopes range from 0 to 15 percent. The soils formed in mixed igneous alluvium. Elevations are -82 to 793 meters (-270 to 2,600 feet). The climate is arid with hot, dry summers and warm, moist winters. Precipitation is greatest in the winter with a lesser secondary peak in the summer. The mean annual precipitation is 75 to 175 millimeters (3 to 7 inches); mean January temperature is 12 degrees C (53 degrees F); mean July temperature is 35 degrees C (95 degrees F); mean annual air temperature is 20 to 23 degrees C (68 to 73.5 degrees F), and the frost-free season is 300 to 340 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Bristolake](#), [Clegorpass](#), [Heleweiser](#), [Pintobasin](#), and [Riverbend](#) soils. Bristolake soils are on nearby fan skirts and lower fan aprons, have a sandy particle size control section and are slightly saline with an SAR of 5 to 13 in the control section. Clegorpass and Heleweiser soils are on nearby fan remnants and have loamy-skeletal particle size control sections. In addition, Clegorpass soils have an argillic horizon and Heleweiser soils have a calcic horizon. Pintobasin soils are on similar landscape positions and are sandy throughout the particle size control section. Riverbend soils are on more stable landforms and have a calcic horizon.

DRAINAGE AND SATURATED HYDRAULIC CONDUCTIVITY: Excessively drained; negligible to low runoff; high saturated hydraulic conductivity.

USE AND VEGETATION: These soils are used for rangeland, recreation and wildlife habitat. Present vegetation is creosote bush, burrobrush, burrobrush and range ratany.

DISTRIBUTION AND EXTENT: Mojave Desert of southeastern California, western Arizona, and southern Nevada; MLRA 30. These soils are extensive.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: PHOENIX, ARIZONA

SERIES ESTABLISHED: Imperial County (El Centro Area), California; 1918.

REMARKS: The type location was relocated in 2006 to the Marine Corps Air Ground Combat Center, Twentynine Palms, California to better represent the series concept. The series has been overused throughout the Southwestern deserts including areas with precipitation ranging from 2 to 12 inches. Soils with extreme arid moisture regimes should consider using the Rizzo series proposed for use in the Lower Colorado Desert (MLRA 31) with a moisture control section that is typically dry throughout for most of the year. New series should be proposed for the high precipitation zones. Use in MLRA 40 should also be reevaluated.

Diagnostic horizons and features in this pedon include:

Ochric epipedon - the zone from a depth of 0 to 18 centimeters (A and part of the C horizons).

Particle size control section - the zone from a depth of 25 to 100 centimeters (part of the C horizon).

Revised for the correlation of SDJR - MLRA 30 - Carrizo-Riverwash complex 3 to 8 percent slopes, 03/13, LJG2

Classified according to Soil Taxonomy, Second Edition, 1999; Keys to Soil Taxonomy, 11th Edition, 2010

National Cooperative Soil Survey
U.S.A.

CARSITAS SERIES

LOCATION CARSITAS CA

Established Series

Rev. AAK/LAB/GMK/PBF/ET

05/2012

The Carsitas series consists of very deep, somewhat excessively drained soils that formed in alluvium from granitoid and/or gneissic rocks. The Carsitas soils are on alluvial fans, fan aprons, valley fills, dissected remnants of alluvial fans and in drainageways. Slopes range from 0 to 30 percent. The mean annual precipitation is about 75 millimeters (3 inches) and the mean annual air temperature is about 25 degrees C (77 degrees F).

TAXONOMIC CLASS: Mixed, hyperthermic Typic Torripsamments

TYPICAL PEDON: Carsitas gravelly sand under desert shrubs. (Colors are for dry soil unless otherwise noted).

C1 -- 0 to 25 centimeters (0 to 10 inches); light olive gray (5Y 6/2) gravelly sand, olive gray (5Y 4/2) moist; stratified; single grain; loose; few coarse and fine roots; common fine interstitial pores; 16 percent gravel; slightly effervescent; moderately alkaline (pH 8.4); gradual smooth boundary. (5 to 38 centimeters thick)

C2 -- 25 to 152 centimeters (10 to 60 inches); light olive gray (5Y 6/2) gravelly coarse sand, olive gray (5Y 4/2) moist; stratified; single grain; loose; very few fine and coarse roots; common fine interstitial pores; 20 percent gravel; slightly effervescent, moderately alkaline (pH 8.4).

TYPE LOCATION: Riverside County, California; approximately 1.6 kilometers (1 mile) east of Cleveland Avenue on Avenue 70; 183 meters (600 feet) west of the NE corner of section 28, T. 7 S., R. 10 E., San Bernardino Base and Meridian; 33 degrees, 32 minutes, 22.9 seconds north latitude and 115 degrees, 56 minutes, 28.3 seconds west longitude; USGS 7.5 minute Mortmar, CA topographic quadrangle; UTM 11S 0598304e 3711622n (DTM: NAD83).

RANGE IN CHARACTERISTICS:

Soil moisture control section: usually dry throughout, rarely moist in some part during winter and summer and early fall. The soils have a typic-aridic soil moisture regime.

Soil temperature: 25 to 28 degrees C (77 to 82 degrees F).

Surface rock fragments: 40 to 95 percent; with 35 to 95 percent gravel, 0 to 20 percent cobbles and 0 to 5 percent stones.

Control section -

Rock fragments: averages 15 to 35 percent; with 7 to 35 percent gravel, 0 to 10 percent cobbles and 0 to 2 percent stones.

Clay content: 1 to 6 percent.

Organic matter: 0 to 0.5 percent.

Effervescence: Effervescent below 25 centimeters in all pedons.

A horizon (when present)

Hue: 10YR, 2.5Y or 5Y.

Value: 4 to 7, dry or moist.

Chroma: 2 to 4, dry or moist.

Texture of the fine earth: sand, loamy coarse sand, loamy sand and sandy loam.

Clay content: 0 to 7 percent.

Rock fragments: 5 to 40 percent; with 5 to 35 percent gravel and 0 to 5 percent cobbles.

Effervescence: noneffervescent to slightly effervescent.

Reaction: neutral to moderately alkaline.

Bw horizon (when present)

Hue: 7.5YR or 10YR.

Value: 5 or 6 dry, 3 to 5 moist.

Chroma: 2 to 4, dry or moist.

Texture of the fine earth: loamy coarse sand, loamy sand or sandy loam.

Clay content: 2 to 7 percent.

Rock fragments: 8 to 25 percent; with 8 to 20 percent gravel, 0 to 10 percent cobbles and 0 to 2 percent stones.

Effervescence: noneffervescent to strongly effervescent.

Reaction: slightly or moderately alkaline.

Note: This horizon is either too thin, is the wrong texture, has insufficient calcium carbonate or fails to meet some other necessary requirement to be classified as a diagnostic horizon.

C, Ck, Ckq and Cq horizons

Hue: 10YR, 2.5Y or 5Y.

Value: 4 to 7 dry, 3 to 7 moist.

Chroma: 2 to 6, dry or moist.

Texture: coarse sand, sand, loamy coarse sand or loamy sand.

Clay content: 0 to 5 percent.

Rock fragments: 7 to 35 percent; with 7 to 35 percent gravel and 0 to 5 percent cobbles.

Effervescence: very slightly to violently effervescent.

Visible secondary carbonates: 0 to 5 percent as coats on rock fragments.

Reaction: slightly or moderately alkaline.

Silica: 0 to 5 percent as films on rock fragments.

COMPETING SERIES: These are the [Dalelake](#) (CA), [Lagunita](#) (AZ), [Myoma](#) (CA), [Pintobasin](#) (CA) and [Rositas](#) (CA AZ+NV) series. Dalelake, Lagunita, Myoma and Rositas soils have less than 15 percent rock fragments in the particle-size control section. In addition, Lagunita soils are slightly to strongly saline throughout, Myoma and Rositas soils have less than 15 percent coarse and very coarse sand and Dalelake and Pintobasin soils are moist in some part of the moisture control section for short periods during winter and early spring and for 10 to 20 days cumulative between July and September following convection storms and have mean annual soil temperature less than 25 degrees C (72 degrees F).

GEOGRAPHIC SETTING: Carsitas soils are on alluvial fans, fan aprons, valley fills, dissected remnants of alluvial fans and in drainageways. Slopes range from 0 to 30 percent. These soils formed in alluvium from granitoid and/or gneissic rocks. Elevations are 67 meters (220 feet) below sea level to 800 meters (2,625 feet). The climate is arid with warm, dry winters and hot, dry summers. The mean annual precipitation is 50 to 100 millimeters (2 to 4 inches) and the mean annual air temperature is 23 to 27 degrees C (73.5 to 80.5 degrees F). The frost-free season is 360 to 365 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Carrizo](#), [Chemwash](#), [Chuckawalla](#), [Goldrose](#), [Imperial](#), [Niland](#), [Rizzo](#) and [Rositas](#) soils. Carrizo, Chemwash and Rizzo soils are on similar landscape positions and have sandy-skeletal particle-size control sections. Chuckawalla soils have a loamy-skeletal particle-size control section and an argillic and calcic horizon. Goldrose soils have a layer within the particle-size control section that has more than 35 percent rock fragments. Imperial soils have a fine-textured particle-size control section and Niland soils have a sandy over clayey particle-size control section. Rositas soils are found on nearby dunes, sand sheets and edges of bolson floors, have less than 5 percent rock fragments in the particle-size control section which is typically dominated by eolian fine sands.

DRAINAGE AND SATURATED HYDRAULIC CONDUCTIVITY: Somewhat excessively drained; negligible to low runoff; high saturated hydraulic conductivity. Altered drainage may occur where irrigation or seepage has caused a seasonal water table at 2 to 5 feet. Torrential summer thundershowers occasionally produce enough runoff to flood the soil for brief periods.

USE AND VEGETATION: The soils are used for watershed, wildlife habitat and recreation. They are a source of sand and gravel for construction material. Vegetation is sparse creosote bush, burrobush, barrel cactus, mesquite, and paloverde. Where irrigation water is available, the soils are used for growing citrus and grapes.

DISTRIBUTION AND EXTENT: Colorado Desert of southeastern California; MLRA 31. These soils are of moderate extent.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California.

SERIES ESTABLISHED: Riverside County (Coachella Valley Area), California, 1974.

REMARKS: Previously revised by the state on 4/1974. Diagnostic horizons and features in this pedon include:

Particle-size control section - from a depth of 25 to 100 centimeters (C2 horizon).

National Cooperative Soil Survey
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CHUCKAWALLA SERIES

LOCATION CHUCKAWALLA

CA AZ

Established Series

Rev. NEE/LCL/PDC/ET

03/2009

The Chuckawalla series consists of very deep, well drained soils formed in stratified mixed alluvium. Chuckawalla soils are on fan terraces and have slopes of 0 to 15 percent. The mean annual precipitation is 4 inches and the mean annual air temperature is 73 degrees F.

TAXONOMIC CLASS: Loamy-skeletal, mixed, superactive, hyperthermic Typic Calciargids

TYPICAL PEDON: Chuckawalla very gravelly silt loam - rangeland. (Colors are for dry soil unless otherwise noted). Surface pavement of closely fitted subangular and rounded gravel are 0.5 to 3 inches in diameter and have strong desert varnish on exposed surfaces. (0.5 to 1.5 inches thick)

E--0 to 1.375 inches; pale brown (10YR 6/3) silt loam, brown (10YR 5/3) moist; weak thick platy structure; soft, very friable, slightly sticky and slightly plastic; many very fine and medium vesicular pores; slightly effervescent on tops of plates strongly effervescent on sides and bottoms; moderately alkaline (pH 8.2); abrupt wavy boundary (1/4 to 1 1/2 inches thick)

BAt--1.375 to 2.5 inches; light brown (7.5YR 6/4) gravelly silty clay loam, brown (7.5YR 4/4) moist; weak very thick platy structure parting to weak fine and medium subangular blocky; slightly hard, friable, sticky and plastic; many very fine, fine and medium vesicular pores; few faint clay films in pores; clean silt grains on peds; 15 percent gravel; strongly effervescent; strongly alkaline (pH 8.6); clear smooth boundary. (0 to 3 inches thick)

Bt--2.5 to 4 inches; light reddish brown (5YR 6/4) gravelly silty clay loam, reddish brown (5YR 4/4) moist; weak and moderate medium angular blocky and weak fine prismatic structure; slightly hard, friable, moderately sticky and moderately plastic; common very fine, fine and medium vesicular pores; few faint clay films in pores; clean silt grains on peds; 15 percent gravel; strongly effervescent; strongly alkaline (pH 8.6); clear smooth boundary. (0 to 3 inches thick)

Btk1--4 to 7 inches; light reddish brown (5YR 6/4) gravelly silty clay loam, yellowish red (5YR 5/6) moist; weak fine subangular blocky structure parting to granular; soft, very friable, moderately sticky and moderately plastic; many very fine irregular pores; 25 percent gravel; colloidal staining on sand grains, few calcium carbonate-coated sand grains and rounded calcium carbonate nodules; violently effervescent; moderately alkaline (pH 8.4); clear wavy boundary. (1 to 4 inches thick)

2Btk2--7 to 16 inches; reddish yellow (7.5YR 6/6) extremely gravelly clay loam, strong brown (7.5YR 5/6) moist; massive; soft, very friable, moderately sticky and moderately plastic; many very fine irregular pores; 70 percent gravel; colloidal staining on sand grains; strongly effervescent in matrix; violently effervescent on bottoms of gravel; strongly alkaline (pH 8.6). (4 to 10 inches thick)

2Ck--16 to 60 inches; light brown (7.5YR 6/4) stratified extremely cobbly fine sandy loam, brown (7.5YR 5/4) moist; massive; many fine and medium irregular pores; 80 percent gravel and cobble; thick calcium carbonate coating on bottoms and sides of rock fragments; moderately alkaline (pH 8.4); weakly cemented in some parts.

TYPE LOCATION: Riverside County, California; on jeep trail north of Palo Verde Valley; approximately 525 feet south and 300 feet east of the W 1/4 corner of section 24, T.5 S., R.23 E. 114 degrees, 32 minutes, 16 seconds west longitude; 33 degrees, 43 minutes, 35 seconds north latitude.

RANGE IN CHARACTERISTICS:

The soil is dry most of the time and is moist for less than 60 consecutive days from December through February. The soil may become moist, from erratic summer thunder showers during July, August, or September, in the surface few inches but would rarely wet the moisture control section.

Soil temperature: 72 degrees to 77 degrees F.

Solum thickness: 10 to 30 inches

Very gravelly or very cobbly alluvial soil material occurs at depths of 3 to 12 inches

Rock fragments: averages 35 to 75 percent rock fragments

The surface has a strongly expressed desert pavement of gravel that are contiguous. The upper side of the gravel have a well developed dark desert varnish (patina) of manganese and iron oxide; under side are tinted orange.

Depth to calcic horizon: less than 20 inches, contains 15 to 25 calcium carbonate equivalent

Depth to base of argillic horizon: less than 25 inches

The control section has an E.C. of 16 to 40 dS/m. The soil is moderately or strongly alkaline.

E horizon

Hue: 10YR or 7.5YR

Value: 6 or 7 dry 4 or 5 moist

Chroma: 3 or 4, dry or moist

Texture: fine sandy loam, very fine sandy loam, loam, silt loam

It has weak to moderate, medium to thick platy structure; plates are dissected by gravel on the surface.

Calcium carbonate: disseminated with effervescence being stronger on the flat surfaces of plates than on broken edges.

The lower boundary of the E horizon is very abrupt and smooth to irregular.

Bt horizon

Hue: 7.5YR, 5YR

Value: 5 or 6 dry, 4 or 5 moist

Chroma: 4 or 6, dry or moist

Texture: loam, sandy clay loam, clay loam, silty clay loam. The lower part of the Bt horizon may be sandy clay but the average clay content of the control section is 20 to 35 percent with more than 15 percent sand coarser than very fine sand.

Rock fragments: 15 to 25 or more percent gravel in the upper part and 50 to 80 percent in the lower part.

Calcium carbonate: mainly disseminated but are segregated into coatings, soft masses, concretions, or pellets in the lower part, some pedons are weakly cemented.

Ck horizon

Very gravelly, extremely gravelly or very cobbly. Sands, loamy sands, or sandy loams fill or partially fill the interstices larger than 2mm.

Calcium carbonate: quite variable in each strata but are present as segregated coatings, soft masses, or concretions usually in the upper part, some strata are weakly cemented.

COMPETING SERIES: These are the [Cololag](#) (T) (NV), [Cristobal](#) (AZ) and [Pinamt](#) (AZ) series. Cololag soils average less than 18 percent clay in the particle-size control section. Cristobal soils are greater than 40 inches to the base of the argillic horizon. Pinamt soils are 25 to 40 inches to the base of the argillic horizon.

GEOGRAPHIC SETTING: Chuckawalla soils are on fan terraces. Slopes are 0 to 15 percent. The soils formed in stratified mixed gravelly alluvium. They typically have a well developed desert pavement with a thick varnish (patina). The climate is arid with very hot dry summers and cool slightly moist winters. Mean annual precipitation is 2 to 7 inches (see remarks). Most storms occur in the winter months but some rainfall occurs as erratic high intensity summer thundershowers. There are also occasional severe wind and dust storms. Elevation ranges 400 to 1,800 feet. Mean January temperature is 53 degrees F.; mean July temperature is 92 degrees F.; mean annual air temperature is 70 to 74 degrees F. Frost-free period is 240 to 350 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Aco](#), [Carrizo](#), and [Rositas](#) soils. Aco, Carrizo, and Rositas soils do not have an argillic horizon.

DRAINAGE AND PERMEABILITY: Well drained; medium runoff; moderate permeability.

USE AND VEGETATION: Used for recreation and watershed. Chuckawalla soils are usually barren except for some Turks Head (Plantaginaceae), 6 weeks grama (*Boutelous barbata*), and other annuals that occur for short periods in wetter years.

DISTRIBUTION AND EXTENT: Chuckawalla soils occur in low desert areas of southern California and southwestern Arizona in MLRA 31 and 30. They are of moderate extent.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: Riverside County, California; 1971.

REMARKS: The activity class was added to the classification in January of 2003. ET. Latitude and longitude added 3/2009 - ET

Diagnostic horizons and features recognized in this pedon are:

Some areas now mapped as Chuckawalla were formerly mapped as Tijeras. Also some areas in the Coachella Valley Area Soil Survey Report are taxadjuncts. Map units CnC and CnE have elevations up to 2,600 feet and precipitation up to 8 inches. These soils are also noncalcareous and lack a desert pavement.

Ochric epipedon - The zone from 0 to 1 3/8 inches (E horizon)

Argillic horizon - The zone from 1 3/8 to 2 1/2 inches (BA_t, B_t, Btk₁, 2Btk₂ horizons)

Calcic horizon - The zone from 4 to 60 inches (Btk₁, 2Btk₂, 2Ck horizons)

Classified according to Keys to Soil Taxonomy Ninth Edition, 2003.

National Cooperative Soil Survey
U.S.A.

CIENEBA SERIES

LOCATION CIENEBA CA
Established Series
Rev. GWH/RCH/RWK/SBS/KP/RLR
08/2012

The Cieneba series consists of very shallow and shallow, somewhat excessively drained soils that formed in material weathered from granitic rock. Cieneba soils are on hills and mountains and have slopes of 9 to

85 percent. The mean annual precipitation is about 635 mm (25 inches) and the mean annual air temperature is about 16 degrees C (60 degrees F).

TAXONOMIC CLASS: Loamy, mixed, superactive, nonacid, thermic, shallow Typic Xerorthents

TYPICAL PEDON: Cieneba gravelly loam, chaparral cover. (Colors are for dry soil unless otherwise noted.)

O1--0 to 1 cm (0 to 1/2 inch); intermittent, partially decomposed leaf and twig litter; grayish brown; loose and fluffy; abrupt smooth boundary.

A--1 to 25 cm (1/2 to 10 inches); pale brown (10YR 6/3) fine gravelly loam, brown (10YR 4/3) moist; moderate fine granular structure; slightly hard, very friable, nonsticky and nonplastic; many fine and medium roots; many very fine and fine interstitial pores; moderately acid; gradual smooth boundary. (4 to 20 inches thick)

Cr--25 to 76 cm (10 to 30 inches); reddish yellow and brown, strongly weathered, acid granitic material with relic rock structure; some loam material formed in place in cracks and cleavage planes; larger roots penetrate along joints.

TYPE LOCATION: San Benito County, California; on the south side of Fremont Peak Road, 9 miles south of San Joan Bautista; SE side of section 25, T.13 S., R.4 E; 36 degrees North latitude, 46 minutes, 41.1 seconds and 121 degrees, 28 minutes, 17.0 seconds West longitude, NAD83.

RANGE IN CHARACTERISTICS:

Soil moisture: Soil below a depth of about 10 to 15 cm (4 to 6 inches) usually is moist all of the time after November until sometime in May and is dry the remainder of the year.

Mean Annual Soil Temperature: 15 to 18 degrees C (59 to 65 degrees F).

Rock fragments: 0 to 35 percent by volume

Depth to paralithic contact: 10 to 50 cm (4 to 20 inches)

Reaction: neutral to strongly acid, dominantly slightly or medium acid

Clay content: less than 18 percent throughout the profile

Textures: coarse sandy loam, sandy loam, loam or has a gravelly modifier

Sand fraction: 15 to 25 percent coarse and very coarse sand

Organic matter: less than 1 percent below a depth of 2 to 10 cm (1 to 4 inches)

A horizon:

Color: hue of 10YR, value of 4 to 6, chroma of 2 or 3

or hue of 7.5YR, value of 5 or 3, chroma of 2 to 4

Color notes: Dry values of 4 or 5 extend to a depth of 2 to 12 cm (1 to 5 inches) in protected pedons that have not been burned or eroded.

Texture: coarse sandy loam, sandy loam, loam, or has a gravelly modifier

Clay content: less than 18 percent clay

Cr horizon: extremely weakly to moderately cemented bedrock

COMPETING SERIES: These are the [Chumash](#) and [Trigo](#) series. Chumash soils are weathered from sedimentary rocks. Trigo soils are weathered from consolidated sediments dominantly from silty or fine sandy alluvium.

GEOGRAPHIC SETTING: Cieneba soils formed from material weathered from granite and other rocks of similar texture and composition. Gradients are 9 to 85 percent. The soils are at elevations of 150 to 1220 meters (500 to 4,000 feet). The climate is dry subhumid mesothermal with warm dry summers and cool moist winters. There is little or no snow. Mean annual precipitation is 305 to 890 mm (12 to 35 inches). Mean annual temperature is 14 to 18 degrees C (57 degrees to 65 degrees F).; average January temperature is 7 to 10 degrees C (45 degrees to 50 degrees F).; average July temperature is 20 to 27 degrees C (68 degrees to 80 degrees F). The frost-free season is 175 to 300 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Ahwahnee](#), [Auberry](#), [Chualar](#), [Gillender](#), La Posta, [Maymen](#), [Pentz](#), [Sheridan](#), [Tollhouse](#) and [Vista](#) soils. Ahwahnee and Auberry soils are more than 50 cm (20 inches) deep to a paralithic contact and have argillic horizons. Chualar, La Posta, Sheridan and Tollhouse soils have mollic epipedon. Gillender soils have less than 15 percent very coarse plus coarse sand and are weathered from rhyolite. Maymen soils have a cambic horizon and are weathered from sedimentary rocks. Pentz soils have an exchange complex dominated by amorphous material and more than 60 percent vitreous material in the sand and silt fraction. Vista soils are greater than 50 cm (20 inches) deep to a paralithic contact.

DRAINAGE AND PERMEABILITY: Somewhat excessively drained; low to high runoff; moderately rapid permeability in the soil and much slower in the weathered bedrock.

USE AND VEGETATION: Used for wildlife, recreation, watershed, and incidental grazing. Vegetation is mainly chaparral and chemise with widely spread foothill pine or oak tree. There are small area of thin annual grasses and weeds.

DISTRIBUTION AND EXTENT: Coastal mountain ranges in central and southern California and foothills of the Sierra Nevada, MLRAs 15, 18 and 20 The soil is extensive.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: Monterey County, California, 1972.

REMARKS:

Geomorphic data updated; Competing and Geographically Associated soils were updated and made current. Range in characteristics was converted to a tabular form; english to metric unit conversion (05/2012)

National Cooperative Soil Survey
U.S.A.

EXETER SERIES

LOCATION EXETER CA
Established Series
Rev. FGS-GWH-DJE-CEJ-ARW
05/2006

The Exeter series consists of moderately deep to a duripan, moderately well drained soils that formed in alluvium mainly from granitic sources. Exeter soils are on alluvial fans and stream terraces and have slopes of 0 to 9 percent. The mean annual precipitation is about 11 inches and the mean annual air temperature is about 64 degrees F.

TAXONOMIC CLASS: Fine-loamy, mixed, superactive, thermic Typic Durixeralfs

TYPICAL PEDON: Exeter loam, annual grasses and forbs. (Colors are for dry soil unless otherwise stated.)

Ap--0 to 7 inches; brown (10YR 5/3) loam, dark brown (7.5YR 3/2) moist; massive; hard, friable, slightly sticky and slightly plastic; many very fine pores; neutral (pH 6.8); gradual smooth boundary. (4 to 8 inches thick)

A--7 to 14 inches; dark yellowish brown (10YR 4/4) loam, dark yellowish brown (10YR 3/4) moist; massive; hard, friable, slightly sticky and slightly plastic; many very fine roots; many very fine pores; neutral (pH 7.0); gradual smooth boundary. (0 to 10 inches thick)

BAt--14 to 20 inches; brown (7.5YR 4/4) loam, dark reddish brown (5YR 3/4) moist; massive; hard, friable, slightly sticky and slightly plastic; many very fine roots; many very fine pores; few thin clay films lining pores and bridging sand grains; slightly alkaline (pH 7.5); clear smooth boundary. (0 to 6 inches thick)

Bt1--20 to 25 inches; reddish brown (5YR 5/4) sandy clay loam, reddish brown (5YR 4/4) moist; massive; hard, firm, sticky and plastic; many very fine roots; many very fine and few fine pores; few thin clay films lining pores and bridging sand grains; slightly alkaline (pH 7.8); gradual smooth boundary. (5 to 12 inches thick)

Bt2--25 to 30 inches; yellowish red (5YR 5/6) clay loam, yellowish red (5YR 4/6) moist; massive; hard, firm, sticky and plastic; many very fine roots; many very fine and few fine pores; common moderately thick clay films lining pores and bridging sand grains; slightly alkaline (pH 7.8); abrupt wavy boundary. (3 to 20 inches thick)

Bqm--30 to 43 inches; reddish brown (5YR 5/4) indurated duripan, reddish brown (5YR 4/4) moist; massive; does not soften or slake after prolonged soaking in water and can be chipped with hand tools with extreme difficulty; many very fine tubular pores; light brown (7.5YR 6/4) silica layer 1 to 3 mm thick caps the surface of the duripan; abrupt wavy boundary. (6 to 30 inches thick)

2C1--43 to 47 inches; light yellowish brown (10YR 6/4) sand, yellowish brown (10YR 5/4) moist; single grained; loose, dry and moist; nonsticky and nonplastic; about 14 percent pebbles; strongly effervescent; moderately alkaline (pH 8.0); gradual smooth boundary. (4 to 12 inches thick)

2C2--47 to 60 inches; light yellowish brown (10YR 6/4) gravelly coarse sand, yellowish brown (10YR 5/4) moist; single grain; loose; 15 percent gravel; moderately alkaline (pH 8.0).

TYPE LOCATION: Tulare County, California; about 1/2 mile north of Ducor; 400 feet east of Road 236 and 430 feet north of Avenue 60; SW1/4 SE1/4 of section 27, T.23 S., R.27 E., Ducor Quadrangle.

RANGE IN CHARACTERISTICS:

Mean annual soil temperature: 60 to 66 degrees F. and the soil temperature usually is not below 47 degrees F. at any time.

Depth to duripan: 20 to 40 inches.

Rock fragments: 0 to 10 percent throughout the solum.

A Horizon--10YR 4/4, 5/2, 5/3, 5/4, 5/6, 6/2, 6/3, 6/4; 7.5YR 5/2, 5/4, 6/4, or 7/4 dry. 10YR 3/2, 3/3, 3/4, 4/2, 4/3, 4/4; 7.5YR 3/4, 4/4, 5/4 moist.

Texture: Sandy loam, very fine sandy loam, sandy clay loam or loam.

Reaction: Slightly acid to moderately alkaline.

Bt Horizon--10YR 5/4, 6/2, 6/3, 6/4; 7.5YR 5/2, 5/4, 5/6, 6/6; 5YR 4/3, 4/4, 5/3, 5/4, and 5/6 dry. Moist colors are generally 1 or 2 units of value less and are the same or are 1 unit of chroma less than dry colors.

Texture: Loam, sandy clay loam or clay loam.

Clay content: 18 to 35 percent clay.

Reaction: Neutral to moderately alkaline.

Bqm Horizon--10YR 5/3, 5/4, 5/6, 6/3; 7.5YR 5/2, 5/4, 5/6, 6/6; 5YR 5/3, 5/4 or 5/6 dry. Moist colors are generally 1 or 2 units of value less and are the same or are 1 unit of chroma less than dry colors.

Other features: In some pedons, the duripan is capped with a thin layer of carbonates or the carbonates may be segregated as few, fine seams or filaments in fine fractures, but the duripan matrix is always noncalcareous.

The 2C1 and 2C2 horizons are variable. They usually consist of sand or gravelly sand underlain by stratified layers of sandy loam to silt loam. Some pedons have buried 2Bt and 2Btk horizons underlying the duripan that are stratified very gravelly loamy coarse sand to loam with 15 to 50 percent pebbles and 2 to 15 percent clay. Carbonates may be present in these horizons as few soft masses or disseminated.

COMPETING SERIES: These are the [Fiddymont](#), [Monserate](#) and [Rocklin](#) series. Fiddymont soils have very thin duripans underlain directly by a paralithic contact and have an abrupt clay increase of 15 to 25 percent within one inch above the duripan. Monserate soils are slightly acid to neutral in the argillic horizon, do not have less than 27 percent clay in the Bt, and have an abrupt clay increase with at least a 10 percent increase from the A to the Bt. Rocklin series have cementation below the indurated duripan and textures below the duripan are not sandy.

GEOGRAPHIC SETTING: Exeter soils are on hummocky, undulating to gently rolling alluvial fans and stream terraces at elevations of 20 to 700 feet. Slopes range from 0 to 9 percent. The soils formed in alluvium mainly from granitic sources. In most areas the hummocky relief has been smoothed by leveling. The climate is dry subhumid with hot, dry summers and cool, moist winters. The mean annual precipitation is 7 to 20 inches. The average January temperature is 46 degrees F.; the average July temperature is 82 degrees F.; and the mean annual temperature is 62 to 65 degrees F. The frost-free period is 250 to 300 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Centerville](#), [Porterville](#) and [Yokohl](#) soils. Centerville and Porterville soils are clayey and lack duripans. Yokohl soils average more than 35 percent clay in the argillic horizon.

DRAINAGE AND PERMEABILITY: Moderately well drained; very slow to medium runoff; moderately slow permeability above the duripan. Permeability of the duripan is very slow.

USE AND VEGETATION: This soil is used for irrigated cropland growing oranges, olives and deciduous orchards, vineyards and row crops. It is also used for dairy and cattle production and building site development. Vegetation in uncultivated areas is mainly annual grasses and forbs.

DISTRIBUTION AND EXTENT: Eastern side of San Joaquin Valley. The soils are extensive in MLRA-17.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: Tulare County, California, 1908.

REMARKS: Exeter soils in Fresno and Riverside counties may have coarse-loamy particle size families. Diagnostic horizons and features recognized in this pedon are:

Ochric epipedon - the zone from 0 to 14 inches (Ap, A)

Argillic horizon - the zone from 14 to 30 inches (BA_t, Bt₁, Bt₂)

Duripan - the zone from 30 to 42 inches (Bqm)

National Cooperative Soil Survey
U.S.A.

FALLBROOK SERIES

LOCATION FALLBROOK CA

Established Series
Rev. GB/LCL/RWK
01/2003

The Fallbrook series consists of deep, well drained soils that formed in material weathered from granitic rocks. Fallbrook soils are on rolling hills and have slopes of 5 to 75 percent. The mean annual precipitation is about 15 inches and the mean annual air temperature is about 63 degrees F.

TAXONOMIC CLASS: Fine-loamy, mixed, superactive, thermic Typic Haploxeralfs

TYPICAL PEDON: Fallbrook sandy loam, annual grass pasture. (Colors are for dry soil unless otherwise noted.)

A11--0 to 2 inches; brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; weak fine granular structure; slightly hard, very friable, nonsticky and nonplastic; many very fine and medium roots; many very fine and fine pores; slightly acid (pH 6.4); clear smooth boundary. (2 to 8 inches thick)

A12--2 to 6 inches; brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; massive; hard, friable, nonsticky and nonplastic; common fine and medium roots; common very fine and fine tubular and interstitial pores; slightly acid (pH 6.4); clear smooth boundary. (4 to 10 inches thick)

B1--6 to 12 inches; reddish brown (5YR 5/3) loam, dark reddish brown (5YR 3/3) moist; weak coarse subangular blocky structure; hard, friable, slightly sticky and nonplastic; common very fine and fine roots; common very fine and fine tubular pores; few thin clay films in line pores and as bridges; slightly acid (pH 6.3); gradual smooth boundary. (4 to 8 inches thick)

B21t--12 to 20 inches; reddish brown (5YR 5/4) sandy clay loam, dark reddish brown (5YR 3/4) moist; moderate medium angular blocky structure; very hard, firm, slightly sticky and slightly plastic; common very fine and fine roots; common very fine and fine tubular pores; continuous thick clay films on faces of peds; slightly acid (pH 6.4); gradual smooth boundary. (7 to 14 inches thick)

B22t--20 to 28 inches; reddish brown (5YR 5/4) sandy clay loam, dark reddish brown (5YR 3/4) moist; moderate medium angular blocky structure; very hard, firm, slightly sticky and slightly plastic; common very fine roots; few very fine tubular pores; continuous thick clay films on faces of peds; slightly acid (pH 6.4); clear wavy boundary. (6 to 10 inches thick)

B3--28 to 47 inches; light reddish brown (5YR 6/4) loam, reddish brown (5YR 4/4) moist; weak coarse subangular blocky structure; hard, friable, slightly sticky and nonplastic; few very fine roots; few very fine tubular pores; common moderately thick clay films on faces of peds; neutral (pH 6.6); gradual smooth boundary. (14 to 24 inches thick)

C1r--47 to 68 inches; light red (2.5YR 6/6) reddish brown (2.5YR 4/4), dark reddish brown (5YR 3/2) and pinkish gray (5YR 6/2) decomposed grandiorite, after crushing feels like loamy coarse sand; massive; few fine roots along fracture planes, few fine interstitial pores; slightly acid (pH 6.5); gradual smooth boundary. (0 to 14 inches thick)

C2r--68 to 85 inches; reddish brown (5YR 5/4), pink (5YR 7/3) and black (N 2/) decomposed grandiorite, feels like gravelly coarse sand; massive; very hard; moderately acid (pH 6.0); gradual smooth boundary. (15 to 20 inches thick)

C3r--85 to 90 inches; white (N 8/), light brownish gray (10YR 6/2) and black (N 2/) decomposed grandiorite, after crushing feels like gravelly coarse sand; massive; very hard; moderately acid (pH 6.0).

TYPE LOCATION: San Diego County, California; about 2 miles south of Fallbrook; in the NE1/4 SW1/4 section 31, T.9S., R.3W.

RANGE IN CHARACTERISTICS: Depth to a paralithic contact is 40 to 60 inches. (See Remarks) The mean annual soil temperature is 60 to 65 degrees F. Soil between the depths of about 5 and 15 inches usually is moist in some or all parts from November or early December until late April or May and is dry all the rest of the year. The soil profile has about 15 to 28 percent coarse and very coarse sand and up to 5 percent 2 to 5 mm rock fragments. The A and B horizons and the soil like C horizons are slightly acid or neutral.

The A horizon is dark brown to yellowish brown (10YR 5/3, 5/4, 4/3; 7.5YR 5/4, 4/4, 5/6). It is loam, fine sandy loam or sandy loam. It has less than 1 percent organic matter in all parts or in some pedons only the

uppermost 1 to 3 inches has 1 to 2 percent organic matter. The lower boundary of the A horizon is clear or gradual and most pedons have transitional A3 horizons or B1 horizons, or both.

The B2t horizon is dominantly reddish brown (5YR 4/3, 5/4, 4/4), but ranges to light brown or brown (7.5YR 6/4, 5/4, 4/4). It is heavy loam, clay loam, or sandy clay loam and usually has 18 to 25 percent clay and ranges up to about 30 percent. Base saturation is 80 to 100 percent. Lower boundary of the B2t horizon is gradual or clear with a transitional B3 horizon or a C horizon of soil material.

COMPETING SERIES: These are the [Arbuckle](#), [Blasingame](#), [Borden](#), [Bressa](#), [Esparto](#), [Montpellier](#), [Ramona](#), [Sesame](#), [Snelling](#), [Tivy](#), [Wasioja](#), and [Wyman](#) series. Arbuckle soils have, in the argillic horizon, 15 percent more gravel larger than 5 mm. Blasingame, Bressa, Sesame and Tivy soils have a paralithic contact at a depth of 20 to 40 inches. Borden soils are moderately alkaline and calcareous in some or all parts of the argillic horizon. Esparto soils are marginal to the silty family with less than 15 percent coarse and very coarse sand. Montpellier soils have an abrupt A-B2t horizon boundary. Ramona soils lack a paralithic contact. (See Remarks) Snelling soils are medium acid in the argillic horizon. Wyman soils have less than 15 percent coarse and very coarse sand. Wasioja soils are moist for less than 90 consecutive days and have an aridic moisture regime.

GEOGRAPHIC SETTING: Fallbrook soils are gently rolling to very steep and are on round hills at elevations of 200 to 3,000 feet or as high as 3,500 feet on south facing slopes. They formed in material weathered from granite and closely related granitic rocks. Usually the rock is deeply weathered. Rock outcrops are common in some areas. The climate is dry subhumid with warm, dry summers and cool, moist winters. The mean annual precipitation is 12 to 18 inches. The average January temperature is 47 to 50 degrees F.; the average July temperature is about 70 degrees F.; and the average annual temperature is 60 to 66 degrees F. The frost free season is 250 to 320 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Bonsall](#), [Cieneba](#), [Hanford](#), [Las Posas](#), and [Vista](#) soils and the competing [Ramona](#) and [Sesame](#) soils. Bonsall soils have more than 35 percent clay and have an abrupt A-B2t horizon boundary. Cieneba soils have a paralithic contact at a depth of 4 to 20 inches. Hanford soils lack an argillic horizon and lack a paralithic contact. Las Posas soils have more than 35 percent clay and the argillic horizon has 2.5YR or redder hue. Vista soils lack an argillic horizon.

DRAINAGE AND PERMEABILITY: Well drained; medium to very rapid runoff; moderately slow permeability.

USE AND VEGETATION: Extensive areas are used for grazing, but there is important production of irrigated avocados, citrus, truck crops and nonirrigated small grain and hay. Uncultivated areas are mainly annual grasses and forbs with considerable chaparral, chamise, flattop buckwheat and other shrubs.

DISTRIBUTION AND EXTENT: Foothills on the east side of the San Joaquin Valley and foothills in the west part of southern California. The series is extensive.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: San Diego County (Oceanside Area), California, 1929.

REMARKS: Extensive areas of Fallbrook soils as previously described included soils with a paralithic contact at a depth of 20 to 40 inches. In the future, these less deep soils may be included in the Blasingame series, or other identification made. Additional study and differentiae are needed to clearly separated the Fallbrook and Ramona series.

The activity class was added to the classification in January of 2003. Competing series were not checked at that time. - ET

National Cooperative Soil Survey
U.S.A.

FRIANT SERIES

LOCATION FRIANT CA

Established Series
Rev. RCH/GH/LCL/SBS
05/2001

The Friant series consists of shallow, well drained soils that formed in material weathered from mica schist, quartz schist and gneiss. Friant soils are on mountainous uplands and have slopes of 9 to 75 percent. The mean annual precipitation is about 18 inches and the mean annual air temperature is about 62 degrees F.

TAXONOMIC CLASS: Loamy, mixed, superactive, thermic Lithic Haploxerolls

TYPICAL PEDON: Friant fine sandy loam, annual grass range. (Colors are for dry soil unless otherwise noted.)

A1--0 to 3 inches; brown (10YR 5/3) fine sandy loam, dark brown (10YR 3/3) moist; weak fine and medium granular structure; slightly hard, friable, nonsticky and nonplastic; many fine roots; common fine tubular and many very fine interstitial pores; about 10 percent angular gravel fragments; slightly acid (pH 6.4); abrupt wavy boundary. (2 to 8 inches thick)

A2--3 to 14 inches; brown (10YR 5/3) fine sandy loam dark brown (10YR 3/3) moist; massive; slightly hard, friable, nonsticky and nonplastic; common fine roots; many fine tubular and interstitial pores; about 5 percent angular gravel fragments; neutral (pH 6.6); abrupt irregular boundary. (4 to 122 inches thick)

R--14 to 24 inches; gray and yellowish brown, slightly weathered quartz mica schist; reddish brown clay films coat some of the minor fracture and joint planes within the upper 6 inches of this horizon.

TYPE LOCATION: Fresno County, California; about 1/4 mile (airline) SSW of the SE end of Friant Dam; SW 1/4 NE1/4 NW1/4 of section 8, T.11S., R.21E.

RANGE IN CHARACTERISTICS: Depth to a lithic contact is 6 to 20 inches. The mean annual soil temperature just above the bedrock is 62 to 67 degrees F., and the soil temperature usually is not below 47 degrees F. Soil below a depth of about 6 to 8 inches is usually continuously moist from about November or early December until April or May and is dry all the rest of the year. Texture throughout is loam, sandy loam or fine sandy loam and has less than 18 percent clay. The soil is micaceous and the amount of mica ranges from small to large. Rock fragments, mostly angular or subangular pebbles, make up 5 to 35 percent of the soil.

The A horizon is brown, dark brown or dark yellowish brown, 10YR 5/2, 5/3, 4/2, 4/3, 4/4; 7.5YR 5/4, 4/4 when dry and dark brown, 10YR 3/3; 7.5YR 3/2, 3/3 when moist. Usually it has weak to moderate granular or subangular blocky structure. In some pedons, some or all of this horizon is massive and slightly hard when dry. It contains 1 to 3 percent organic matter. This horizon is neutral to medium acid and the base saturation is 75 to 100 percent. Some pedons have a C horizon of soil material 1 to 5 inches thick between the A horizon and bedrock. Such C horizons have dry value of 6 and moist chroma of 2 through 4, and less than 1 percent organic matter. All other properties are similar to the A horizon.

COMPETING SERIES: These are the [Calleguas](#), [Daulton](#), [Exchequer](#), [Gaviota](#), [Hambright](#), [Lodo](#), [Lopez](#), and [Millsholm](#) series. Calleguas soils are moderately alkaline and have more than 35 percent rock fragments. Daulton, Exchequer, Gaviota and Millsholm soils have ochric epipedons. Hambright and Lopez soils have more than 35 percent rock fragments and Lopez soils have 50 to 75 percent base saturation. Lodo soils have 18 to 35 percent clay.

GEOGRAPHIC SETTING: Friant soils are on hilly and mountainous landscapes at elevations of 500 to 3,500 feet. Slopes range from 9 to 75 percent. The soils formed in residuum weathered from mica schist, quartz schist, and gneiss. The climate is subhumid mesothermal with warm, dry summers and cool, moist winters. The mean annual precipitation is 12 to 25 inches. The mean annual temperature is about 59 to 65 degrees F.; the average January temperature is 42 to 54 degrees F.; the average July temperature is about 72 to 78 degrees F. The frost free season is about 210 to 330 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Cieneba](#), [Escondido](#), [Fallbrook](#), [Sesame](#) and [Vista](#) soils. Each of these soils lacks a mollic epipedon. Escondido, Fallbrook, Sesame and Vista soils lack a paralithic contact within a depth of 20 inches.

DRAINAGE AND PERMEABILITY: Well drained; medium to very rapid runoff; moderately rapid permeability.

USE AND VEGETATION: These soils are used principally for grazing, wildlife, and watershed. Native vegetation is buckwheat, chaparral, and naturalized grasses and forbs.

DISTRIBUTION AND EXTENT: Foothills along the east side of the San Joaquin Valley and the southwestern part of southern California. The soils are moderately extensive.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: San Bernardino County (Southwestern Part), California, 1972.

National Cooperative Soil Survey
U.S.A.

GORGONIO SERIES

LOCATION GORGONIO CA
Established Series
Rev. AAK/GB/LCL
11/2012

Typically, Gorgonio soils have dark grayish brown and brown, gravelly loamy fine sand, slightly and medium acid A horizons and brown, somewhat stratified; medium acid, gravelly loamy sand C horizons.

TAXONOMIC CLASS: Sandy, mixed, thermic Fluventic Haploxerolls

TYPICAL PEDON: Gorgonio gravelly loamy fine sand - annual grass pasture. (Colors are for dry soil unless otherwise stated.)

A11--0 to 1 inch; dark grayish brown (10YR 4/2) gravelly loamy fine sand, very dark grayish brown (10YR 3/2) moist; weak platy parting to moderate crumb structure; soft, very friable; common medium and fine roots; many fine interstitial pores; slightly acid (pH 6.5); abrupt smooth boundary. (1 to 3 inches thick)

A12--1 to 7 inches; brown (10YR 5/3) gravelly loamy fine sand, dark brown (10YR 3/3) moist; weak crumb structure; soft, loose; many very fine and few fine roots; many very fine interstitial pores; moderately acid (pH 6.0); gradual smooth boundary. (4 to 6 inches thick)

A13--7 to 15 inches; brown (10YR 5/3) gravelly loamy fine sand, dark brown (10YR 3/3) moist; weak crumb structure; soft, loose; many very fine and few fine roots; many very fine interstitial pores; moderately acid (pH 6.0); gradual smooth boundary. (6 to 8 inches thick)

C1--15 to 29 inches; brown (10YR 5/3) gravelly loamy fine sand, dark brown (10YR 3/3) moist; single grained; loose; few medium and fine roots; many fine interstitial pores; moderately acid (pH 6.0); diffuse smooth boundary. (12 to 14 inches thick)

C2--29 to 44 inches; brown (10YR 5/3) gravelly loamy sand, dark brown (10YR 3/3) moist; single grained; loose; few fine roots; many fine interstitial pores; moderately acid (pH 6.0); diffuse smooth boundary. (12 to 16 inches thick)

C3--44 to 60 inches; brown (10YR 5/3) stratified gravelly loamy sand, brown (10YR 4/3) moist; single grained; loose; many fine interstitial pores; moderately acid (pH 6.0).

TYPE LOCATION: Riverside County, California; about 2 miles east of Banning, California; approximately 900 feet east, 850 feet south of the W1/4 corner of sec. 12, T.3S., R.1E.

RANGE IN CHARACTERISTICS: The mean annual soil temperature is 59 to 65 degrees F., and the soil temperature usually is not below 47 degrees F. at any time. The soil between depths of about 10 and 35 inches is usually dry all of the time from April or May until November or mid-December and usually is moist in some or all parts all the rest of the year. The soils are somewhat stratified; dominant textures are loamy sand, loamy fine sand, and minor strata are loam, sandy loam, and fine sandy loam. Gravel content ranges from 2 or 4 percent to about 30 percent. The 10 to 40 inch control section averages loamy sand or loamy fine sand with gravel. The soil ranges from neutral to medium acid and there is no consistent change in reaction with depth. The A1 horizon is grayish brown, dark grayish brown, brown or dark brown and the hue is 10YR or 2.5Y. Moist value and moist chroma are 2 or 3. Organic matter content ranges from 1 to 3 percent in the upper 10 inches and decreases irregularly to an average of less than 1 percent between depths of about 12 and 20 inches. The C horizon is brown, pale brown or light brownish gray.

COMPETING SERIES: These are the Arroyo Seco, [Baywood](#), [Cajon](#), [Corralitos](#), [Mottsville](#), [Reiff](#), [Soboba](#), and [Tujunga](#) series. Arroyo Seco soils have an average texture of sandy loam in the 10 to 40 inch section. Baywood soils have a regular decrease in organic matter and lack stratification. Cajon soils have an ochric epipedon and an aridic moisture regime. Corralitos and Tujunga soils lack a mollic epipedon. Mottsville soils have an aridic moisture regime and a mean annual soil temperature below 59 degrees F. Reiff soils have an ochric epipedon and average texture of sandy loam in the 10 to 40 inch section. Soboba soils have more than 35 percent rock fragments.

GEOGRAPHIC SETTING: The Gorgonio soils are nearly level to moderately sloping. They are on alluvial fans at elevations of 20 to 3,000 feet. They formed in coarse textured alluvium derived from granite, granodiorite, schist, and related rocks. The climate is one of long, dry summers and cold, moist winters with an average annual precipitation of 10 to 25 inches. The average January temperature is 45 degrees F., the average July temperature is about 75 degrees F., and the average annual temperature is 57 to 62 degrees F. The freeze-free season is about 250 to 310 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the competing Arroyo Seco, [Soboba](#), and [Tujunga](#) soils and the [Crouch](#), [Elder](#), [Hanford](#), [Glenbrook](#), San Andreas, and [Sheridan](#) soils. Crouch, Glenbrook, San Andreas, and Sheridan soils have a paralithic contact of weathered bedrock. Elder and Hanford soils are sandy loam in the 10 to 40 inch section.

DRAINAGE AND PERMEABILITY: Somewhat excessively drained; slow or medium runoff; rapid permeability.

USE AND VEGETATION: They are used mostly for range. Some areas are cultivated for growing grain and hay. Principal native plants are annual grasses and forbs with a few scattered oak trees.

Distribution and Extent: Near the mountains in southern and central coast areas of California. The series is of moderate extent.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

Series Established: Monterey County, California, 1972.

Remarks: The Gorgonio soils would have been classified as Alluvial soils.

OSD scanned by SSQA. Last revised by state on 8/72.

National Cooperative Soil Survey
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GRANGEVILLE SERIES

LOCATION GRANGEVILLE CA
Established Series
Rev. LCL-ARW-CAF
10/1999

The Grangeville series consists of very deep, somewhat poorly drained soils that formed in moderate coarse textured alluvium dominantly from granitic rock sources. Grangeville soils are on alluvial fans and floodplains and have slopes ranging from 0 to 2 percent. The mean annual precipitation is about 12 inches and the mean annual temperature is about 63 degrees F.

TAXONOMIC CLASS: Coarse-loamy, mixed, superactive, thermic Fluvaquentic Haploxerolls

TYPICAL PEDON: Grangeville fine sandy loam - cultivated. (Colors are for dry soil unless otherwise noted.)

Ap--0 to 11 inches; grayish brown (10YR 5/2) fine sandy loam, very dark grayish brown (10YR 3/2) moist; weak very fine granular structure; soft, very friable, nonsticky and nonplastic; common roots; slightly alkaline (pH 7.8); clear smooth boundary. (10 to 20 inches thick)

Bg--11 to 20 inches; light brownish gray (10YR 6/2) fine sandy loam, dark grayish brown (10YR 4/2) moist; weak very fine granular structure; soft, very friable, nonsticky and nonplastic; common roots; few fine prominent and distinct yellowish brown 10YR 5/4 to 10YR 5/8 dry redoximorphic masses of iron accumulation, strong brown 7.5YR 5/7 and 7.5YR 5/8 moist; slightly effervescent, carbonates disseminated; moderately alkaline (pH 8.0); clear smooth boundary. (0 to 12 inches thick)

2C--20 to 60 inches; pale brown (10YR 6/3) stratified fine sandy loam, loamy fine sand and loam, dark brown (10YR 4/3) moist; soft, very friable, nonsticky and nonplastic; common fine prominent and distinct yellowish brown 10YR 5/4 and 10YR 5/8 dry redoximorphic masses of iron accumulation that are strong brown 7.5YR 5/6 and 7.5YR 5/8 moist; slightly effervescent, carbonates disseminated and decreasing with increasing depth; strongly alkaline (pH 9.0).

TYPE LOCATION: Madera County, California; SW1/4, SW1/4, Sec. 24, T. 11 S., R 16 E.

RANGE IN CHARACTERISTICS: The mean annual soil temperature at a depth of 20 inches is 59 degrees to 65 degrees F., and the soil temperature usually is not below 47 degrees F. at any time. Soil between the depths of about 8 and 24 inches is continuously dry from May or early June until November or early December. In most years under natural conditions, the soils are saturated within 25 to 40 inches of the surface for several months or more, usually about January to April. Additional effective moisture is added through dense ground fog in the San Joaquin Valley. The 10 to 40 inch control section is stratified and averages less than 18 percent clay by weight and has more than 15 percent sand coarser than very fine sand. Rock fragments range from 0 to 5 percent. Organic matter is 1.5 to 6 percent in the upper 10 inches and averages less than 1 percent at a depth of 20 inches. The organic matter decreases irregularly with increasing depth.

The A horizon has dry color of 10YR 4/1, 4/2, 4/3, 5/1, 5/2, 5/3, 6/2; 2.5Y 5/2, 4/2; 5Y 4/1 or 4/2 and moist color of 10YR 2/1, 2/2, 3/1, 3/2, 3/3; 2.5Y 3/2, 3/3; 5Y 3/1 or 3/2. It is sandy loam, very fine sandy loam, fine sandy loam, light loam, silt loam, or clay loam. The A horizon is slightly acid to moderately

alkaline and slightly alkaline to very strongly alkaline in saline-sodic phases. Some pedons are effervescent at the surface. In saline-sodic phases the sodium adsorption ratio is always less than 13 in this horizon.

The B horizon has dry color of 10YR 5/2, 6/2, 6/3, 7/2, 7/3; 2.5Y 6/2, 5/2; 5Y 5/1, 5/2, 6/2 or 6/3. Faint to prominent redoximorphic masses of iron are present. This horizon is sandy loam, fine sandy loam, light loam or light silt loam. It has weak structure or is massive. It is neutral to moderately alkaline and slightly alkaline to very strongly alkaline in saline-sodic phases. In most pedons, some or all of this horizon is calcareous with carbonates mostly disseminated, but in some pedons fine carbonate segregations are present. Carbonates range from 0 to 5 percent. In some pedons the B horizon is absent.

The C horizon is similar to the B horizon in most features but includes dry color of 10YR 8/1, 7/2, 6/2, 5/4, 5/3, or 5/2; 2.5Y 7/2; 5Y 5/1, or 6/1 and moist color of 5Y 4/1, 4/2, 5/1, 5/2; 2.5Y 4/2, 5/2; 10YR 3/2, 3/3, 4/2, 4/3, 5/2, 5/3 or 7/1. It is stratified loamy sand to silt loam, clay content is 8 to 18 percent, and colors are very variable. It is neutral to strongly alkaline and slightly alkaline to very strongly alkaline in saline-sodic phases. Carbonates usually decrease from the B horizon but always by less than 5 percent.

COMPETING SERIES: There are no other soils in this family.

GEOGRAPHIC SETTING: Grangeville soils are on alluvial fans and floodplains at elevations of 0 to 1800 feet. Slopes range from 0 to 2 percent. The soils formed in moderately coarse textured alluvium dominantly derived from granitic rock sources. Some areas are saline and saline-sodic affected. Many areas have been reclaimed. The climate is dry subhumid with hot dry summer and cool moist winters. The mean annual precipitation, all in the form of rain, is 7 to 16 inches. Mean annual temperature is 60 degrees to 64 degrees F., mean January temperature is 45 degrees to 50 degrees F., mean July temperature is 72 degrees to 80 degrees F. The frost-free season is 200 to 300 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Borden](#), [Dello](#), [Dinuba](#) and [Traver](#) soils and the competing [Foster](#) and [Hanford](#) soils. Borden and Dinuba soils have an argillic horizon and lack a mollic epipedon. Dello soils have sandy particle size families. Traver soils have an argillic horizon.

DRAINAGE AND PERMEABILITY: Somewhat poorly drained; this soil has altered drainage because of the dams and reservoirs in the Sierra Nevada, pumping from the water table, tile and interceptor drains, and filling and leveling of sloughs in the vicinity. negligible to very low runoff; moderately rapid permeability and moderate permeability in saline-sodic phases. Formerly most areas of Grangeville soils were occasionally flooded, but now stream flow is controlled by large flood control structures to the extent that most areas are not flooded more than once in about 25 to 75 years. The water table is at depths of 24 to 48 inches unless drained. If drained, the water table is at depths of 48 to greater than 60 inches. (See Remarks)

USE AND VEGETATION: Used intensively for growing alfalfa, grapes, cotton, truck crops and irrigated pasture. Some areas are being urbanized. Vegetation in uncultivated areas is annual grasses and forbs with native (sodic) alkali-tolerant plants and a few scattered oak and cottonwood trees.

DISTRIBUTION AND EXTENT: East side of the San Joaquin Valley and intermountain valleys in the western part of southern California. The series is extensive in MLRA-17, 19. (See Remarks)

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: Kings County, California, 1938.

REMARKS: The description of the Foster series has not been recently revised and differentiation of the two soils is not clearly defined. Foster soils are assumed to have a regular decrease in organic matter. Pumping of ground water and changes in season and volume of stream flow has greatly changed the moisture regime of many areas classified as Grangeville soil in the past. It is doubtful that many areas are any longer saturated within 40 inches of the surface. The Bg horizon is considered by some observers to be a C horizon.

Diagnostic horizons and features recognized in this pedon are:

Mollic epipedon - the zone from the surface to a depth of 11 inches (Ap).

Fluvaquentic subgroup - organic carbon decreases irregularly with increasing depth.

U.S.A.

GREENFIELD SERIES

LOCATION GREENFIELD CA
Established Series
Rev. LCL/GWH/RWK
01/2003

The Greenfield series consists of deep, well drained soils that formed in moderately coarse and coarse textured alluvium derived from granitic and mixed rock sources. Greenfield soils are on alluvial fans and terraces and have slopes of 0 to 30 percent. The mean annual precipitation is about 15 inches and the mean annual air temperature is about 62 degrees F.

TAXONOMIC CLASS: Coarse-loamy, mixed, active, thermic Typic Haploxeralfs

TYPICAL PEDON: Greenfield coarse sandy loam, annual grass pasture. (Colors are for dry soil unless otherwise noted.)

A1--0 to 23 inches; pale brown (10YR 6/3) coarse sandy loam, dark brown (10YR 4/3) moist; massive; slightly hard, very friable, nonsticky and nonplastic; slightly acid (pH 6.3); gradual smooth boundary. (8 to 30 inches thick)

B1--23 to 37 inches; light yellowish brown (10YR 6/4) sandy loam, dark yellowish brown (10YR 4/4) moist; weak fine subangular blocky structure; slightly hard, very friable, slightly sticky and nonplastic; thin patchy clay film; neutral (pH 6.6); gradual smooth boundary. (10 to 20 inches thick)

B2t--37 to 51 inches; light yellowish brown (10YR 6/4) fine sandy loam, dark yellowish brown (10YR 4/4) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and nonplastic; thin patchy clay films; neutral (pH 6.8); gradual smooth boundary. (10 to 20 inches thick)

C--51 to 72 inches; brownish yellow (10YR 6/6) and yellow (10YR 7/6) stratified loamy sand, sandy loam, and fine sandy loam; yellowish brown (10YR 5/6) moist; massive; soft, very friable; neutral (pH 7.0).

TYPE LOCATION: Madera County, California; SW1/4 NW1/4 section 18, T.10S., R.18E.

RANGE IN CHARACTERISTICS: The mean annual soil temperature is 59 to 65 degrees F. and the soil temperature is not below 47 degrees F. at any time for more than a few days all of the time from late April or May until November or early December and usually is moist in some or all parts of the moisture control section all the rest of the year. Rock fragments range from less than 1 to 25 percent in the A and B horizons. Coarse and very coarse sand average more than 20 percent.

The A horizon is pale brown, light brownish gray, grayish brown, brown, light yellowish brown, dark yellowish brown, yellowish brown, pinkish gray or light brown (10YR 6/2, 6/3, 6/4, 5/2, 5/3, 5/4, 4/3, 4/4; 7.5YR 5/2, 5/4, 6/2, 6/4). It is loamy sand, sandy loam, fine sandy loam or gravelly equivalents of each. This horizon contains less than 1 percent organic matter in all parts. It is slightly acid to mildly alkaline. The lower boundary is gradual or clear.

The B2t horizon is pale brown, brown, light brown, light gray, light yellowish brown, yellowish brown, dark yellowish brown, grayish brown, reddish yellow, pink or brownish yellow (10YR 6/1, 6/3, 5/3, 6/4, 6/6, 5/4, 5/6, 5/8, 4/4, 4/6, 7/4, 7/6, 5/2; 7.5YR 5/2, 5/4, 4/2, 4/4, 6/4, 6/6, or 7/4). It is heavy sandy loam, heavy fine sandy loam, or gravelly equivalents of each and has 3 to 6 percent more clay than the A horizon. This horizon is slightly acid to mildly alkaline.

The C horizon is light yellowish brown, very pale brown, yellowish brown, pale brown, light brownish yellow (10YR 6/4, 5/4, 5/6, 5/8, 6/3, 6/2, 6/6, 6/8, 7/3, 7/4, 4/2, 4/4) or brown (7.5YR 4/4, 4/2). It is loamy sand, coarse sandy loam, sandy loam, fine sandy loam or gravelly equivalents of each. This horizon is neutral to moderately alkaline. Some pedons have silica cementation or contrasting soil material or more than 35 percent gravel, all below 40 inches.

COMPETING SERIES: These are the [Atwater](#) and [Dinuba](#) series in the same family and the [Hanford](#), [Oakdale](#), [Ramona](#), and [Snelling](#) series. Atwater soils average less than 20 percent coarse and very coarse sand, and are essentially gravel free. Dinuba soils are calcareous between depths of 20 to 40 inches and have silty unrelated sediments below the argillic horizon. Hanford soils lack an argillic horizon. Oakdale soils have a moist value of 3 and more than 1.2 percent organic matter to a depth of more than 4 inches. Ramona and Snelling soils have more than 18 percent clay in the argillic horizon.

GEOGRAPHIC SETTING: Greenfield soils are on fans and terraces at elevations of 100 to 3,500 feet. Slopes range from 0 to 30 percent. The soils formed in moderately coarse and coarse textured alluvium or some wind deposited material derived from granitic and mixed sources. The climate is dry subhumid mesothermal with hot, dry summers and cool, moist winters. The mean annual precipitation is 9 to 20 inches. The mean annual temperature is 60 to 64 degrees F.; the average January temperature is 42 to 46 degrees F.; and the average July temperature is 76 to 80 degrees F. The frost free season averages about 200 to 325 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the competing [Hanford](#), [Ramona](#) and [Snelling](#) soils and the [Arlington](#), [Docas](#), [Garey](#), [Lockwood](#), and [San Joaquin](#) soils. Arlington and San Joaquin soils have duripans at depths of less than 40 inches. Docas soils lack argillic horizons. Garey soils have an argillic horizon consisting of lamellae and intervening sandy layers without clay bridges. Lockwood soils have a mollic epipedon.

DRAINAGE AND PERMEABILITY: Well drained; slow to medium runoff; moderately rapid permeability.

USE AND VEGETATION: Used for the production of a wide variety of irrigated field, forage and fruit crops and also for growing dryland grain and pasture. Vegetation on uncultivated areas consists of annual grass, forbs, some shrubs and scattered oak trees.

DISTRIBUTION AND EXTENT: Interior and coastal valleys of central and southern California. The soils are extensive.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: Monterey County (Salinas Area), California, 1924.

REMARKS: The activity class was added to the classification in January of 2003. Competing series were not checked at that time. - ET

National Cooperative Soil Survey
U.S.A.

HANFORD SERIES

LOCATION HANFORD CA
Established Series
Rev. LCL/ARW/JJJ/CAF
10/1999

The Hanford series consists of very deep, well drained soils that formed in moderately coarse textured alluvium dominantly from granite. Hanford soils are on stream bottoms, floodplains and alluvial fans and have slopes of 0 to 15 percent. The mean annual precipitation is about 12 inches and the mean annual air temperature is about 63 degrees F.

TAXONOMIC CLASS: Coarse-loamy, mixed, superactive, nonacid, thermic Typic Xerorthents

TYPICAL PEDON: Hanford fine sandy loam, pasture. (Colors are for dry soil unless otherwise noted.)
A1--0 to 12 inches; pale brown (10YR 6/3) fine sandy loam, dark brown (10YR 4/3) moist; weak fine granular structure; slightly hard, very friable, nonsticky and nonplastic; many fine roots in the upper few inches; many fine interstitial pores; slightly acid; gradual smooth boundary. (6 to 14 inches thick)

C1--12 to 36 inches; pale brown (10YR 6/3) fine sandy loam, dark brown (10YR 4/3) moist; massive; slightly hard, very friable, nonsticky and nonplastic; common fine interstitial pores; neutral; diffuse boundary. (10 to 24 inches thick)

C2--36 to 60 inches; light yellowish brown (10YR 6/4) fine sandy loam and sandy loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, very friable, nonsticky and nonplastic; slightly alkaline.

TYPE LOCATION: Madera County, California; SW1/4 NW1/4 section 30, T. 10 S., R. 18 E.

RANGE IN CHARACTERISTICS: The mean annual soil temperature at a depth of 20 inches is about 59 to 68 degrees F., and the soil temperature is not below 47 degrees F. for any significant period. Soil between the depths of about 8 to 24 inches usually is dry all of the time from late April or May until November or early December and usually is moist in some or all parts of this section all the rest of the year. The 10 to 40 inch control section averages sandy loam, coarse sandy loam, fine sandy loam or gravelly equivalents of each. The coarse fragments range from 0 to 35 percent. The particle size control section has little or no stratification. Clay content usually averages 6 to 18 percent. Organic matter is less than 1 percent and decreases regularly with increasing depth. Below a depth of 40 inches some pedons have marked stratification. The soils are medium acid to slightly alkaline and usually become more alkaline with depth. Secondary free carbonates do not occur above a depth of 40 inches. In some cases carbonates have been added to the soil by farmers which results in slight effervescence in the surface layers.

The A horizon is pale brown or light brownish gray (10YR 5/2, 5/3, 6/3, 6/2).

The C horizon is very pale brown, pale brown or light yellowish brown (10YR 5/3, 6/3, 6/4, 7/3, 7/4).

COMPETING SERIES: These are the [Honcut](#), [Pollasky](#) and [Saugus](#) series. Honcut soils have more silt or clay in the 10 to 40 inch particle-size control section, lower available water holding capacity, and/or redder hues. Pollasky soils are underlain by unrelated moderately consolidated sandy sediments at depths of less than 40 inches. Saugus soils have a paralithic contact at depths of more than 40 inches.

GEOGRAPHIC SETTING: The Hanford soils are on stream bottoms, floodplains and alluvial fans at elevations of 150 to 3,500 feet. Slopes range from 0 to 15 percent. The soils formed in deep, moderately coarse textured alluvium dominantly from granite and other quartz bearing rocks of similar texture. The climate is dry subhumid mesothermal with hot, dry summers and cool, moist winters. The mean annual precipitation is 9 to 20 inches. The mean annual temperature is 62 to 65 degrees F.; the mean January temperature is about 45 degrees F.; and the mean July temperature is about 81 degrees F. The frost free season is 200 to 280 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Elder](#), [Dinuba](#), [Ramona](#), and [Tujunga](#) soils. Elder soils have mollic epipedons. Dinuba and Ramona soils have argillic horizons and Tujunga soils are sand or loamy sand throughout the 10 to 40 inch control section.

DRAINAGE AND PERMEABILITY: Well drained; negligible to low runoff; moderately rapid permeability.

USE AND VEGETATION: Hanford soils are used for growing a wide range of fruits, vegetables, and general farm crops. They are also used for urban development and dairies. Vegetation in uncultivated areas is mainly annual grasses and associated herbaceous plants.

DISTRIBUTION AND EXTENT: Widely distributed in the San Joaquin Valley and in the valleys of central and southern California. The soils are extensive. MLRA 17

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: Kings County (Hanford Area), California, 1901.

National Cooperative Soil Survey
U.S.A.

HELENDALE SERIES

LOCATION HELENDALE CA
Established Series
Rev. GAW/JWF/CAH/MAV/ET
05/2012

The Helendale series consists of very deep, well drained soils that formed in alluvium from granitoid rocks. Helendale soils are on fan piedmonts, fan remnants, alluvial fans and terraces. Slopes range from 0 to 15 percent. The mean annual precipitation is about 125 millimeters (5 inches) and the mean annual temperature is about 17 degrees C (62.5 degrees F).

TAXONOMIC CLASS: Coarse-loamy, mixed, superactive, thermic Typic Haplargids

TYPICAL PEDON: Helendale loamy sand, on a 2 percent slope under creosote bush, burrobush and fiddleneck at an elevation of 980 meters (3,220 feet). (Colors are for dry soil unless otherwise stated. When described the soil was dry throughout.)

A -- 0 to 10 centimeters (0 to 4 inches); very pale brown (10YR 7/4) loamy sand, dark yellowish brown (10YR 4/4) moist; moderate thin and medium platy structure; slightly hard, very friable; common very fine roots; common very fine interstitial pores; moderately alkaline (pH 8.0); abrupt smooth boundary. (2 to 25 centimeters thick)

Bt1 -- 10 to 15 centimeters (4 to 6 inches); brown (7.5YR 5/4) sandy loam, brown (7.5YR 4/4) moist; weak coarse prismatic structure parting to moderate medium and coarse subangular blocky; hard, friable, sticky and slightly plastic; common very fine roots; common very fine interstitial and tubular pores; many moderately thick clay films on ped faces, lining pores and bridging sand grains; about 3 percent fine gravel; slightly alkaline (pH 7.6); clear smooth boundary.

Bt2 -- 15 to 45 centimeters (6 to 18 inches); brown (10YR 5/3) sandy loam, brown (10YR 4/3) moist; weak coarse prismatic structure parting to moderate medium angular blocky structure; hard, friable, slightly sticky and nonplastic; few very fine roots; common very fine and fine interstitial pores; many thin clay films on ped faces, lining pores and bridging sand grains; about 3 percent fine gravel; slightly alkaline (pH 7.5); gradual smooth boundary.

Bt3 -- 45 to 75 centimeters (18 to 30 inches); brown (10YR 5/3) sandy loam, brown (10YR 4/3) moist; weak coarse prismatic structure parting to moderate fine and medium angular blocky structure; hard, friable, slightly sticky and nonplastic; few very fine and fine roots; common very fine interstitial pores and few fine tubular pores; few thin clay films lining pores and bridging sand grains; 5 percent fine gravel; slightly alkaline (pH 7.5); diffuse smooth boundary.

Bt4 -- 75 to 98 centimeters (30 to 39 inches); brown (10YR 5/3) sandy loam, brown (10YR 4/3) moist; weak medium subangular blocky structure; hard, friable, slightly sticky and nonplastic; few fine roots; few very fine interstitial pores and few fine tubular pores; few thin clay films lining pores and bridging sand grains; 5 percent fine gravel; slightly alkaline (pH 7.5); diffuse smooth boundary.

Bt5 -- 98 to 120 centimeters (39 to 48 inches); yellowish brown (10YR 5/4) sandy loam, dark yellowish brown (10YR 4/4) moist; weak medium subangular blocky structure; hard, friable, slightly sticky and nonplastic; few fine roots; few very fine interstitial pores and few fine tubular pores; few thin clay films lining pores and bridging sand grains; 5 percent fine gravel; slightly alkaline (pH 7.5); clear wavy boundary. (Combined thickness of the Bt horizons is more than 50 centimeters)

Bk -- 120 to 165 centimeters (48 to 66 inches); light yellowish brown (10YR 6/4) sandy loam, dark yellowish brown (10YR 4/4) moist; massive; hard, very friable, nonsticky and nonplastic; strongly effervescent, carbonates segregated as few fine seams; moderately alkaline (pH 8.4); gradual wavy boundary. (0 to 19 inches thick)

C -- 165 to 265 centimeters (66 to 106 inches); yellow (10YR 7/6) loamy sand, yellowish brown (10YR 5/6) moist; massive; hard, very friable; slightly effervescent with carbonates disseminated and segregated as few fine seams; moderately alkaline (pH 8.4).

TYPE LOCATION: San Bernardino County, California; approximately 800 meters (0.5 miles) north of Palmdale Road on Wilson Ranch Road; about 110 meters (360 feet) north and 110 meters (360 feet) east of the SW corner of section 16, T.5 N., R.6 W, San Bernardino Base and Meridian; 34 degrees, 30 minutes and 54 seconds north latitude and 117 degrees, 31 minutes and 11 seconds west longitude; USGS Shadow Mountains SE 7.5 minute topographic quadrangle; UTM 11S 452296n 3819383e (DTM: NAD83).

RANGE IN CHARACTERISTICS:

Soil moisture control section: usually dry, moist in some part for short periods during winter and early spring and for 10 to 20 days cumulative between July and September following summer convection storms. The soils have a typic-aridic soil moisture regime.

Soil temperature: 19 to 22 degrees C.

Organic matter: 0 to 0.5 percent.

Control section -

Clay content: 8 to 18 percent.

Depth to the upper boundary of an argillic horizon: 2 to 25 centimeters (1 to 10 inches).

Effervescence: noneffervescent, very slightly to strongly effervescent below 60 centimeters.

A horizon

Hue: 7.5YR or 10YR.

Value: 5 to 7, dry or moist.

Chroma: 2 to 4, dry or moist.

Texture of the fine earth: loamy sand, loamy fine sand or sandy loam.

Clay content: 4 to 12 percent.

Rock fragments: 5 to 20 percent, predominantly gravel.

Effervescence: noneffervescent to slightly effervescent.

Reaction: slightly or moderately alkaline.

BA horizon (when present)

Value: 4 or 6, dry and 4 or 5, moist.

Texture of the fine earth: sand or loamy sand.

Clay content: 4 or 5 percent.

Reaction: slightly to moderately alkaline.

Bt horizon

Hue: 7.5YR or 10YR.

Value: 5 or 6, dry.
Chroma: 3 to 6, dry or moist.
Texture of the fine earth: coarse sandy loam, sandy loam, fine sandy loam or loam.
Clay content: averages 8 to 18 percent.
Rock fragments: 5 to 15 percent, dominantly gravel.
Reaction: slightly or moderately alkaline.

Bk or Bkq horizon (when present)
Hue: 7.5YR or 10YR.
Value: 4 to 6, dry or moist.
Chroma: 3 to 6, dry and 3 or 4, moist.
Texture of the fine earth: loamy sand, loamy fine sand or sandy loam.
Rock fragments: 5 to 20 percent, dominantly gravel.
Calcium carbonate equivalent: 0 to 2 percent.
Silica: 0 to 2 percent durinodes in the matrix.

C or Ck horizon
Hue: 7.5YR, 10YR or 2.5Y.
Value: 6 to 8, dry.
Chroma: 3 to 6, moist.
Texture of the fine earth: sand, loamy sand, loamy fine sand or sandy loam.
Rock fragments: 5 to 25 percent.
Calcium carbonate equivalent: 0 to 2 percent.
Reaction: slightly or moderately alkaline.

COMPETING SERIES: These are the [Dovecanyon](#) (CA), [Friedliver](#) (CA), [Golddivide](#) (CA), [Goldpeak](#) (CA), [Hexie](#) (CA), [Jumborox](#) (CA), [Littlefargo](#) (CA), [Searchlight](#) (NV), [Sonoita](#) (AZ), [Tray](#) (CA) and [Wingap](#) (CA) series.

[Dovecanyon](#), [Wingap](#) and [Goldpeak](#) soils do not receive substantial summer precipitation. In addition, [Goldpeak](#) soils are cool thermic with a mean annual soil temperature of 15 to 18 degrees C and [Wingap](#) soils have a paralithic contact between 100 and 150 centimeters from the soil surface. [Friedliver](#) soils have an argillic horizon with an upper boundary between 25 and 50 centimeters (10 to 20 inches) from the soil surface. [Golddivide](#) soils have an argillic horizon with an upper boundary between 50 and 100 centimeters (20 to 40 inches) from the soil surface and an upper depth to visible secondary carbonates of 25 to 75 centimeters (10 to 30 inches). [Hexie](#) and [Littlefargo](#) soils have a paralithic contact between 50 and 100 centimeters (20 to 40 inches) from the soil surface. In addition, [Littlefargo](#) soils are noneffervescent throughout the profile and have a mean annual soil temperature of 15 to 19 degrees C. [Jumborox](#) soils are cool thermic with a mean annual soil temperature of 15 to 19 degrees C. [Searchlight](#) soils have 15 to 35 percent rock fragments in the particle-size control section, visible secondary silica on rock fragments beginning 5 centimeters below the mineral soil surface and 5 to 10 percent calcium carbonate equivalent throughout the profile. [Sonoita](#) soils have a medium acid to neutral A horizon and are intermittently moist for more than 20 days cumulative during the summer. [Tray](#) soils have a massive, strongly to very strongly alkaline argillic horizon with an ESP of 15 to 30 and are calcareous throughout the profile.

GEOGRAPHIC SETTING: Helendale soils are on fan piedmonts, fan remnants, alluvial fans and terraces. Slopes range from 0 to 9 percent. Elevations are 610 to 1,200 meters (2,000 to 3,935 feet). These soils formed in alluvium from granitoid rock. The climate is arid with hot, dry summers and cool, moist

winters. The mean annual precipitation is 75 to 200 millimeters (3 to 8 inches). The mean annual temperature is 17 to 20 degrees C (62.5 to 68 degrees F). The frost free season is 270 to 320 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Bryman](#), [Cajon](#), [Morongo](#) and [Rosamond](#) soils. Bryman and Rosamond soils have fine-loamy particle-size control sections. In addition, Rosamond soils do not have an argillic horizon. Cajon and Morongo soils do not have an argillic horizon and have sandy particle-size control sections. In addition, Morongo soils are noneffervescent throughout the particle-size control section.

DRAINAGE AND SATURATED HYDRAULIC CONDUCTIVITY: Well drained; negligible to low runoff; moderately high and high saturated hydraulic conductivity.

USE AND VEGETATION: Used for irrigated agriculture and pasture, homesites, military operations, recreation and wildlife habitat. Vegetation is mainly creosote bush, burrobush, Nevada jointfir, Joshua trees and annual forbs and grasses.

DISTRIBUTION AND EXTENT: Mojave Desert of southeastern California. MLRA 30. The soils are of moderate extent.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California.

SERIES ESTABLISHED: San Bernardino County, California, Mojave River Area, 1978.

REMARKS: Diagnostic horizons and features in this pedon include:

Ochric epipedon - from a depth of 0 to 10 centimeters (A horizon).
Argillic horizon - from a depth of 10 to 120 centimeters (Bt horizons).
Particle-size control section - from a depth of 10 to 60 centimeters (Bt1, Bt2 and part of the Bt3 horizon).

ADDITIONAL DATA: Where mapped above 1,160 meters (3,800 feet) elevation, such as Benton-Owens Valley Area Soil Survey, consider correlating those soils to the Jumborox series, a cool thermic soil. The use of Helendale in MLRA 30XA (areas without summer precipitation) such as Edwards Air Force Base, Benton-Owens Valley Area, Kern County, NE Part and the Mojave Desert, Northwest Part Soil Surveys should be reconsidered.

National Cooperative Soil Survey
U.S.A.

HESPERIA SERIES

LOCATION HESPERIA CA
Established Series
Rev. GWH/GAW/TDC/ET
10/97

The Hesperia series consists of very deep, well drained soils that formed in alluvium derived primarily from granite and related rocks. Hesperia soils are on alluvial fans, valley plains and stream terraces and

have slopes of 0 to 9 percent. The mean annual precipitation is about 8 inches and the mean annual air temperature is about 64 degrees F.

TAXONOMIC CLASS: Coarse-loamy, mixed, superactive, nonacid, thermic Xeric Torriorthents

TYPICAL PEDON: Hesperia fine sandy loam--disturbed site. (Colors are for dry soil unless otherwise stated).

Ap--0 to 4 inches; pale brown (10YR 6/3) fine sandy loam, dark brown (10YR 4/3) moist; weak medium subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; common very fine roots; common very fine interstitial and few very fine tubular pores; slightly acid (pH 6.3); abrupt smooth boundary. (4 to 10 inches thick).

C1--4 to 22 inches; pale brown (10YR 6/3) fine sandy loam, dark brown (10YR 4/3) moist; massive; slightly hard, friable, nonsticky and nonplastic; common very fine and few fine roots; common very fine interstitial and few very fine tubular pores; slightly alkaline (pH 7.5); gradual smooth boundary. (16 to 20 inches thick).

C2--22 to 54 inches; pale brown (10YR 6/3) fine sandy loam, dark brown (10YR 4/3) moist; massive; slightly hard, friable, nonsticky and nonplastic; common very fine and few fine roots; common very fine interstitial, and few very fine tubular pores; slightly effervescent with disseminated lime moderately alkaline (pH 8.0); gradual smooth boundary. (30 to 34 inches thick).

C3--54 to 77 inches; pale brown (10YR 6/3) sandy loam, dark brown (10YR 4/3) moist; massive; slightly hard, friable, nonsticky and nonplastic; common very fine, few fine roots; common very fine interstitial, few very fine tubular pores; strongly effervescent with disseminated lime; moderately alkaline (pH 8.0).

TYPE LOCATION: Los Angeles County, California; about 2 miles northeast of Little Rock; near center of NE 1/4, SE 1/4 section 8, T.5N., R.10W.

RANGE IN CHARACTERISTICS: The mean annual soil temperature ranges from 57 degrees to 71 degrees F. The soil is dry in all parts, unless irrigated, from early May until early November. Organic matter content is very low and decreases regularly with increasing depth. The soils are typically calcareous between depths of 16 and 40 inches.

The A horizon has a dry color of 10YR 5/2, 5/3, 5/4, 6/2, 6/3, 6/4, 7/2, 7/3, 8/3 and 7.5YR 5/2, 5/4, 6/2 and 6/4. Moist color is 10YR 3/2, 3/3, 4/2, 4/3, 4/4, 4/6, 5/3, 6/3; 7.5YR 3/2, 4/4, 5/4. It is loamy fine sand, loamy sand, sandy loam, fine sandy loam, very fine sandy loam or light loam, and has 0 to 5 percent rock fragments ranging from 2 mm to 2 cm. This horizon is slightly acid to moderately alkaline.

The C horizon is similar in color to the A horizon. It is fine sandy loam, sandy loam or coarse sandy loam. Contrasting textures are excluded from the 10 to 40 inches control section although some fine or weak stratification is common. Rock fragments 2 mm to 2 cm in diameter range from 0 to 15 percent. The soil is slightly acid to moderately alkaline. Lime is usually disseminated but a few pedons have lime veins in the lower part of the profile. Some pedons have loamy sand substratums.

COMPETING SERIES: There are no competing soils series.

GEOGRAPHIC SETTING: Hesperia soils are on long smooth alluvial fans, and valley fill. The alluvium is from granite and closely related rocks. Elevations are as low as 200 feet in the San Joaquin Valley and as high as 4,800 feet in the high desert. The climate is semiarid bordering on arid. Winters have some general widespread rains plus occasional snow in the high desert. Summers have infrequent thunder showers in the high desert. Mean annual precipitation is 4 to 9 inches. Average January temperature is about 46 degrees F; average July temperature is about 83 degrees F; mean annual temperature is 57 degrees to 69 degrees F. Frost-free season is about 140 to 310 days. (see remarks).

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Arvin](#), [Cajon](#) and [Whitewolf](#) soils and the [Adelanto](#) soils. Adelanto soils have B2t horizons.

DRAINAGE AND PERMEABILITY: Well drained; negligible to low runoff, moderately rapid permeability.

USE AND VEGETATION: Used for desert range, and for production of irrigated orchards, row crops, field crops, grain, hay, pasture and grapes. Native vegetation consists of creosotebush in the high desert and sparse annuals in the valley.

DISTRIBUTION AND EXTENT: Mainly in the lower San Joaquin Valley and the high desert of Southern California and adjoining areas of the southwest. The series is extensive in MLRA-17 and of minor extent in MLRA 29.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California.

SERIES ESTABLISHED: Central-Southern Area California Reconnaissance, 1917.

REMARKS: The soils now mapped at elevations of less than 500 feet would be separated as new soils. These map units should be warm phases with the lower San Joaquin Valley with the longer (310) frost-free season. Series last updated 9/97. CEC activity class supported by lab data. Series competed at that time.

National Cooperative Soil Survey
U.S.A.

METZ SERIES

LOCATION METZ CA
Established Series
Rev: LCL/RWK/CEJ/KJO
06/1999

The Metz series consists of very deep, somewhat excessively drained soils that formed in alluvial material from mixed, but dominantly sedimentary rocks. Metz soils are on floodplains and alluvial fans and have slopes of 0 to 15 percent. The mean annual precipitation is about 15 inches and the mean annual air temperature is about 59 degrees F.

TAXONOMIC CLASS: Sandy, mixed, thermic Typic Xerofluvents

TYPICAL PEDON: Metz fine sandy loam, cultivated. (Colors are for dry soil unless otherwise noted.)

Ap--0 to 12 inches; light brownish gray (2.5Y 6/2) fine sandy loam, dark grayish brown (2.5Y 4/2) moist; massive; hard, friable, slightly sticky and slightly plastic; common very fine roots in upper 2 inches, few very fine roots in rest of horizon; many very fine interstitial and few fine tubular pores; compacted due to tillage; noncalcareous; moderately alkaline (pH 8.0); abrupt wavy boundary. (10 to 20 inches thick)

C1--12 to 29 inches; light brownish gray (2.5Y 6/2) fine sand, dark grayish brown (2.5Y 4/2) moist; massive; soft, very friable; few very fine roots; many very fine interstitial pores; near top of horizon, a discontinuous streak of sand lenses 1 to 2 inches thick; slightly effervescent; moderately alkaline (pH 8.0); clear smooth boundary. (10 to 20 inches thick)

C2--29 to 38 inches; light brownish gray (2.5Y 6/2) sand, grayish brown (2.5Y 5/2) moist; single grain; loose; few very fine roots; horizon has 1 percent gravel and 1 to 2 percent mud balls 2 to 5 inches in diameter of very dark gray (N 3/) mottled silty clay; many very fine and few fine roots; many very fine interstitial pores; slightly effervescent; moderately alkaline (pH 8.0); gradual smooth boundary. (Variable thickness)

C3--38 to 52 inches; light brownish gray (2.5Y 6/2) very fine sandy loam, olive brown (2.5Y 4/4) moist; strong brown (7.5YR 5/6 dry and moist) mottles; weak coarse prismatic structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine roots; many very fine interstitial and common very fine tubular pores; indistinct strata of silt loam in middle of horizon; strongly effervescent with disseminated lime; moderately alkaline (pH 8.0); abrupt smooth boundary. (Variable thickness)

C4--52 to 118 inches; light brownish gray (2.5Y 6/2) fine sand, dark grayish brown (2.5Y 4/2) moist; single grain; loose; many very fine interstitial pores; slightly effervescent; moderately alkaline (pH 8.0).

TYPE LOCATION: Monterey County, California; 8 miles southeast of Salinas; from Highway 101 on Samovia Road, 1.15 miles to end of pavement, 0.65 mile on dirt road continuation, 0.2 mile northeast and 30 feet west and 100 feet north in corner of field.

RANGE IN CHARACTERISTICS: The mean annual soil temperature is 59 to 64 degrees F. The soil between the depths of 10 and 30 inches is usually dry all of the time from late April or May until November or early December and is usually moist in some or all parts the rest of the year. The textural control section (10 to 40 inches) averages loamy sand. Individual strata are sand, coarse sand, loamy sand, loamy fine sand, sandy loam, fine sandy loam, very fine sandy loam and loam plus minor thin silty lenses. Organic matter decreases irregularly with depth and on the average is less than 1 percent. The soil is neutral, slightly or moderately alkaline, although most pedons are moderately alkaline in most parts. Individual strata are noncalcareous or weakly to strongly calcareous. Gravel content ranges from 0 to 15 percent, although individual strata may reach 35 percent. A few mottles are present in some pedons but they seem to be relic from initial deposition and are associated with the finer textures.

The A and C horizons are 10YR 7/3, 6/1, 6/4, 5/2, 5/3; 2.5Y 6/2, 6/4, 5/2, 5/4.

COMPETING SERIES: This is the [Holillipah](#) series. Holillipath soils are neutral to slightly acid, are not calcareous bellow the A horizon and the difference between summer and winter soil temperature is 30 to 33 degrees F.

GEOGRAPHIC SETTING: Metz soils are on floodplains and alluvial fans at elevations of 25 to 2,500 feet. Gradient is 0 to 15 percent. The alluvium is derived from mixed but mostly sedimentary sources. The climate is dry mesothermal with warm dry summers and cool moist winters. Mean annual precipitation is 12 to 20 inches. The average January temperature is 47 to 50 degrees F; the average July temperature is 62 to 75 degrees F and the mean annual temperature is 57 to 60 degrees F. The average frost-free season is 175 to 340 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Tujunga](#), [Hanford](#), [Mocho](#), [Pacheco](#), [Pico](#), [Salinas](#) and [Sorrento](#) soils. Hanford and Pico soils have 18 to 35 percent clay in the textural control section.

DRAINAGE AND PERMEABILITY: Somewhat excessively drained; negligible to low runoff; moderately rapid permeability. Some areas subject to flooding are protected by dikes and dams.

USE AND VEGETATION: Much of the soil is irrigated and used for growing pasture, hay, truck crops, field crops and fruit. Some areas are grazed and in willows, annual grasses and forbs.

DISTRIBUTION AND EXTENT: Coastal valleys of the central and south Coast Range of California, MLRA 14. The soils are of moderate extent.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: Monterey County (King City Area), California, 1924

REMARKS: The reaction range is extended to include neutral soils in future mapping.

National Cooperative Soil Survey
U.S.A.

MODESTO SERIES

LOCATION MODESTO CA
Established Series
Rev. RJA/JEM
01/2003

The Modesto series consists of moderately well drained, (medial) Noncalic Brown soils developed from alluvium derived largely from granitic rock sources but with some mixture from metamorphic rocks. They occur on nearly level alluvial fans in areas where the surface drainage is very slow. These soils are reported to have had a mound type of microrelief, but this has been almost completely destroyed by leveling. The soils are formed on rather gritty, sandy loam or loam textured alluvium underlain in many places by a silty substratum like that underlying the Dinuba and Hanford soils. The Modesto soils

characteristically have neutral, grayish brown or dark grayish brown surface layers of loams and clay loams which become puddled and dense when cultivated in the moist condition. They have blocky to prismatic light clay or sandy clay B2 horizons which are mildly basic and intermittently calcareous in the lower part. The underlying material may be sandy alluvium or unrelated silty substrata, occasionally cemented with lime to form thin, weak hardpans.

TAXONOMIC CLASS: Fine-loamy, mixed, active, thermic Mollic Haploxeralfs

TYPICAL PEDON: Modesto loam (cultivated irrigated pasture)

Ap--0 to 10 inches; grayish brown (10YR 5/2) loam (somewhat gritty and puddled very dark grayish brown (10YR 3/1.5) moist; massive; very hard friable, slightly sticky and slightly plastic; few pores, numerous fine roots; moderately acid (pH 5.8); abrupt smooth boundary. 8 to 10 inches thick.

AB--10 to 12 inches; between grayish brown (10YR 5/2) and brown (10YR 5/3) light clay loam, very dark grayish brown (10YR 3/2.5) moist; moderate medium and coarse blocky structure; very hard, firm, plastic and slightly sticky; few fine pores, common fine roots; slightly acid (pH 6.1); this layer may have been somewhat mixed by leveling or cultivation.

B21--12 to 22 inches; brown (10YR 5/3) light clay; dark brown (10YR 3.5/3) moist with very dark brown (7.5YR 2.5/2) coatings; moderate coarse prismatic structure changing to strong coarse angular blocky in the lower part; very hard, firm, plastic and sticky; thick continuous clay films on all ped faces; common fine pores and fine roots; slightly acid (pH 6.3); clear smooth boundary. 10 to 13 inches thick.

B22--22 to 35 inches; brown (10YR 4.5/3) light clay, dark brown (10YR 3.5/3) moist with coatings of dark gray (7.5YR 4/1) dry, very dark brown (7.5YR 2/2) moist; similar to above but with few roots and with increasing pH (6.7); gradual smooth boundary. 8 to 12 inches thick.

B31--35 to 44 inches; brown (10YR 5/3) sandy clay loam, dark brown (7.5YR 3/2) moist; very weak coarse blocky structure; hard, friable, plastic and slightly sticky; thin clay films on vertical faces; neutral (pH 6.8); gradual smooth boundary. 6 to 12 inches thick.

B32--44 to 55 inches; brown (10YR 5/3) heavy sandy loam, dark brown (10YR 4/2.5) moist; massive; few thin patchy clay films; neutral (pH 6.8) abrupt irregular boundary. 6 to 12 inches thick.

D--55 to 62 inches +; light gray (2.5Y 7/2) silt loam, olive gray (2.5Y 5/2) moist with common medium distinct mottles of yellowish brown (10YR 5/6) dry, yellowish brown (10YR 3/6 to 5/6) moist; massive; hard, firm and somewhat brittle when moist, slightly plastic when crushed wet; neutral (pH 6.9); stratified with very fine sandy loam in places. Several feet thick.

TYPE LOCATION: Stanislaus County, California; 660 feet W. and 300 feet N. of east 1/4 corner of Sec. 17, T. 3S., R. 9E., 2 1/2 miles N. of Modesto, 1/8 mile west of McHenry Avenue, 100 yards north of Bowden Avenue.

RANGE IN CHARACTERISTICS:

A1 horizons vary in texture from loam to clay loam and in color from grayish brown (10YR 5/2) to gray (10YR 5/1) or dark grayish brown (10YR 4/2) and reaction from pH 6.0 to 7.0.

B2 horizons are brown (10YR 5/3, 7.5YR 5/3) or dark brown (10YR 4/3, 7.5YR 4/3) with slightly redder clay coatings on ped surfaces. Structure of the B2 horizon is moderate to strong coarse prismatic. The pH is always more alkaline in the B2 horizon than in the A horizon and is generally between 7.5 and 8.0 with some segregated lime in the lower part; however, the lime occurs only intermittently.

The underlying material is variable ranging from sandy loam to compact silt loam similar to that found under the Dinuba soils. Where the compact silt loam occurs at depths of 3 to 4 feet, it is often partially cemented with lime to a moderately dense hardpan. The silty material is devoid of coarse sand indicating that it is unrelated to the solum above which is usually somewhat gritty throughout. A few areas are affected by weak alkaline salts.

COMPETING SERIES:

GEOGRAPHIC SETTING: Nearly level, slowly drained alluvial fans or interfan areas approaching basin topography, formerly with mound microrelief which is now largely destroyed by leveling for irrigation. Modesto soils occur at elevations of 40 to 100 feet in a mesothermal semiarid climate having a mean annual precipitation of 10 to 12 inches with hot dry summers and cool moist winters; an average

temperature of 45 degrees F. in January, 78 degrees F. in July with a mean annual temperature of 60 degrees F. The average frost-free season is about 300 days.

GEOGRAPHICALLY ASSOCIATED SOILS: The Modesto soils are associated with the [Chualar](#), [Dinuba](#), and [Hanford](#) soils. They differ from Chualar soils in that they are generally finer textured, less permeable, have hard rather than soft consistence in the A horizon, and have more distinctly blocky or prismatic B2 horizons. Where they are underlain by silty substrata, they resemble the Dinuba soils which, however, have only weakly developed, sandy loam B2 horizons. The Merriam soils have brown or reddish brown A horizons which abruptly overlies prismatic clay or heavy sandy clay B2 horizons.

DRAINAGE AND PERMEABILITY: Soils are moderately well drained to somewhat poorly (imperfectly) drained with very slow surface runoff, locally ponded. The B2 horizon is slowly permeable and if puddled by cultivation the surface soil becomes very slowly permeable. Water tables are variable ranging from 3 to 10 feet, depending upon the proximity of artificial drains and drainage wells. Perched water often occur in wet years where the soil is underlain by the compact silt.

USE AND VEGETATION: Annual grasses and herbaceous plants; morning glory (bindweed), star thistle, and Johnson grass are troublesome weeds in places. These soils are used for growing grapes, orchard, field, and forage crops and irrigated pasture. Unless these soils are carefully managed the poor structure causes reduced yields.

DISTRIBUTION AND EXTENT: Eastern side of central San Joaquin valley, California.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: Modesto-Turlock Area, California, 1908. Source of name is city of Modesto, Stanislaus County.)

REMARKS: The activity class was added to the classification in January of 2003. Competing series were not checked at that time. - ET

OSD scanned by SSQA. Last revised by state on 1/6/59.

National Cooperative Soil Survey
U.S.A.

MONSERATE SERIES

LOCATION MONSERATE CA
Established Series
Rev. AAK/LAB/LCL
01/2003

The Monserate series is a member of the fine-loamy, mixed, thermic family of Typic Durixeralfs. Typically, Monserate soils have brown and yellowish red, slightly acid, sandy loam A horizons, reddish brown, neutral, sandy clay loam B2t horizons underlain by silica-cemented duripans.

TAXONOMIC CLASS: Fine-loamy, mixed, superactive, thermic Typic Durixeralfs

TYPICAL PEDON: Monserate sandy loam - pasture, formerly cultivated. (Colors are for dry soil unless otherwise noted.)

Ap--0 to 5 inches; brown (7.5YR 5/4) sandy loam, dark reddish brown (5YR 3/4) moist; moderate medium granular structure; slightly hard, friable, nonsticky, nonplastic; many fine roots; many fine tubular pores; slightly acid (pH 6.2); clear smooth boundary. (5 to 9 inches thick)

A3--5 to 10 inches; yellowish red (5YR 4/6) sandy loam, dark reddish brown (2.5YR 3/4) moist; moderate medium subangular blocky structure; hard, firm, slightly sticky, slightly plastic; common fine roots; many fine tubular pores; slightly acid (pH 6.5); abrupt smooth boundary. (5 to 7 inches thick)

B21t--10 to 20 inches; reddish brown (5YR 4/4) sandy clay loam, dark reddish brown (2.5YR 3/4) moist; strong medium prismatic structure; extremely hard, very firm, very sticky, very plastic; few fine, mostly

exped roots; few fine tubular pores; many moderately thick clay films lining pores and on faces of peds; neutral (pH 6.7); gradual smooth boundary. (5 to 12 inches thick)

B22t--20 to 28 inches; reddish brown (5YR 5/4) sandy clay loam, dark reddish brown (5YR 3/4) moist; strong medium angular blocky structure; extremely hard, very firm, very sticky, very plastic; few fine, mostly exped roots; few fine tubular pores; many moderately thick clay films lining pores and on faces of peds; neutral (pH 7.2); abrupt wavy boundary. (5 to 12 inches thick)

Clsim--28 to 45 inches; dark brown (10YR 4/3), dark reddish brown (5YR 3/4) moist; massive; indurated and extremely hard, very firm; when crushed has the appearance of loamy sand and is slightly sticky and nonplastic; very few roots in seams and fissures; slightly alkaline (pH 7.7); gradual smooth boundary. (5 to 20 inches thick)

C2si--45 to 57 inches; dark yellowish brown (10YR 3/4) loamy coarse sand, dark reddish brown (5YR 3/4) moist; massive and weakly cemented; very hard, firm, nonsticky, nonplastic; slightly alkaline (pH 7.6); clear wavy boundary. (3 to 18 inches thick)

C3--57 to 70 inches; yellowish brown (10YR 5/4) loamy coarse sand, dark reddish brown (5YR 3/4) moist; massive and weakly cemented in lenses; loose, nonsticky, nonplastic; slightly alkaline (pH 7.5). (Many feet thick)

TYPE LOCATION: Riverside County, California; about 2 miles east of Sunnymead; approximately 1,200 feet east and 150 feet north of the SW corner sec. 33, T.2S., R.3W.

RANGE IN CHARACTERISTICS: The mean annual soil temperature at a depth of 20 inches is about 65 degrees F. and the soil temperature usually is not below 47 degrees F. at any time. Soil between the depths of about 8 and 20 inches is usually moist in some or all parts from December to about the middle of May and usually is dry all the rest of the year. Rock fragments, mostly mineral grains 2 to 5 mm. in diameter, range from 5 to 35 percent and tend to be more numerous in the lower part of the profile. The A horizon is grayish brown, brown, reddish brown or yellowish red, and the hue is 10YR, 7.5YR or 5YR. It is sandy loam or loam and is neutral or slightly acid. This horizon has granular or subangular blocky structure or it is hard or very hard and massive when dry. The average organic matter is less than 1 percent.

The B2t horizon is brown or strong brown in 7.5YR hue or reddish brown or dark reddish brown in 5YR hue. It is sandy clay loam or less commonly clay loam and contains 27 to 35 percent clay. The upper boundary of the B2t horizon is abrupt and contains at least 10 percent more clay absolute than the overlying horizon. Some pedons have a very thin A2 horizon. The B2t horizon has moderate to strong prismatic or angular blocky structure and usually the prismatic structure is in the upper part grading to angular blocky in the lower part. It is slightly acid to neutral and base saturation is 75 to 95 percent.

The upper Csim horizon is indurated and the upper surface has a smooth opal coating on more than half of the area. Other parts of the Csi horizon are strongly cemented, but layered and variable and some plates are indurated. It is neutral or mildly alkaline. The lower boundary of the main Csi horizon is smooth or wavy and highly irregular with silica apparently moving down along vertical planes into unconsolidated sediments. Dendritic deposits of manganese oxide and small amounts of calcium carbonate are in fracture planes in some pedons. Holes or "windows" occur in the pan. The lower part of the C horizon is neutral to moderately alkaline.

COMPETING SERIES: These are the [Arlington](#), [Buchenau](#), [Buren](#), [Exeter](#), [Gloria](#), [Igo](#), [Redding](#), [Rocklin](#), [San Joaquin](#), and [Ysidora](#) series. Arlington, Buren, and Ysidora soils lack strong cementation in the duripans. Buchenau soils are calcareous in the B2t horizon and have lime and silica cementation. Exeter and Rocklin soils have less than 27 percent clay in the argillic horizon. (See Remarks.) Gloria, Redding, and San Joaquin soils have more than 35 percent clay in the argillic horizon. Igo soils are 3 to 12 inches deep to a duripan.

GEOGRAPHIC SETTING: The Monserate soils are on nearly level to moderately steep old dissected terraces and fans at elevations of 700 to 2,500 feet. The soils formed in alluvium derived principally from granitic rocks. The climate is dry subhumid mesothermal with long dry summers and mild moist winters. Mean annual precipitation is 12 to 18 inches. Average January temperature is 48 degrees to 52 degrees F.,

average July temperature is about 78 degrees F., and the mean annual temperature is 62 degrees to 65 degrees F. The freeze-free season is 230 to 280 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Fallbrook](#), [Greenfield](#), [Hanford](#), [Placentia](#), [Ramona](#), and [Vista](#) soils. These soils lack duripans. Fallbrook and Vista soils have a paralithic contact. Hanford soils lack an argillic horizon. Greenfield soils have less than 18 percent clay in the argillic horizon. Placentia soils have a fine textured natric horizon.

DRAINAGE AND PERMEABILITY: Moderately well to well drained; slow to rapid runoff; permeability is moderately slow in the B2t horizon and very slow in the duripan.

USE AND VEGETATION: Used principally for growing grain, grain hay or pasture, some citrus, and field and truck crops when irrigation water is available. Naturalized vegetation is mainly annual grasses and forbs, widely spaced native canyon oak, and shrubs on eroded slopes.

DISTRIBUTION AND EXTENT: Interior valleys in the western part of southern California. The soils are of moderate extent.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: San Diego County (Oceanside Area), California, 1929.

REMARKS: The Monserate soils were formerly classified as Noncalcic Brown soils. The differentiae of the Exeter and Rocklin soils need further study.

The activity class was added to the classification in January of 2003. Competing series were not checked at that time. - ET

OSD scanned by SSQA. Last revised by state on 10/72.

National Cooperative Soil Survey
U.S.A.

MORICAL SERIES

LOCATION MORICAL WA
Established Series
Rev VB/RJE/TLA/TJR
02/2011

The Morical series consists of moderately deep, well drained soils formed in residuum and colluvium from granite or quartzite lithology with an influence of volcanic ash and loess in the surface. They are on ridgetops, mountain slopes, and foothills. Slopes range from 0 to 90 percent. The mean annual precipitation is 12 to 18 inches and the mean annual air temperature is about 48 degrees F.

TAXONOMIC CLASS: Fine-loamy, mixed, superactive, mesic Vitrandic Argixerolls

TYPICAL PEDON: Morical ashy fine sandy loam in rangeland on a 15 percent west facing slope at an elevation of 2,100 feet. (Colors are for dry soil unless otherwise stated. All textures are apparent field textures.)

A--0 to 12 inches; grayish brown (10YR 5/2) ashy fine sandy loam, dark brown (10YR 3/3) moist; weak medium granular structure; slightly hard, friable, nonsticky and nonplastic; many fine and medium roots; many fine and very fine tubular pores; 5 percent gravel; slightly alkaline (pH 7.4); gradual wavy boundary. (10 to 14 inches thick)

BA--12 to 23 inches; brown (10YR 5/3) sandy loam, dark yellowish brown (10YR 3/4) moist; weak medium subangular blocky structure; slightly hard, firm, slightly sticky and slightly plastic; common fine and medium roots; many fine and very fine tubular pores; 5 percent gravel; neutral (pH 7.2); gradual wavy boundary; (0 to 12 inches thick)

Bt--23 to 37 inches; light yellowish brown (10YR 6/4) sandy clay loam, yellowish brown (10YR 5/4) moist; moderate medium prismatic structure; hard, very firm, sticky and moderately plastic; few fine roots; common fine and medium tubular pores; few faint clay films on faces of peds; 5 percent gravel; neutral (pH 7.2); clear wavy boundary (8 to 16 inches thick)

Cr--37 inches; weathered granodiorite; massive, crushes to gravel and coarse sand.

TYPE LOCATION: Chelan County, Washington; about 1 mile south of Ardenvoir, Washington, 2,500 feet south of northwest corner of sec. 29, T. 26 N., R. 20 E.

RANGE IN CHARACTERISTICS: The mean annual soil temperature is 47 to 52 degrees F. These soils are usually moist, but are dry in all parts between depths of 4 and 12 inches for 75 to 105 consecutive days following the summer solstice.

Depth to paralithic contact (weathered bedrock) is 20 to 40 inches.

The particle-size control section has 5 to 35 percent hard rock fragments.

The upper 10 to 14 inches of the soil has an estimated moist bulk density of 1.0 to 1.35 g/cc, volcanic glass content of 5 to 20 percent, acid-oxalate extractable aluminum plus one-half of the acid-oxalate extractable iron of 0.4 to 1.0 percent, and 15-bar water retention of 5 to 10 percent for air dried samples.

Reaction is neutral or slightly alkaline throughout.

The A horizon has value of 4 or 5 dry, 2 or 3 moist and chroma of 2 or 3 dry and moist.

The BA horizon has hue of 10YR or 7.5YR, value of 5 through 7 dry, 3 or 4 moist and chroma of 3 or 4 dry and moist. Texture is sandy loam or gravelly sandy loam.

The Bt horizon has hue of 10YR or 7.5YR, value of 5 through 7 dry and 3 to 5 moist and chroma of 3 or 4 dry and moist. Texture is sandy clay loam, clay loam, silt loam, loam, or gravelly loam, or gravelly sandy clay loam.

COMPETING SERIES: These are the [Buckbay](#), [Georgecreek](#), [Glenrose](#), [Hillcreek](#), [Jauriga](#), [Mozen](#), [Pachneum](#), [Ralock](#), [Rollinger](#), [Shushuskin](#), [Teewee](#), [Tolius](#), Umperon, [Vanderbilt](#), [Volinger](#), [Wenner](#), and [Wockum](#) series.

Buckbay soils - dry for 105 consecutive days following the summer solstice; have rock fragments of andesite origin within the particle-size control section; have weathered andesite below the paralithic contact

Georgecreek soils - 40 to 60 inches to a paralithic contact

Glenrose soils - more than 40 inches deep to a paralithic contact; dry for 60 to 75 consecutive days following the summer solstice

Hillcreek soils - no paralithic or lithic contact within 60 inches

Jauriga soils - more than 40 inches deep to a paralithic contact; dry for 105 consecutive days following the summer solstice

Mozen soils - 20 to 40 inches deep to a lithic contact

Pachneum soils - no paralithic or lithic contact within 60 inches

Ralock soils - no paralithic or lithic contact within 60 inches; have secondary carbonates at a depth of 22 to 38 inches.

Rollinger soils - no paralithic or lithic contact within 60 inches; dry for 100 to 120 consecutive days; have a mollic epipedon greater than 40 inches thick

Shushuskin soils - 20 to 40 inches to a lithic contact

Teewee soils - 40 to 60 inches to a paralithic contact

Tolius soils - no paralithic or lithic contact within 60 inches

Umperon soils - no paralithic or lithic contact within 60 inches

Vanderbilt soils - no paralithic or lithic contact within 60 inches

Volinger soils - have secondary carbonates at a depth of 43 to 60 inches

Wenner soils - no paralithic or lithic contact within 60 inches

Wockum soils - no paralithic or lithic contact within 60 inches

GEOGRAPHIC SETTING: Morical soils are on ridgetops, mountain slopes, and foothills. Slopes are 0 to 90 percent. They formed in residuum and colluvium mixed with volcanic ash and loess in the surface overlying weathered granite or quartzite lithology. Elevation is 2,000 to 3,200 feet. The climate is characterized by warm, dry summers and cool, moist winters. The mean annual precipitation is 12 to 18 inches. The mean January temperature is about 25 degrees F. and the mean July temperature is about 68 degrees F. The mean annual air temperature is 45 to 50 degrees F. The frost-free season is about 100 to 140 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Bisping](#), [Dinkelman](#), [Palmich](#), [Switchback](#), [Tyee](#), and [Yaxon](#) soils and the competing [Dragoon](#) soils. All of these soils except Dragoon and Yaxon soils lack an argillic horizon. In addition, Bisping, Dinkelman and Palmich soils are deep. Switchback soils lack a mollic epipedon and are frigid. Tyee soils are shallow. Yaxon soils are deep.

DRAINAGE AND SATURATED HYDRAULIC CONDUCTIVITY: Well drained; moderately high saturated hydraulic conductivity.

USE AND VEGETATION: These soils are used mostly for rangeland. Other uses include cropland, wildlife habitat, watershed, and recreation. Natural vegetation is bluebunch wheatgrass, Idaho fescue, arrowleaf balsamroot, Sandberg bluegrass, and lupine.

DISTRIBUTION AND EXTENT: Northeastern Washington; MLRAs 6, 8, and 9. The series is of moderate extent.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Portland, Oregon

SERIES ESTABLISHED: Chelan County, Washington, 1969.

REMARKS: Diagnostic horizons and features recognized in this pedon are:

Mollic epipedon - the zone from the surface to 12 inches (A horizon)

Argillic horizon - the zone from 23 to 37 inches (Bt horizon)

Paralithic contact - at 37 inches (top of Cr horizon)

Particle-size control section - the zone from 23 to 37 inches (Bt horizon)

Vitrandic feature - the zone from 0 to 12 inches (A horizon)

Soil moisture regime - xeric

Further investigation is needed to verify the Vitrandic subgroup feature and associated estimated properties

National Cooperative Soil Survey
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MYOMA SERIES

LOCATION MYOMA CA
Established Series
Rev. LAB/AAK/GMK
05/97

Typically, Myoma soils are light olive gray, moderately alkaline fine and very fine sands to a depth of about 31 inches. Below 31 inches they are strongly alkaline very fine sands.

TAXONOMIC CLASS: Mixed, hyperthermic Typic Torripsamments

TYPICAL PEDON: Myoma fine sand - uncultivated. (Colors are for dry soil unless otherwise noted.)

C1--0 to 18 inches; light olive gray (5Y 6/2) fine sand, olive gray (5Y 5/2) moist; single grain; loose dry and moist; common very fine and few fine roots; some conch shells; slightly effervescent; moderately alkaline (pH 8.2); clear smooth boundary. (9 to 20 inches thick)

C2--18 to 24 inches; light olive gray (5Y 6/2) very fine sand, olive gray (5Y 5/2) moist; single grain, loose; few common very fine roots; highly micaceous; cross bedding; strongly effervescent; moderately alkaline (pH 8.0); clear wavy boundary. (3 to 10 inches thick)

C3--24 to 31 inches; light olive gray (5Y 6/2) fine sand, olive gray (5Y 5/2) moist; single grain; loose; few very fine and fine roots; few conch and clam shells; moderately alkaline (pH 8.4); clear wavy boundary. (6 to 14 inches thick)

C4--31 to 60 inches; light olive gray (5Y 6/2) very fine sand, olive gray (5Y 4/2) moist; single grain; loose; few very fine roots; few conch and clam shell; strongly effervescent; strongly alkaline (pH 8.6)

TYPE LOCATION: Riverside County, California; 3 miles south of Indio; 440 feet east and 100 feet south of N1/4 corner section 11, T. 6 S., R. 7 E. SBBM.

RANGE IN CHARACTERISTICS: The texture of the C1 horizon is very fine sand to sand. Hue is 2.5Y and yellower, value is 5 through 7 dry and 3 through 6 moist with chroma of 1 through 3 moist and dry. The control section has less than 15 percent coarse fragments and less than 15 percent of coarse and

very coarse sand. The profile throughout is moderately to strongly alkaline with slight to violent effervescence.

COMPETING SERIES: These are the [Carrizo](#), [Carsitas](#), [Coachella](#), [Delhi](#), and [Rositas](#) series. Carrizo soils have more than 35 percent coarse fragments. Carsitas soils have 15 to 35 percent coarse fragments. Coachella soils have an irregular decrease in organic matter in the control section. Delhi soils have a thermic temperature regime. Rositas soils have hue of 10YR or redder throughout.

GEOGRAPHIC SETTING: Myoma soils are nearly level to rolling, have hummocky micro relief where unprotected and are at elevations of 200 feet below sea level to 1,800 feet above sea level. The soil formed in sand blown from recent alluvium. The climate is arid with an annual precipitation of 2 to 4 inches that occurs as gentle winter rain or erratic high intensity summer storms. The average January temperature is about 53 degrees F., average July temperature is 92 degrees F. and the average annual temperature is about 72 to 75 degrees F. The frost-free season (32 degrees F.+) is about 290 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the competing [Carsitas](#) and [Coachella](#) series and the [Gilman](#), [Niland](#), and [Salton](#) soils. Gilman soils have a coarse-loamy control section. Niland soils have contrasting textures in the control section, sandy over clayey. Salton soils have a fine-silty control section.

DRAINAGE AND PERMEABILITY: Somewhat excessively drained; very slow runoff; rapid permeability.

USE AND VEGETATION: Myoma soils are used principally for growing citrus fruits, grapes, alfalfa, dates and truck crops under irrigation. Native vegetation is ephemeral grasses and forbs, and a sparse cover of creosotebush, bush sunflower and mesquite.

DISTRIBUTION AND EXTENT: Southern California. Myoma soils are extensive.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: Riverside County (Coachella Valley Area), California, 1974.

OSD scanned by SSQA. Last revised by state on 5/74.

National Cooperative Soil Survey
U.S.A.

OAK GLEN SERIES

LOCATION OAK GLEN CA
Established Series
Rev. LCL/GWH/TDC/ET
02/2003

The Oak Glen series consists of deep, well drained soils that formed in alluvium derived mainly granitic rocks. Oak Glen soils are on alluvial fans and toe slopes. Slopes range from 2 to 25 percent. The mean annual precipitation is about 20 inches and the mean annual temperature is about 55 degrees F.

TAXONOMIC CLASS: Coarse-loamy, mixed, superactive, mesic Pachic Haploxerolls

TYPICAL PEDON: Oak Glen gravelly sandy loam, annual grass pasture. (Colors are for dry soil unless otherwise noted.)

A11--0 to 10 inches; dark grayish brown (10YR 4/2) gravelly sandy loam, very dark brown (10YR 2/2) moist; moderate very fine granular structure; soft, very friable, nonsticky and nonplastic; many fine roots; slightly acid (pH 6.3); diffuse smooth boundary. (8 to 14 inches thick)

A12--10 to 20 inches; dark grayish brown (10YR 4/2) gravelly sandy loam, very dark grayish brown (10YR 3/2) moist; moderate very fine granular structure; soft, very friable, nonsticky and nonplastic; common fine roots; slightly acid (pH 6.3); diffuse smooth boundary. (8 to 14 inches thick)

C--20 to 60 inches; dark grayish brown (10YR 4/2) gravelly sandy loam, very dark grayish brown (10YR 3/2) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; few fine roots; slightly acid (pH 6.5).

TYPE LOCATION: San Bernardino County, California; 7 miles north of Beaumont, north side of Oak Glen Road; NW1/4 section 36, T.1S.M R.1W.

RANGE IN CHARACTERISTICS: The mean annual soil temperature at a depth of 20 inches is about 54 to 59 degrees F. The soil temperature is above 47 degrees F. all the time or is above 47 degrees F. after the middle of February (95 to 120 days) in some soils. Soil between depths of about 8 and 24 inches usually is continuously dry in all parts from late May or early June until late November or early December, and usually is moist in some or all parts all the rest of the year. Rock fragments, in all parts, are less than 35 percent and usually consist of less than 20 percent mineral grains 2 to 5 mm in diameter. Texture throughout the profile is relatively uniform and is fine sandy loam, sandy loam or coarse sandy loam. The soil profile is neutral to moderately acid but is usually slightly acid or near slightly acid. Base saturation is 75 to 95 percent. Organic matter decreases regularly with depth and is more than 1 percent to a depth of 20 to 30 inches or more.

The A horizon is brown, gray, grayish brown, dark grayish brown, dark gray or dark brown (10YR 5/3, 5/1, 5/2 4/2, 4/1 4/3). Moist colors are very dark brown, very dark grayish brown, dark brown or very dark gray (10YR 2/2, 3/2, 3/3, 3/1). This horizon has weak or moderate granular or subangular blocky structure. It contains 1.5 to 4 percent organic matter.

The C horizon is dark grayish brown, grayish brown, dark brown, brown yellowish brown, light yellowish brown or reddish brown (10YR 4/2, 4/3, 5/2, 3/3, 5/3, 5/4, 6/4; 7.5YR 4/2, 5/2, 5/4; 5YR 4/3, 4/4). It has weak granular or subangular blocky structure or is massive, and it is soft or slightly hard.

COMPETING SERIES: These are the [Central Point](#) (T), [Edmundston](#), [Imbler](#) (T), [Ritter](#) (T), [Stevens](#) and [Uhlig](#) series. Central Point soils have a hard or very hard B horizon. [Edmundston](#) soils have a B horizon, have rock fragments that range from 2 to 10 mm and have a mean summer and winter difference of about 41 degrees F. Imbler soils have a mean annual soil temperature of 47 to 53 degrees F. Ritter soils are dominantly loam in the 10 to 40 inch control section, have a B horizon and are mildly alkaline in the lower part of the B horizon. Stevens soils are calcareous below a depth of 25 to 40 inches and are loam or silt loam in the particle size control section. Uhlig soils have a loam B horizon with the upper part containing a high component of loess and ash.

GEOGRAPHIC SETTING: Oak Glen soils are on fans and have slopes of 2 to 25 percent. Elevations are 3,400 to 6,000 feet. The soils formed in alluvium from a variety of rock but dominantly from granitic rock sources. The climate is subhumid mesothermal with warm, dry summers and cool, moist winters with some snow. The mean annual precipitation is 15 to 25 inches. The mean annual temperature is 52 to 57 degrees F.; the mean annual January temperature is about 42 degrees F.; and the mean July temperature is about 72 degrees F. The frost free season is 150 to 225 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Calpine](#), [Crafton](#), [Crouch](#) and [Mottsville](#) soils. Calpine soils are moist in the 8 to 24 inch control section for less than 90 days when the soil temperature is above 47 degrees F. Crafton soils have a paralithic contact at a depth of less than 20 inches. Crouch soils have base saturation of less than 75 percent and have a mollic epipedon less than 20 inches thick. Mottsville soils are sandy in the control section.

DRAINAGE AND PERMEABILITY: Well drained; slow to rapid runoff; moderately rapid permeability.

USE AND VEGETATION: These soils are used for growing pasture or deciduous orchards and forested areas are used for recreation. Principal native plants are shrubs, mixed hardwoods, and pine trees. Naturalized plants are annual grasses and forbs.

DISTRIBUTION AND EXTENT: The Oak Glen soils occur in mountain valleys in southern California. They are of moderate extent.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: San Bernardino County (Southwestern Part), California, 1972.

REMARKS: The activity class was added to the classification in February of 2003. Competing series were not checked at that time. - ET

National Cooperative Soil Survey
U.S.A.

OSITO SERIES

LOCATION OSITO CA
Established Series
REV: TMR/DRG/JGR/DJE/RLR
05/2014

The Osito series consists of shallow, well drained soils formed in material weathered from interbedded sandstone and shale. Osito soils are on uplands and have slopes of 15 to 70 percent. Mean annual precipitation is 432 centimeters (17 inches) and mean annual temperature is 14 degrees C (58 degrees F).

TAXONOMIC CLASS: Loamy, mixed, superactive, thermic, shallow Typic Haploxerepts

TYPICAL PEDON: Osito silt loam - on a south facing linear to slightly convex slope of 30 percent under chamise and annual grasses. (Colors are for dry soils unless otherwise stated. When described on 6/1/78 the soil was dry throughout).

A--0 to 5 centimeters (0 to 2 inches); brown (10YR 5/3) silt loam; dark brown (10YR 3/3) moist; moderate very fine and fine subangular blocky structure; hard, friable, sticky and plastic; common very fine roots; many very fine and fine tubular and interstitial pores; neutral (pH 7.3); clear wavy boundary. (5 to 13 cm (2 to 5 inches) thick)

Bw--5 to 38 centimeters (2 to 15 inches); pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; moderate fine and medium subangular blocky structure; hard, friable, sticky and very plastic; common very fine and medium roots; many very fine and fine tubular and interstitial pores; neutral (pH 7.0); abrupt wavy boundary. (20 cm to 38 cm (8 to 15 inches) thick)

Cr--38 centimeters (15 inches); light yellowish brown fine grained sandstone, highly fractured with fractures less than 1 mm wide and greater than 10 cm apart; fragments easily slake in water; easily cut with a spade, no roots.

TYPE LOCATION: Los Angeles County, California; approximately 1.2 miles southeast of Oak Flat Campground in the Angeles National Forest; 2250 feet east and 5 feet south of the NW corner of sec. 29, T. 11 N., R. 17 W., SBBM.

RANGE IN CHARACTERISTICS:

Soil Moisture: usually dry below 10 cm (4 inches) for at least 45 consecutive days within the 4 months following the summer solstice.

Mean annual soil temperature: 15 to 21 degrees C (59 to 70 degrees F)

Depth to a paralithic contact: 25 to 50 cm (10 to 20 inches)

Rock fragments: less than 15 percent gravel in the solum

Reaction: neutral or mildly alkaline.

Organic carbon: averages less than 0.6 percent after mixing the upper 18 cm (7 inches)

A horizon:

Dry color: hue of IOYR; value of 3 to 6; chroma of 2 to 4

Moist color: hue of IOYR; value of 3 or 4; chroma of 2 or 3

Texture: loam, silt loam

Structure: weak or moderate granular structure

Bw horizon:

Dry Color: hue of IOYR; value of 5 or 6; chroma of 3 or 4

Moist Color: hue of IOYR; value of 4 or 5; chroma of 3 or 4

Texture: loam, silt loam, or silty clay loam

Cr horizon: weathered sandstone or shale

COMPETING SERIES: These are the [Amador](#), [Borreguero](#), and [Wolfey](#) soils. Amador soils are weathered from rhyolitic tuffaceous sediments. Borreguero soils are weathered from marine sandstone. Wolfey soils receive 114 to 150 cm (45 to 60 inches) of precipitation each years.

GEOGRAPHIC SETTING: Osito soils are on uplands and have slopes of 15 to 70 percent. Elevation is 200 to 1200 meters (650 to 4000 feet). They are formed in material weathered from interbedded fine grained sandstone and shale. The climate is dry, subhumid, mesothermal with hot dry summers and cool moist winters. Mean annual precipitation is 330 to 500 mm (13 to 20 inches). Average January temperature is 9 degrees C (48 degrees F); average July temperature is 22 degrees C (72 degrees F); mean annual temperature is 14 degrees C (58 degrees F). Frost-free season is approximately 200 to 320 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Balcom](#), [Calleguas](#), [Millsholm](#), [Modesto](#), [Stonyford](#), [San Andreas](#), and [Trigo](#) soils. Balcom soils have a calcic horizon. Calleguas soils are calcareous through the profile. Millsholm soils have a lithic contact within 20 inches. Modesto and Stonyford soils have an argillic horizon. San Andreas soils have a coarse-loamy particle-size class and a mollic epipedon. Trigo soils lack a cambic horizon.

DRAINAGE AND PERMEABILITY: Well drained; medium or rapid runoff; moderate permeability.

USE AND VEGETATION: Used for watershed, wildlife habitat and recreation. The vegetation is chamise, manzanita, ceonothus, scrub oak, mountain mahogany, black sage, white sage, yerba santa, laurel sumac, buckwheat, and annual grasses.

DISTRIBUTION AND EXTENT: Southern California Mountain and foothills. This soil is moderately extensive.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: Los Angeles County (Angeles National Forest Area), California, 1980.

REMARKS: updated English to metric unit conversion, RIC conversion to tabular format, updated competing and geographically associated soils sections (RLR)

PACHAPPA SERIES

LOCATION PACHAPPA CA

Established Series

Rev. RU/JEM

01/2003

The Pachappa series consists of well drained (minimal) Noncalic Brown soils developed from moderately coarse textured alluvium. They occur on gently sloping alluvial fans and flood plains under annual grass-herb vegetation. Characteristically the Pachappa soils have grayish brown, slightly acid A1 horizons and brown, slightly finer textured, neutral B2 horizons that overlie moderately alkaline, slightly calcareous B3ca horizons and very slightly calcareous, stratified C horizons.

TAXONOMIC CLASS: Coarse-loamy, mixed, active, thermic Mollic Haploxeralfs

TYPICAL PEDON: Pachappa fine sandy loam (cultivated site).

Ap--0 to 14 inches; grayish brown (10YR 5/2) fine sandy loam, very dark grayish brown (10YR 3/2) moist; essentially massive dry, very weak very fine granular structure moist; slightly hard, very friable; micaceous; low in organic matter; slightly acid (pH 6.3); clear smooth boundary. (8 to 16 inches thick).

B2--14 to 28 inches; brown (10YR 5/3) loam, dark brown (10YR 4/3) moist; weak medium subangular block structure; hard, friable; thin patchy clay film of dark brown (10YR 3/3) color moist; neutral (pH 6.6); clear smooth boundary. (6 to 10 inches thick).

B3--28 to 45 inches; brown (10YR 5/3) fine sandy loam, dark brown (10YR 4/3) moist; very weak medium subangular blocky structure; hard, friable; thin very patchy clay films of dark brown (10YR 3/3) moist; slightly calcareous with both disseminated and segregated lime; moderately alkaline (pH 7.9); diffuse boundary. (16 to 30 inches thick).

C--45 to 60 inches+; similar colored stratified fine sandy loam and loamy sands; massive; slightly hard, very friable; very slightly calcareous, lime mainly disseminated; moderately alkaline (pH 8.2).

TYPE LOCATION: Madera County, California; SW 1/4, NW 1/4 sec. 3, T. 11S., R. 18E.

RANGE IN CHARACTERISTICS: The A1 horizons range in color from brown (10YR 5/3) to pale brown (10YR 6/3) or grayish brown (10YR 5/2), in texture from fine sand to loam, and in reaction from slightly acid to mildly alkaline. The lighter or paler colors are generally associated with coarser texture. The B2 horizons are characteristically noncalcareous and weakly developed. Lime occurs in the B3ca horizon but is not always distinctly segregated. The C horizon is variable in color and texture, being pale brown (10YR 6/3), brown (10YR 5/3), light brownish gray (10YR 6/2) or light yellowish brown (10YR 6/4) fine sandy loam, sandy loams, loamy sands, or sands. In places the soils rest on older finer textured marly deposits within a depth of 5 feet. Variable amounts of excess soluble salts and exchangeable sodium also occur, principally below the A1 horizon but may be present in the surface layer as well. In a few areas an unconforming lime-silica hardpan occurs at depths of 2 1/2 feet or more.

COMPETING SERIES:

GEOGRAPHIC SETTING: Nearly level to very gently undulating; the coarser textured types where exposed to wind are slightly hummocky and wind blown. The Pachappa soils occur at elevations under 1000 feet in a semiarid to dry subhumid mesothermal climate having a mean annual precipitation of 10 to 18 inches with hot, dry summers and cool, moist winters; an average January temperature of 45 degrees F.; an average July temperature of 80 degrees F. with a mean annual temperature of 61 degrees F and an average frost free season of over 250 days.

GEOGRAPHICALLY ASSOCIATED SOILS: The Pachappa soils occur in the same general area as [Fresno](#), [Grangeville](#), [Hanford](#) and [Traver](#) soils. In some respects they resemble the [Borden](#), [Chino](#), [Greenfield](#) and [Hesperia](#) soils, all of which are developed on similar parent materials. The Borden soils have clay loam rather than loam B2 horizons and have moderately to strongly alkaline C horizons. The

Chino soils occur in nearly level areas with restricted drainage. They have gray A1 horizons that are high in organic matter and grayish brown, weak textural B horizons. The Greenfield soils are essentially noncalcareous throughout, lack moderately alkaline C horizons, and lack dark colored clay films. The Hesperia soils, under more arid conditions have light brown A1 horizons and lack textural B horizons.

DRAINAGE AND PERMEABILITY: General drainage in good. Surface runoff is very slow, and permeability is moderate. In places the soil is subject to occasional overflow and high water table. The soils appear to have developed under conditions of occasional high water table. Most areas are no longer so affected, but excess salts and exchangeable sodium are still present in places.

USE AND VEGETATION: Mostly under irrigation for alfalfa, small grains and row crops as well as dry farm small grains. Yields are normally good. Annual grasses, herbs and shrubs.

DISTRIBUTION AND EXTENT: San Joaquin Valley and inland valleys of southern California. The Pachappa series is quite extensive in central and southern California.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: Santa Ana Watershed SCS Survey, Cucamonga Unit, San Bernardino County, California, 1940. (Source of name is Pachappa Hill and railroad siding, near City of Riverside.)

REMARKS: The activity class was added to the classification in January of 2003. Competing series were not checked at that time. - ET

OSD scanned by SSQA. Last revised by state on 1/59.

National Cooperative Soil Survey
U.S.A.

PACIFICO SERIES

LOCATION PACIFICO CA
Established Series
TMR/DRG/JRG/DJE/ET
04/2000

The Pacifico series consists of shallow, somewhat excessively drained soils that formed in material weathered from granitic and anorthosite rocks. Pacifico soils are on uplands and have slopes of 15 to 75 percent. The mean annual precipitation is 22 inches and the mean annual temperature is 54 degrees F.

TAXONOMIC CLASS: Mixed, mesic, shallow Typic Xeropsamments

TYPICAL PEDON: Pacifico loamy sand on a northeast facing linear to slightly convex mountainside slope of 55 percent under canyon live oak and bigcone Douglas-fir. (Colors are for dry soils unless otherwise stated. When described on 1/15/80 the soil was moist throughout).

O--0.5 inch to 0; oak and conifer leaf and needle litter.

A--0 to 5 inches; grayish brown (10YR 5/2) loamy sand, very dark grayish brown (10YR 3/2) moist; weak very fine granular structure; soft, very friable, nonsticky and nonplastic; common very fine roots; many very fine tubular and interstitial pores; 7 percent pebbles; moderately acid (pH 6.0); clear wavy boundary. (5 to 7 inches thick)

C--5 to 17 inches; light brownish gray (10YR 6/2) loamy sand; grayish brown (10YR 5/2) moist; weak very fine granular structure; soft, very friable, nonsticky and nonplastic; few very fine and fine roots; many very fine tubular and interstitial pores; 5 percent pebbles; neutral (pH 7.0); clear wavy boundary. (5 to 13 inches thick)

Cr--17 inches; highly fractured, strongly weathered granite; very few fine roots in fractures, easily cut with a spade.

TYPE LOCATION: Los Angeles County, California; approximately 1.1 miles northwest of Mill Creek Station on Forest Road 3N17; 2500 feet west and 2650 feet south of the NE corner sec. 25, T. 4N., R. 12 W., SBB&M.

RANGE IN CHARACTERISTICS: Depth to a highly fractured paralithic contact is 10 to 20 inches. The mean annual soil temperature at the contact is estimated to be between 47 and 59 degrees F. The soil is usually dry between 12 and 20 inches for at least 45 consecutive days within the four months following the summer solstice. Coarse fragments make up 5 to 15 percent of the soil by volume.

The A horizon has dry color of 10YR 4/4, 5/2, 5/3, 6/2 or 6/3; moist color of 10YR 3/2, 3/3, 3/4, 4/2 or 4/3. It is loamy fine sand or loamy sand. Organic carbon averages less than 0.6 percent after mixing the upper 7 inches. It has very fine granular structure or is single grain. It is medium acid or slightly acid. The C horizon has dry color of 10YR 6/2, 7/2, 7/3 or 2.5Y 6/2; and moist color of 10YR 5/2, 5/3, 5/4 or 2.5Y 4/2. It is sand or loamy sand. It has weak very fine granular structure or is massive. It is slightly acid or neutral.

COMPETING SERIES: Similar soils in other families are the Heitz, [Omstott](#), [Tollhouse](#), and [Wapi](#) series. Heitz soils have a lithic contact within 20 inches and a frigid soil temperature regime. Omstott soils have a loamy particlesize control section. Tollhouse soils have a mollic epipedon and a loamy particle-size control section. Wapi soils have a lithic contact within 20 inches.

GEOGRAPHIC SETTING: Pacifico soils are on uplands. Slope is 15 to 75 percent. Elevation is 4000 to 6500 feet. They formed in residuum weathered from granite and anorthosite rock. The climate consists of hot, dry summers and cool, moist winters. Mean annual precipitation is 20 to 25 inches. Snowfall is 20 to 40 inches at elevations above 5000 feet. Average January temperature is 42 degrees F.; average July temperature is 73 degrees F.; mean annual temperature is 54 degrees F. The frost-free season is 180 to 210 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are soils in the [Sur](#), [Tyee](#), and the competing [Tollhouse](#) and [Wapi](#) families. Sur soils have a mollic epipedon. Tyee soils have a loamy particle-size control section.

DRAINAGE AND PERMEABILITY: Somewhat excessively drained; medium or rapid runoff; rapid permeability.

USE AND VEGETATION: Used for watershed, wildlife habitat, and recreation. Vegetation is canyon live oak, coulter pine, bigcone Douglas-fir, and Jeffrey pine.

DISTRIBUTION AND EXTENT: Mountain slopes, San Gabriel and San Bernardino Mountains, Southern California. The soil is moderately extensive.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California.

SERIES ESTABLISHED: Los Angeles County (Angeles National Forest Area), California, 1980.

REMARKS: Series was entered into Ames database 04/2000.

National Cooperative Soil Survey
U.S.A.

PLACENTIA SERIES

LOCATION PLACENTIA CA
Established Series
Rev. TDC/LCL
02/97

The Placentia series is a member of the fine, montmorillonitic, thermic family of Typic Natrixeralfs. Typically, Placentia soils have brown, medium acid, sandy loam A horizons, dark reddish brown, clay and heavy sandy clay loam B2t horizons with prismatic structure in the upper part and strong brown, gravelly sandy loam C horizons.

TAXONOMIC CLASS: Fine, smectitic, thermic Typic Natrixeralfs

TYPICAL PEDON: Placentia sandy loam - cultivated. (Colors are for dry soil unless otherwise stated.)

Ap1--0 to 5 inches; brown (7.5YR 5/4) sandy loam, dark brown (7.5YR 3/2) moist; massive; compacted by tillage; hard, very friable, slightly sticky, slightly plastic; common very fine and few fine roots; many very fine interstitial and few very fine and medium tubular pores; medium acid (pH 6.0); clear smooth boundary. (4 to 3 inches thick)

Ap2--5 to 12.5 inches; brown (7.5YR 5/4) sandy loam, dark brown (7.5YR 3/2) moist; weak medium subangular blocky structure; hard, very friable, slightly sticky, slightly plastic; many very fine roots; many very fine interstitial and common very fine and fine tubular pores; horizon somewhat disturbed by many gopher holes filled with granular material, roots much more numerous in granular material; medium acid (pH 6.0); abrupt smooth boundary. (6 to 13 inches thick)

A2--12.5 to 13 inches; brown (10YR 5/3) sandy loam, dark brown (7.5YR 4/4) moist; weak medium platy structure; hard, very friable, slightly sticky, slightly plastic; many very fine interstitial and few very fine tubular pores; medium acid (pH 6.0); abrupt smooth boundary. (1/4 to 4 inches thick)

B21t--13 to 20 inches; dark reddish brown (5YR 3/4 moist or dry) clay; moderate coarse prismatic structure, prisms slightly rounded at top; extremely hard, very firm, very sticky, plastic; common very fine roots on exterior of peds; few very fine interstitial and few very fine tubular pores; continuous thin clay films as bridges and continuous moderately thick clay films on faces of peds; noncalcareous; moderately alkaline (pH 8.0); gradual smooth boundary. (6 to 10 inches thick)

B22t--20 to 29 inches; dark reddish brown (5YR 3/3) clay, dark brown (7.5YR 3/4) moist; strong coarse angular blocky structure; extremely hard, very firm, very sticky, plastic; common very fine roots on exterior of peds; few very fine interstitial and few very fine tubular pores; continuous thin clay films in bridges and continuous moderately thick films on faces of peds; few black Mn(?) stains on faces of peds; noncalcareous; moderately alkaline (pH 8.0); clear wavy boundary. (8 to 12 inches thick)

B23tca--29 to 36 inches; reddish brown (5YR 4/4 moist or dry) heavy clay loam, same color rubbed; moderate medium angular blocky structure; very hard, firm, sticky, plastic; few very fine roots on exteriors of peds; common very fine interstitial and tubular pores; many thin clay films as bridges and continuous thin films on faces of peds; strongly effervescent in medium lime seams; moderately alkaline (pH 8.0); gradual smooth boundary. (3 to 10 inches thick)

B24t--36 to 42 inches; strong brown (7.5YR 5/6) heavy sandy clay loam, dark reddish brown (5YR 3/4) moist; moderate medium angular blocky structure; very hard, firm, sticky, plastic; few very fine roots; many very fine interstitial pores; many thin clay films in bridges and continuous thin clay films on faces of peds; few lime seams trailing down from B23tca; moderately alkaline (pH 8.0); clear smooth boundary. (0 to 8 inches thick)

B3t--42 to 58 inches; strong brown (7.5YR 5/6) light sandy clay loam, brown (7.5YR 4/4) moist, same moist color rubbed; massive; very hard, friable, sticky, plastic; few very fine roots; many very fine interstitial and few very fine and medium tubular pores; common thin clay films in bridges; noncalcareous; this horizon somewhat brittle with weak duripan features; moderately alkaline (pH 8.0); gradual smooth boundary. (5 to 20 inches thick)

C--58 to 68 inches; strong brown (7.5YR 5/6) gravelly sandy loam, brown (7.5YR 4/4) moist; massive; hard, very friable, slightly sticky, slightly plastic; many very fine interstitial and few fine tubular pores; common very thin clay films in bridges; moderately alkaline (pH 8.0); augered to depth of 100 inches without change.

TYPE LOCATION: Monterey County, California; 0.72 mile NW on Iverson Road from intersection with Johnson Canyon Road, 0.47 mile NE to reservoir 300 feet SW, 24 feet NW.

RANGE IN CHARACTERISTICS: The mean annual soil temperature is 59 degrees to 67 degrees F. The soil between depths of about 5 and 15 inches usually is moist in some or all parts all of the time from

November or mid-December until sometime late in April or May and usually is dry all the rest of the year. The A horizon is grayish brown to pale brown (10YR 5/2, 4/2, 5/3, 5/4, 6/3; 7.5YR 5/2, 5/4). It is sandy loam or loam with about 24 to 28 percent coarse and very coarse sand. Average organic matter is less than 1 percent or additionally the surface horizon is hard or very hard and massive when dry. This horizon is medium acid to mildly alkaline. The A2 horizon was dry or moist values 1 unit higher than the adjacent horizons. The following units are included, 10YR 5/3, 6/3, 7/3, 7/2, 6/2; 7.5YR 5/4, 6/4, 6/2, 7/2. The B2t horizon has an abrupt upper boundary with an absolute clay increase from A to B2t horizon of 15 to 25 percent. The B2t horizon is reddish brown to yellowish brown (5YR 3/3, 3/4, 4/3, 4/4, 5/3, 5/4; 7.5YR 3/2, 3/4, 4/4, 4/2, 5/4). It is clay, sandy clay or gravelly clay with 35 to 45 percent clay and 15 to 20 percent coarse and very coarse sand. This horizon is neutral to moderately alkaline and alkalinity increases in the lower part. The upper 16 inches of this horizon has more than 15 percent exchangeable sodium in some part and in most pedons the sodium is more than 15 from the upper boundary downward. Structure in the upper part is prismatic or columnar and in the lower part it is massive or more commonly angular blocky. Lower B2 or B3 horizons are strong brown, reddish brown or brown in 5YR, 7.5YR or 10YR hue. They are sandy clay loam, loam or sandy loam with considerable coarse and very coarse sand and some gravel. They are mildly or moderately alkaline and most pedons have a few lime segregations in the lower B or upper C horizons.

COMPETING SERIES: These are the [Antioch](#), [Bonsall](#), [Cometa](#), [Corning](#), [Madera](#), [Ramona](#), [Riz](#), [San Miguel](#), and [Stockpen](#) series. Antioch soils have less than 5 percent coarse and very coarse sand. Bonsall and Stockpen soils lack an A2 horizon. Cometa and Corning soils lack a natric horizon. Madera soils have a duripan. Ramona soils have less than 35 percent clay in the argillic horizon. Riz soils lack an abrupt A-B horizon boundary with 15 percent absolute clay difference. San Miguel soils have a lithic contact 20 to 34 inches below the surface.

SETTING: Placentia soils are nearly level to moderately sloping and are on fans and terraces at elevations of 50 to 2,500 feet. They formed in alluvium from granite and other rocks of similar composition and texture. The climate is dry subhumid mesothermal with long dry warm summers and cool moist winters. The mean annual precipitation is about 12 to 18 inches. The average January temperature is about 50 degrees F., average July temperature is 65 degrees to 75 degrees F., and the average annual temperature is 58 degrees to 65 degrees F.

PRINCIPAL ASSOCIATED SOILS: These are the competing Bonsall and Ramona soils and the Chualar, Danville, Gloria, Hanford, Fallbrook, and Vista soils. Chualar and Danville soils have argillic horizons. Gloria soils have a duripan. Hanford and Vista soils lack an argillic horizon. Fallbrook soils have less than 35 percent clay in the argillic horizon.

DRAINAGE AND PERMEABILITY: Well or moderately well drained; slow to rapid runoff; very slow permeability.

USE AND VEGETATION: Used for the production of citrus, truck crops, small grain, hay, and forage. Most uncultivated areas have annual grasses and forbs.

DISTRIBUTION AND EXTENT: Mostly Salinas Valley and coastal parts of southern California. Placentia soils are extensive.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: Soil Survey around Santa Ana, Orange County, California, 1900.

REMARKS: The Placentia soils were formerly classified as (maximal) Noncalcic Brown soils.

ADDITIONAL DATA: Riverside Laboratory, S65-Calif-27-14, not yet published.

OSD scanned by SSQA. Last revised by state on 11/72.

National Cooperative Soil Survey
U.S.A.

RAMONA SERIES

LOCATION RAMONA CA

Established Series
Rev. GB/LAB/LCL
01/2003

The Ramona series is a member of the fine-loamy, mixed, thermic family of Typic Haploxeralfs. Typically, Ramona soils have brown, slightly and medium acid, sandy loam and fine sandy loam A horizons, reddish brown and yellowish red, slightly acid, sandy clay loam B2t horizons, and strong brown, neutral, fine sandy loam C horizons.

TAXONOMIC CLASS: Fine-loamy, mixed, superactive, thermic Typic Haploxeralfs

TYPICAL PEDON: Ramona fine sandy loam - cultivated (Colors are for dry soil unless otherwise noted.)

Ap--0 to 14 inches; brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; massive; hard, very friable, nonsticky, nonplastic; few fine roots; many very fine interstitial and tubular pores; moderately acid (pH 6.0); clear smooth boundary. (8 to 15 inches thick)

A12--14 to 23 inches; brown (10YR 5/3) fine sandy loam, dark brown (10YR 3/3) moist; massive; hard, very friable, slightly sticky, slightly plastic; few fine roots; common fine tubular pores; slightly acid (pH 6.5); clear smooth boundary. (5 to 10 inches thick)

B1--23 to 29 inches; brown (7.5YR 5/4) loam, dark reddish brown (5YR 3/4) moist; moderate coarse angular blocky structure; hard, friable, slightly sticky, slightly plastic; few fine roots; many fine tubular pores; few thin clay films on faces of peds and lining pores; slightly acid (pH 6.5); clear smooth boundary. (3 to 8 inches thick)

B21t--29 to 37 inches; reddish brown (5YR 4/4) sandy clay loam, dark reddish brown (5YR 3/4) moist; moderate coarse prismatic structure; very hard, firm, sticky, plastic; few fine roots; common fine tubular pores; common thin clay films on faces of peds and lining pores; slightly acid (pH 6.5); gradual smooth boundary. (6 to 10 inches thick)

B22t--37 to 46 inches; yellowish red (5YR 5/6) sandy clay loam, yellowish red (5YR 4/6) moist; moderate coarse prismatic structure; very hard, firm, sticky, plastic; very few fine roots; few fine tubular pores; many moderately thick clay films on faces of peds and lining pores; slightly acid (pH 6.5); gradual smooth boundary. (6 to 12 inches thick)

B23t--46 to 58 inches; yellowish red (5YR 5/6) sandy clay loam, yellowish red (5YR 4/6) moist; moderate coarse prismatic structure; very hard, firm, sticky, plastic; few fine tubular pores; many moderately thick clay films on faces of peds and lining pores; slightly acid (pH 6.5); gradual smooth boundary. (8 to 14 inches thick)

B3--58 to 68 inches; yellowish red (5YR 5/6) sandy clay loam, yellowish red (5YR 4/6) moist; moderate coarse angular blocky structure; very hard, firm, sticky, plastic; few fine tubular pores; many moderately thick clay films on faces of peds and lining pores; neutral (pH 6.8); clear irregular boundary. (6 to 12 inches thick)

C--68 to 74 inches; strong brown (7.5YR 5/6) fine sandy loam, dark brown (7.5YR 4/4) moist; massive; hard, firm, slightly sticky, slightly plastic; few fine pores; neutral (pH 7.0).

TYPE LOCATION: Riverside County, California; about 3 miles northwest of Beaumont, California; approximately 1,100 feet north and 500 feet west of the S1/4 corner of sec. 31, T.2S., R.1W.

RANGE IN CHARACTERISTICS: The mean annual soil temperature at a depth of 20 inches is 59 degrees to 65 degrees F. and the soil temperature usually is not below 47 degrees F. or is below 47 degrees F. for only a few days in January. Soil between the depth of about 5 and 15 inches usually is moist in some or all parts from November or early December until late April or May and is dry all the rest of the year. The A and B horizons have more than 15 percent combined coarse and very coarse sand and 5 to 35 percent fine rock fragments of 2 to 5mm size. Rock fragments larger than 5mm are less than 5 percent. The C horizons are variable as to coarse sand, fine gravel, and rock fragments larger than 5mm but in general are more coarse than the A and B horizons.

The A horizon is light brownish gray to dark grayish brown or yellowish brown (10YR 6/2, 5/2, 4/2, 6/3, 5/3, 4/3, 5/4; 7.5YR 5/2, 5/4) when dry. It is coarse sandy loam, sandy loam, fine sandy loam or light loam and has less than 1 percent organic matter. After considerable cultivation or cattle trampling some or all of the A horizon is hard or very hard and massive when dry. It is neutral to moderately acid. The lower boundary is gradual or there is an A3 horizon or a B1 horizon or both horizons are present.

The B2t horizon is dark brown, strong brown, brown or light brown in 7.5YR hue or reddish brown or yellowish red in 5YR hue in yellowish in 10YR hue in the lower part. It is heavy sandy loam, sandy clay loam or loam with 18 to 27 percent clay. Total clay content is 3 to 12 percent more in the B2t horizon than in the A horizon. The B2t horizon is slightly acid or neutral in all parts or in some pedons it is slightly alkaline in the lower part. It has weak or moderate angular blocky or prismatic structure. In pedons having a B3 or B3t horizon, color of the transitional horizon is similar to the B2t horizon or it has a hue 1/4 letter interval less red. It is slightly acid to moderately alkaline.

The C horizon is coarse sandy loam, fine sandy loam or loam and is neutral to moderately alkaline. In some pedons it is calcareous in some part with a small amount of segregated or disseminated lime.

COMPETING SERIES: These are the [Arbuckle](#), [Blasingame](#), [Borden](#), [Esparto](#), [Fallbrook](#), [Montpellier](#), [Sesame](#), Snalling, [Tivy](#), [Wasioja](#), and [Wyman](#) series. Arbuckle soils are gravelly with more than 15 percent gravel larger than 5mm in the argillic horizon. Blasingame and Tivy soils have a paralithic contact less than 40 inches below the surface. Borden soils have an argillic horizon that is moderately alkaline and is calcareous in some or all parts. Esparto soils are marginal to the silty family with less than 20 percent fine gravel, coarse and very coarse sand. Fallbrook soils have 27 to 35 percent clay in the argillic horizon. The difference in total clay content between A and B2t horizon is more than 10 percent absolute. Sesame soils have a lithic contact between A and B2t horizon is more than 10 percent absolute. Sesame soils have a lithic contact at a depth of 20 to 40 inches. Snalling soils are medium acid in the B2t horizon. (See Remarks). Wasioja soils have an aridic moisture regime marginal to xeric. Wyman soils have less than 15 percent coarse and very coarse sand, less than 10 percent absolute clay difference between A and B horizon and about 27 to 35 percent clay in the B2t horizon.

GEOGRAPHIC SETTING: The Ramona soils are nearly level to moderately steep. They are on terraces and fans at elevations of 250 to 3,500 feet. They formed in alluvium derived mostly from granitic and related rock sources. The climate is dry subhumid mesothermal with warm dry summers and cool moist winters. Mean annual precipitation is 10 to 20 inches. Average January temperature is 50 degrees F., average July temperature is about 70 degrees F., average annual temperature is 60 degrees to 66 degrees F. The frost-free season is 230 to 320 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the competing [Fallbrook](#) and [Montpellier](#) soils and the [Arlingtonk](#), [Greenfield](#), [Hanford](#), and [Placencia](#) soils. Arlington soils have a duripan. Greenfield soils have less than 18 percent clay in the argillic horizon. Hanford soils lack an argillic horizon. Placencia soils have a natric horizon with more than 35 percent clay.

DRAINAGE AND PERMEABILITY: Well-drained; slow to rapid runoff; moderately slow permeability.

USE AND VEGETATION: Used mostly for production of grain, grain-hay, pasture, irrigated citrus, olives, truck crops, and deciduous fruits. Uncultivated areas have a cover of annual grasses, forbs, chamise or chaparral.

DISTRIBUTION AND EXTENT: The Ramona soils are in the interior valleys of central and the western part of southern California. The soils are extensive.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: Los Angeles County (Pasadena Area), California, 1915.

REMARKS: The Ramona soils are formerly classified as Noncalcic Brown soils. The Snalling soils are differentiated from Ramona soils on soil reaction in the B2t horizon. Some differentiae used to separate series within this family are difficult to apply consistently.

The activity class was added to the classification in January of 2003. Competing series were not checked at that time. - ET

OSD scanned by SSQA. Last revised by state on 10/72.

SAN EMIGDIO SERIES

LOCATION SAN EMIGDIO CA
Established Series
Rev. AAK/LCL/RWK
06/1999

The San Emigdio series consists of very deep, well drained soils that formed in dominantly sedimentary alluvium. San Emigdio soils are on fans and floodplains and have slopes of 0 to 15 percent. The mean annual precipitation is about 15 inches and the mean annual air temperature is about 62 degrees F.

TAXONOMIC CLASS: Coarse-loamy, mixed, superactive, calcareous, thermic Typic Xerofluvents

TYPICAL PEDON: San Emigdio fine sandy loam, grassland, formerly cultivated. (Colors are for dry soil unless otherwise noted).

Ap--0 to 8 inches; light brownish gray (2.5Y 6/2) fine sandy loam, dark grayish brown (2.5Y 4/2) moist; weak medium and fine granular structure; hard, very friable, nonsticky and nonplastic; many very fine roots; many fine tubular pores; slightly effervescent, disseminated lime; moderately alkaline (pH 8.2); abrupt smooth boundary. (0 to 10 inches thick)

C1--8 to 22 inches; light brownish gray (2.5Y 6/2) fine sandy loam, dark grayish brown (2.5Y 4/2) moist; massive; hard, very friable, nonsticky and nonplastic; common fine roots; many fine tubular pores; strongly effervescent, lime disseminated and in filaments; moderately alkaline (pH 8.2); clear smooth boundary. (10 to 16 inches thick)

C2--22 to 42 inches; light gray (2.5Y 7/2) fine sandy loam, light olive brown (2.5Y 5/3) moist; massive; slightly hard, very friable, nonsticky and nonplastic; few fine roots; many fine tubular pores; strongly effervescent, lime disseminated and in filaments; moderately alkaline (pH 8.2); clear smooth boundary. (15 to 24 inches thick)

C3--42 to 60 inches; light gray (2.5Y 7/2) fine sandy loam, light olive brown (2.5Y 5/3) moist; massive; slightly hard, very friable, nonsticky and nonplastic; few fine roots; many fine tubular pores; strongly effervescent, lime disseminated and in filaments; moderately alkaline (pH 8.2).

TYPE LOCATION: Riverside County, California; approximately 800 feet east, 400 feet south of NW corner section 16. T.3 S., R.2 W.

RANGE IN CHARACTERISTICS: The mean annual soil temperature at a depth of 20 inches is 60 to 65 degrees F and the soil temperature usually is not below 47 degrees F at any time. Soil between the depths of about 8 and 15 inches is dry all of the time from April or May until late October to early December and is moist in some or all parts all the rest of the year. The soil is coarse sandy loam, sandy loam, fine sandy loam, silt loam, or loam to a depth of 40 inches or more. Rock fragments, mostly fine pebbles, range to 15 percent, the amount tends to be greater in the lower part of the profile. The 10 to 40 inch control section averages less than 18 percent clay. There is weak to strong stratification and the organic matter decreases irregularly with depth.

The A horizon has dry color of 10YR 5/3, 5/4, 6/2, 6/3 or 6/4; 2.5Y 6/2 or 7/2. Moist colors are 10YR 4/3, 3/4, 4/3, 4/4; 2.5Y 4/2, 3/2. The organic matter is 0.5 to 1.5 percent. It is mildly to moderately alkaline.

The C horizon has dry color of 10YR 6/3, 6/4, 6/6 or 7/6; 2.5Y 6/2, 7/2, 7/3, 7/4; moist colors are 10YR 4/3, 4/4, 4/6, 5/3, 5/4 or 5/6. When moist values are 3, dry values are 6 or more. Lime is disseminated throughout and many pedons have small amounts of fine segregated lime.

COMPETING SERIES: San Emigdio is the only series in this family. Similar soils are in the [Anthony](#), [Docas](#), [Gila](#), [Hanford](#), [Honcut](#), [Ireteba](#), [Maywood](#), [Pico](#), Ramada, and [Reiff](#) series. Anthony, Gila, and Ireteba soils have an aridic moisture regime. Docas soils have a fine-silty control section. Hanford and Honcut soils are noncalcareous and have a regular decrease in organic matter. Maywood, Ramada, and Reiff soils are noncalcareous in the upper part or in all parts of the profile. Pico soils have a mollic epipedon.

GEOGRAPHIC SETTING: San Emigdio soils are on alluvial fans, floodplains, and in narrow valleys at elevations of 100 to 2,000 feet. Slopes are 0 to 15 percent. The soils formed in moderately coarse textured alluvium dominantly from sedimentary formations. The climate is dry subhumid mesothermal with hot dry summers and cool moist winters. Mean annual precipitation, all in the form of rain, is 10 to 20 inches. Average January temperature is about 50 to 52 degrees F, average July temperature is about 70 to 74 degrees F, and the mean annual temperature is about 60 to 65 degrees F. The frost-free season is about 200 to 280 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Hanford](#), [Metz](#), and [San Timoteo](#) soils. Metz soils have an average texture of loamy sand in the 10 to 40 inch control section. San Timoteo soils have a paralithic contact at depths of 20 to 40 inches.

DRAINAGE AND PERMEABILITY: Well drained; negligible to low runoff; moderately rapid permeability.

USE AND VEGETATION: Used for growing citrus fruit, alfalfa, truck crops, dryland grain, and some areas are in homesites. Uncultivated areas are annual grasses and forbs.

DISTRIBUTION AND EXTENT: Intermountain valleys in the western part of southern California, MLRA 14, 17, and 19. The soil is of moderate extent. (See Remarks).

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: Bakersfield Area, California, 1940.

REMARKS: The San Emigdio series was initially mapped extensively in an area now recognized as having an aridic moisture regime and later was mapped in a xeric moisture regime. In future mapping, the Anthony series will probably replace soils placed in the San Emigdio series in the aridic regime. Last revised by the state on 2/91.

National Cooperative Soil Survey
U.S.A.

SAN TIMOTEO SERIES

LOCATION SAN TIMOTEO CA
Established Series
Rev. AAK-RCH-TDC-MAV
06/1999

The San Timoteo series consists of moderately deep, well to somewhat excessively drained soils formed in material weathered from shale, sandstone and calcified weathered granite. San Timoteo soils are on uplands and have slopes of 2 to 75 percent. The mean annual precipitation is about 16 inches and the mean annual temperature is about 63 degrees F.

TAXONOMIC CLASS: Coarse-loamy, mixed, superactive, calcareous, thermic Typic Xerorthents

TYPICAL PEDON: San Timoteo loam - range. (Colors are for dry soil unless otherwise stated.)

0i--1/8 to 0 inch; dark brown litter from low shrubs, partially decomposed.

A1--0 to 9 inches; pale brown (10YR 6/3) loam, brown (10YR 5/3) moist; weak fine granular structure; soft, friable, nonsticky and slightly plastic; many fine and medium roots; violently effervescent; moderately alkaline (pH 8.2); clear smooth boundary. (8 to 12 inches thick)

A2--9 to 14 inches; light gray (10YR 7/2) loam, pale brown (10YR 6/3) moist; massive; soft, friable, nonsticky and slightly plastic; few medium and coarse roots; violently effervescent; moderately alkaline (pH 8.2); gradual smooth boundary. (5 to 8 inches thick)

C--14 to 22 inches; light gray (10YR 7/2) loam, grayish brown (10YR 5/2) moist; massive; soft, friable, nonsticky and slightly plastic; few medium and coarse roots; violently effervescent; moderately alkaline (pH 8.2); clear irregular boundary. (5 to 8 inches thick)

Cr--22 to 28 inches; light gray (10YR 7/2) decomposing soft sandstone that can be broken down to sandy loam, pale brown (10YR 6/3) moist; violently effervescent; moderately alkaline (pH 8.2).

TYPE LOCATION: Riverside County, California; about 5 miles north of Moreno, California; approximately 150 feet SW of intersection of Redlands Blvd. and San Timoteo Canyon Road, 900 feet north and 500 feet east of SW corner sec. 13, T. 2 S., R. 3 W., SBBM.

RANGE IN CHARACTERISTICS: Depth to a paralithic contact is typically 20 to 40 inches, but is only 20 to 30 inches in many pedons. The mean annual soil temperature is 59 to 65 degrees F and rarely, if ever, is the soil temperature below 47 degrees F. The soil between depths of about 8 to 25 inches usually is dry in all parts from about April until late November or mid-December, and usually is moist in some or all parts all the rest of the year. Textures are sandy loam, fine sandy loam, loam or silt loam and have less than 18 percent clay. The soils are slightly to violently effervescent throughout, but have less carbonates in the upper parts. Some pedons do not have carbonates in the upper parts. Carbonates are generally disseminated with few, if any, segregations other than in the underlying soft sandstone material. It is slightly or moderately alkaline.

The A horizon has dry color of 10YR 5/2, 5/3, 6/1, 6/2, 6/3, 6/4, 7/1, 7/2; 2.5Y 5/2, 6/4, 7/2. Moist colors are 10YR 4/2, 4/3, 4/4, 5/3, 5/4 and 6/3. It has less than 1 percent organic matter in the upper 7 inches of soil.

The C horizon has dry color of 10YR 5/3, 5/4, 6/1, 6/2, 6/3, 6/4, 7/1, 7/2, 7/3 and 7/4; 2.5Y 6/2, 6/4 and 7/2. Moist colors are 10YR 4/3, 4/4, 4/6, 5/2, 5/3, 5/4, 5/6 and 6/3.

COMPETING SERIES: This is the [Padres](#) (T) series. [Balcom](#), [Castaic](#), [Cieneba](#), [Garretson](#), [Pollasky](#), [San Emigdio](#), [Saugus](#), [Shedd](#) and [Trigo](#) series are similar soils in other families. Balcom and Castaic soils have more than 18 percent clay. Cieneba and Trigo soils have a paralithic contact less than 20 inches below the surface. Garretson soils lack a paralithic contact and have more than 18 percent clay. Pollasky and Saugus soils are noncalcareous. San Emigdio soils are stratified, have an irregular decrease in organic matter and lack a paralithic contact. Shedd soils are fine-silty and have a chroma of less than 2.

GEOGRAPHIC SETTING: San Timoteo soils have 2 to 75 percent slopes and are on uplands at elevations of 300 to 3,500 feet. They formed in material weathered from shale, sandstone and calcified weathered granite. The climate is subhumid with warm dry summers and cool moist winters. Annual precipitation (rainfall) is 9 to 20 inches. The average January temperature is about 50 degrees F, average July temperature is about 75 degrees F, and the average annual temperature is 60 to 65 degrees F. The frost-free season is 240 to 310 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the similar [Cieneba](#) and [San Emigdio](#) soils and the [Metz](#) and [Vista](#) soils. Metz soils are sandy and lack a paralithic contact. Vista soils are not calcareous.

DRAINAGE AND PERMEABILITY: Well to somewhat excessively drained; very low to medium runoff; moderately rapid permeability.

USE AND VEGETATION: The soils are used mostly for grazing or watershed except for small cultivated areas. Vegetation is mostly California sagebrush, flatter buckwheat, yucca, sugarbush and annual grasses.

DISTRIBUTION AND EXTENT: Central Coast Range and southern California. They are moderately extensive in MLRA-15, 20.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: Monterey County, California 1972.

REMARKS: The San Timoteo soils were formerly classified as Regosols.

Diagnostic horizons and features recognized in this pedon are:

Ochric epipedon - the zone from the surface to 14 inches (A1,A2)
Calcareous reaction class - the fine earth fraction effervesces in all parts below 10 inches.
CEC/Clay ratio estimated from similar soils with laboratory data in the W. Stanislaus Soil Survey Area.

National Cooperative Soil Survey
U.S.A.

SAUGUS SERIES

LOCATION SAUGUS CA
Established Series
Rev. GAW/RCH/LCL/ET
03/2003

The Saugus series consists of deep, well drained soils that formed from weakly consolidated sediments. Saugus soils are on dissected terraces and foothills and have slopes of 9 to 50 percent. The mean annual precipitation is about 16 inches and the mean annual air temperature is about 63 degrees F.

TAXONOMIC CLASS: Coarse-loamy, mixed, superactive, nonacid, thermic Typic Xerorthents

TYPICAL PEDON: Saugus loam, brush and grass. (Colors are for dry soil unless otherwise stated.)

A1--0 to 15 inches; grayish brown (10YR 5/2) loam, dark grayish brown (10YR 4/2) moist; weak fine subangular blocky structure; hard, friable, slightly sticky and slightly plastic; common very fine medium and coarse roots; common very fine, few fine tubular and common very fine interstitial pores; about 5 percent gravel by volume; neutral (pH 6.8); gradual smooth boundary. (8 to 17 inches thick)

C1--15 to 25 inches; grayish brown (10YR 5/2) loam, dark grayish brown (10YR 4/2) moist; weak medium subangular blocky structure; hard, friable, slightly sticky and slightly plastic; few very fine, common coarse roots; few very fine tubular, common very fine interstitial pores; about 15 percent gravel by volume; slightly acid (pH 6.5); gradual smooth boundary. (10 to 14 inches thick)

C2--25 to 42 inches; grayish brown (10YR 5/2) loam, dark grayish brown (10YR 4/2) moist; weak medium subangular blocky structure; hard, friable, slightly sticky and slightly plastic; few very fine, common fine and few coarse roots; few very fine tubular, common very fine interstitial pores; contains about 10 percent gravel by volume; slightly acid (pH 6.5); diffuse smooth boundary. (16 to 25 inches thick)

C3--42 to 50 inches; grayish brown (10YR 5/2) weakly consolidated sediments that crush to gravelly heavy sandy loam, dark grayish brown (10YR 4/2) moist; massive; hard, friable, slightly sticky and slightly plastic; few very fine interstitial pores; about 25 percent gravel and 5 percent cobbles; slightly acid (pH 6.3).

TYPE LOCATION: Los Angeles County, California; in Romero Canyon; NW1/4 NW1/4 section 27, T.5N., R.17W.

RANGE IN CHARACTERISTICS: Depth to a paralithic contact is 40 to 56 inches. Saugus soils are on complex slopes of 9 to 50 percent. The mean annual soil temperature at a depth of 20 inches is 60 degrees F. and the soil temperature is not below 47 degrees F. at any time. Soil between depths of about 5 and 15 inches is continuously dry in all parts from late April or May until late October to early December and is moist in some or all parts all the rest of the year. The soil profile is loam or sandy loam throughout and the 10 to 40 inch control section has less than 18 percent clay. Rock fragments range from 1 to 35 percent and are mostly gravel and a few cobbles. Usually the amount of rock fragments increases with depth, though in some pedons the immediate surface has a partial layer of fragments. The profile is slightly acid to slightly alkaline and in many pedons the lower part is less acid.

The A horizon is light brownish gray, grayish brown, yellowish brown, brown or pale brown in 10YR or 2.5Y hue when dry. The moist value is 4 or 5. In some pedons the upper 1 to 4 inches is gray, dark gray or dark grayish brown. The upper 7 inches of the A horizon has 0.4 to 1.0 percent organic matter. The C horizon above the paralithic contact has a color similar to the A horizon or it has one unit higher value.

COMPETING SERIES: These are the [Escondido](#), [Hanford](#), [Honcut](#), [Pollasky](#), [Pfeiffer](#), [San Andreas](#), and [Vista](#) series. Escondido and Vista soils have a cambic horizon. Hanford and Honcut soils are on smooth slopes of less than 9 percent and they lack a paralithic contact. Pfeiffer and San Andreas soils have a mollic epipedon. Pollasky soils have a paralithic contact at depths of less than 40 inches.

GEOGRAPHIC SETTING: The Saugus soils are on slopes of dissected terraces and foothills at elevations of 600 to 2,500 feet. Slopes range from 9 to 50 percent. The soils formed in material weathered from weakly consolidated sediments mostly from granitic and closely related rocks. The climate is dry subhumid mesothermal with warm dry summers and cool moist winters. The mean annual precipitation is 14 to 20 inches all in the form of rain. Mean annual temperature is about 63 degrees F., average January temperature is about 54 degrees F., and average July temperature is about 73 degrees F. The freeze-free season is about 250 to 300 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Castaic](#), [Gaviota](#), [Metz](#), [San Andreas](#), and [Sorrento](#) soils. Castaic soils have more than 18 percent clay and have a fine-silty control section. Gaviota soils have a lithic contact less than 20 inches below the surface. Metz soils are sandy and are stratified with layers of finer texture.

DRAINAGE AND PERMEABILITY: Well drained; medium to rapid runoff; moderate permeability.

USE AND VEGETATION: Used for grazing, wildlife, watershed, and small amounts used for industry and urbanization. Native vegetation is chamise and other shrubs plus minor amounts of perennial grasses. Naturalized grasses and forbs make up a small to large portion of the vegetation.

DISTRIBUTION AND EXTENT: Foothills in the western part of southern California. The soils are of moderate extent.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: San Bernardino County (Southwestern Part), California, 1972.

REMARKS: The activity class was added to the classification in February of 2003. Competing series were not checked at that time. - ET

OSD scanned by SSQA. Last revised by state on 10/75.

National Cooperative Soil Survey
U.S.A.

SHEEPHEAD SERIES

LOCATION SHEEPHEAD CA
Established Series
Rev. GB/LAB/RWK
03/2009

The Sheephead series consists of shallow, somewhat excessively drained soils that formed in material weathered from mica, schist, gneiss, or granite. Sheephead soils are on mountainous uplands and have slopes of 9 to 75 percent. The mean annual precipitation is about 30 inches and the mean annual temperature is about 57 degrees F.

TAXONOMIC CLASS: Loamy, mixed, superactive, mesic, shallow Entic Ultic Haploxerolls

TYPICAL PEDON: Sheephead cobbly fine sandy loam, chaparral. (Colors are for dry soil unless otherwise noted.)

A11--0 to 4 inches; dark grayish brown (10YR 4/2) cobbly fine sandy loam, dark brown (10YR 3/3) moist; weak very fine granular structure; soft, very friable, nonsticky and nonplastic; many very fine roots; highly micaceous; slightly acid (pH 6.5); clear smooth boundary. (2 to 10 inches thick)

A12--4 to 8 inches; brown (10YR 5/3) cobble fine sandy loam, dark brown (10YR 3/3) moist; weak fine granular structure; soft, friable, nonsticky and nonplastic; many fine roots; common fine tubular pores; highly micaceous; slightly acid (pH 6.2); clear irregular boundary. (10 to 48 inches thick)

Cr--8 to 51 inches; light yellowish brown (10YR 6/4) fractured foliar micaceous schist; common medium and coarse roots along fracture planes; diffuse irregular boundary. (10 to 48 inches thick)

R--51 to 57 inches; pale yellow (2.5Y 7/4) fractured foliar micaceous schist.

TYPE LOCATION: San Diego County, California; about 10 miles southeast of Julian; approximately 800 feet east of Sunrise Highway in the SW1/4 section 7, T.14 S., R.5 E. 32 degrees 58 minutes, 00 seconds North latitude; 116 degrees, 30 minutes, 38 seconds West longitude.

RANGE IN CHARACTERISTICS: Depth to a paralithic contact is 6 to 20 inches. The mean annual soil temperature above bedrock is about 58 degrees F. and the soil temperature is above 47 degrees F. after mid-February or is not below 47 degrees F. at any time. Soil below a depth of 8 inches is usually moist in some or all parts from about December 1 until late May and is continuously dry the rest of the time. The base saturation is 65 to 75 percent. Cobbles make up to 20 percent and gravel makes up an additional 5 to 25 percent of the rock fragments in the soil profile. The profile is coarse sandy loam, sandy loam or fine sandy loam.

The A horizon is brown, dark brown, grayish brown or dark gray (10YR 5/3, 5/2, 4/3, 4/2, 4/1). Moist color is very dark brown, very dark grayish brown, or dark brown (10YR 2/2, 3/2, 3/3).

Some pedons have a C horizon of soil material above the paralithic contact. It is grayish brown, brown, yellowish brown, pale brown or light yellowish brown (10YR 5/2, 5/3, 5/6, 6/3, 6/4) and is slightly acid or medium acid.

COMPETING SERIES: These are the [Chehulpum](#), [Crafton](#), [Crouch](#), [Friant](#), [Millsholm](#), and [Tollhouse](#) series in other families. Chehulpum soils are loam, silt loam, or silty clay loam. Crafton soils have a paralithic contact at a depth of 20 to 40 inches. Crouch soils lack a lithic contact within 40 inches of the surface. Friant soils have a mean annual soil temperature warmer than 59 degrees F. and have a lithic contact within a depth of 20 inches. Tollhouse soils have base saturation of more than 75 percent.

GEOGRAPHIC SETTING: Sheephead soils are in mountainous areas at elevations of 2,000 to 7,500 feet. Slopes are 9 to 75 percent. The soils formed in material weathered from granitic rocks. The climate is subhumid mesothermal with warm, dry summers and cool, moist winters. The mean annual precipitation is 20 to 50 inches of which some is snow. The mean annual temperature is about 57 degrees F.; the average January temperature is about 44 degrees F.; and the average July temperature is about 70 degrees F. The frost free period is 150 to 225 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the competing [Crafton](#), [Crouch](#) and [Tollhouse](#) soils and the [Coarsegold](#), [Holland](#) and [La Posta](#) soils. Coarsegold and Holland soils have an argillic horizon and Holland soils are 60 to 100 inches deep to a paralithic contact. La Posta soils are sandy throughout.

DRAINAGE AND PERMEABILITY: Somewhat excessively drained; medium to very rapid runoff; moderately rapid permeability.

USE AND VEGETATION: Used mainly for watershed and wildlife habitat. Native vegetation is mainly chaparral but in the lower rainfall area it is scrub oak, pinyon pine, and digger pine.

DISTRIBUTION AND EXTENT: Mountains in southern California. The soils are extensive in MLRA 20.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: San Diego County, California, 1973.

REMARKS: NSSL pedon: S60CA-073-003 (type location).

National Cooperative Soil Survey
U.S.A.

SOBOBA SERIES

LOCATION SOBOBA CA
Established Series
Rev. AAK/GB/LCL
10/75

The Soboba series consists of deep, excessively drained soils that formed in alluvium from predominantly granitic rock sources. Soboba soils are on alluvial fans and flood plains and have slopes of 0 to 30 percent. The mean annual precipitation is about 15 inches and the mean annual air temperature is about 61 degrees F.

TAXONOMIC CLASS: Sandy-skeletal, mixed, thermic Typic Xerofluvents

TYPICAL PEDON: Soboba stony sand, annual grass pasture. (Colors are for dry soil unless otherwise noted.)

A--0 to 11 inches; grayish brown (2.5Y 5/2) stony loamy sand, dark grayish brown (2.5Y 4/2) moist; single grained; loose, very friable; many medium and fine roots; many fine interstitial pores; neutral (pH 7.0); clear smooth boundary. (8 to 14 inches thick)

C--11 to 60 inches; grayish brown (2.5Y 5/2) stratified very gravelly and cobbly sand, sand, and loamy sand, somewhat lighter in color than the surface, dark grayish brown (2.5Y 4/2) moist; single grained; loose, very friable; common medium and fine roots; many fine interstitial pores; neutral (pH 6.8).

TYPE LOCATION: Riverside County, California; about 3 miles east of San Jacinto, California, 3/4 mile southeast of the intersection of Highway 79 and Soboba Road; approximately 1,200 feet east, 200 feet north of the SW corner section 14, T.4S., R.1W.

RANGE IN CHARACTERISTICS: The soils are usually moist in some or all parts between depths of 12 and 35 inches from about December 1 to April 15. The mean annual soil temperature is about 63 to 65 degrees F.

The A horizon is grayish brown, brown, or pale brown, and has hue of 2.5Y or 10YR, value of 5 or 6 dry, 4 or 5 moist and chroma of 2 or 3. It ranges from coarse sand to sandy loam and is gravelly, cobbly or stony in some pedons. This horizon is slightly acid to mildly alkaline.

The C horizon is commonly somewhat lighter in color, coarser in texture, and higher in proportion of coarse fragments than the A horizon. Rock fragments make up 35 to 75 percent of the volume of the 10 to 40 inch control section. Darker colors buried surface soils occur randomly in the C horizon.

COMPETING SERIES: These are the [Cajon](#), [Carrizo](#), Cortin, [Delhi](#), [Gorgonio](#), and [Tujunga](#) series. Cajon soils have less than 35 percent rock fragments in the control section and are dry more than 3/4 of the time. Carrizo soils have average soil temperature of about 74 degrees F. [Cortina](#) soils have very gravelly sandy loam control sections. Delhi soils have less than 15 percent rock fragments in the control section. Gorgonio soils have dark colored surface horizons, with more than 1 percent organic matter. Tujunga soils have less than 35 percent rock fragments in the control section.

GEOGRAPHIC SETTING: Soboba soils are on alluvial fans and flood plains at elevations of 25 to 3,700 feet. Slopes range from 0 to 30 percent. The soils formed in recent alluvium, mostly from granitic rocks. The climate is one of long dry summers and mild, moist winters with an average annual rainfall of 10 to 20 inches. The average January temperature is 50 degrees F.; the average July temperature is 72 degrees F.; and the average annual temperature is 60 to 62 degrees F. The frost free season is 260 to 330 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Fallbrook](#), [Hanford](#), [Ramona](#), and [Vista](#) soils and the competing [Tujunga](#) soils. Fallbrook soils are upland soils with reddish brown argillic horizons. Hanford soils have sandy loam texture, with less than 35 percent coarse fragments in the control section. Ramona soils are terrace soils with reddish brown argillic horizons. Vista soils lack many coarse fragments and have a paralithic contact of weathered granite.

DRAINAGE AND PERMEABILITY: Excessively drained; very slow runoff; very rapid permeability.

USE AND VEGETATION: The soils are used mostly for pasture. The native vegetation is annual grasses and forbs and chaparral shrubs.

DISTRIBUTION AND EXTENT: Interior valleys of southern California. The soils are of moderate extent.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: Riverside County, California, 1971.

REMARKS: Soboba soils represent very gravelly, cobbly, or stony soils formerly included in the Tujunga series.

National Cooperative Soil Survey
U. S. A.

TRIGO SERIES

LOCATION TRIGO CA
Established Series
RU/JEM/JFR
05/2001

The Trigo series consists of shallow, well drained soils formed in consolidated alluvium from mixed sources on dissected terraces. Slopes are 2 to 60 percent. The mean annual precipitation is about 10 inches and the mean annual temperature is about 61 degrees F.

TAXONOMIC CLASS: Loamy, mixed, superactive, nonacid, thermic, shallow Typic Xerorthents

TYPICAL PEDON: Trigo fine sandy loam, under annual grasses and forbs. (Colors are for dry soil unless otherwise noted.)

A--0 to 3 inches; pale brown (10YR 6/3) fine sandy loam; brown (10YR 4/3) moist; massive; slightly hard, friable; slightly sticky and slightly plastic, many very fine roots; many very fine tubular pores; slightly acid (pH 6.5); clear smooth boundary. 1 to 14 inches thick.

C--3 to 16 inches; pale brown (10YR 6/3) loam; brown (10YR 5/3) moist; massive; friable; slightly sticky and slightly plastic; common very fine roots; common very fine pores; slightly acid (pH 6.1); clear smooth boundary. 0 to 15 inches thick.

Cr--16 to 20 inches; white (10YR 8/2) softly consolidated stratified fine sandy alluvial sediments with a few lime seams in places, light gray (10YR 7/2) moist; firm when moist, does not slake in water.

TYPE LOCATION: Madera Area, Madera County, California. Southeast 1/4 of Section 14, T. 11 S., R. 19 E. About 10 miles east of Madera.

RANGE IN CHARACTERISTICS: The soil is shallow to consolidated sediments. Depth is 6 to 20 inches. The mean annual soil temperature is 59 to 65 degrees F. The soil is moist for about 100 days when the soil temperature is above 41 degrees F.

The A horizon is 2.5Y or 10YR 5/2, 5/3, 6/2, 6/3 or 7/2 dry, and 2.5Y or 10YR 3/3, 4/2, 4/3, 4/4 or 5/2 dry. Reaction is slightly acid or neutral. The particle size control section is 8 to 18 percent clay.

The C horizon is 2.5Y or 10YR 5/3, 6/2, 6/3, 6/4 or 7/2. Moist color is 2.5Y or 10YR 4/2, 4/3, 5/2, 5/4 or 6/4. Reaction is slightly acid to slightly alkaline. Some areas have a few lime seams and are slightly effervescent in the lower part.

COMPETING SERIES: These are the [Cieneba](#), [Borreguero](#) (T), and [Gillender](#) series. Cieneba soils weathered from granitic rock and have 15 to 25 percent coarse and very coarse sand. Borreguero soils have a B horizon and more than 18 percent clay. Gillender soils are very shallow and moderately well drained.

GEOGRAPHIC SETTING: Trigo soils are on dissected fan terraces. The soils formed in consolidated sediments mainly from silty or fine sandy alluvium. Slopes are 2 to 60 percent. Elevations are 200 to 2,000 feet in a semiarid mesothermal climate. Precipitation is 8 to 12 inches with warm dry summers and cool somewhat moist winters. The average January temperature is 45 degrees F.; an average July temperature 81 degrees F. The mean annual temperature is 58 to 64 degrees F. The frost free season is 225 to 300 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Chanac](#) soils. Chanac soils are very deep and fine-loamy.

DRAINAGE AND PERMEABILITY: Well drained; medium to rapid runoff; Moderately rapid permeability.

USE AND VEGETATION: Mainly annual grasses; red brome, wild oats, ripgut brome, filaree, foxtail fescue and mouse barley.

DISTRIBUTION AND EXTENT: The central and southern parts of the San Joaquin Valley. The soil is not extensive in MLRA 17.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: Madera Area, Madera County, California, 1959.

REMARKS: OSED previous revision was in 1959.

National Cooperative Soil Survey
U.S.A.

TUJUNGA SERIES

LOCATION TUJUNGA CA

Established Series

Rev. RCH-ARW-SBS-CAF

09/1999

The Tujunga series consists of very deep, somewhat excessively drained soils formed in alluvium weathered mostly from granitic sources. Tujunga soils are on alluvial fans and flood plains and have slopes of 0 to 9 percent. The mean annual precipitation is about 16 inches and the mean annual air temperature is about 62 degrees F.

TAXONOMIC CLASS: Mixed, thermic Typic Xeropsammments

TYPICAL PEDON: Tujunga sand on a 1 percent slope at about 700 feet elevation under native shrubs. (Colors are for dry soil unless otherwise noted.)

C1--0 to 12 inches; pale brown (10YR 6/3) sand, brown (10YR 5/3) moist; single grained; loose; mica flakes evident; very low in organic matter; very porous; slightly acid; diffuse boundary. (6 to 14 inches thick)

C2--12 to 48 inches; similar to surface soil but of more variable color due largely to mineral grains themselves; diffuse boundary. (30 to 50 inches thick)

C3--48 to 60 inches; stratified sand, coarse sand and gravel; single grained; loose; neutral. (Many feet thick)

TYPE LOCATION: Los Angeles County, California; Tujunga Wash southeast of San Fernando in R. 14 W., T. 1 N.; Sunland Quadrangle.

RANGE IN CHARACTERISTICS: The mean annual soil temperature at a depth of 20 inches is 60 to 66 degrees F. The soil temperature usually does not go below 47 degrees F. or is below 47 degrees F. for

only a few days in January. The soil becomes moist below a depth of about 12 inches some time from October to December and remains moist in some part between depths of about 12 to 35 inches until April or May. Textures in the particle-size control section are sands or loamy sands, with more than 35 percent combined coarse and very coarse sand. Thin strata with silt sized particles or similar finer textures are lacking, though considerable stratification of coarse material is present. Rock fragments make up 2 to 35 percent by volume. Clay content ranges from 0 to 5 percent. The soils are slightly acid to neutral in the upper part and are slightly acid to slightly alkaline in the lower part.

The A horizon have dry colors of 10YR 7/2, 7/1, 6/4, 6/3, 6/2, 5/3 or 5/2 and moist colors of 10YR 5/4, 5/3, 5/2, 4/4, 4/3, 4/2, or 3/3.

The C horizon has dry colors of 10YR 8/1, 8/3, 8/4, 7/4, 7/3, 7/2, 7/1, 6/4, 6/3, 6/2, 5/8, 5/6, 5/4, 5/3, 5/2, or 5/1 and moist color of 10YR 6/3, 6/4, 6/2, 6/1, 5/3, 5/1, 4/4, 4/3, 4/2, 4/1 or 3/1.

COMPETING SERIES: These are the [Arnold](#), [Briones](#), [Calhi](#), [Corralitos](#), [Delhi](#), [Monoridge](#) (T), and [Monvero](#) (T) series. Arnold soils are residual soils with 9 to 60 percent slopes and have less than 35 percent coarse and very coarse sand. Briones soils have a paralithic contact at a depth of 20 to 40 inches. Calhi soils are calcareous in the 10 to 40 inch control section. Corralitos soils are moderately acid. Delhi soils lack stratification and have less than 35 percent coarse and very coarse sand.

GEOGRAPHIC SETTING: Tujunga soils occur at elevations of 5 to 4,300 feet on alluvial fans and flood plains and have slopes of 0 to 9 percent. The soils formed in sandy alluvium derived mostly from granitic sources. The climate is subhumid mesothermal with cool moist winters and hot dry summers. Mean annual precipitation is 10 to 25 inches. Mean annual temperature is 58 to 65 degrees F.; mean January temperature is 45 to 50 degrees F.; mean July temperature is 75 to 80 degrees F. Frost-free season is 225 to 350 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the competing [Delhi](#) soils and the [Hanford](#), [Soboba](#) and [Grangeville](#) soils. Hanford soils have sandy loam texture in the control section. Grangeville soils are saturated with water part of each year to within 40 inches of the surface. Soboba soils have more than 35 percent rock fragments.

DRAINAGE AND PERMEABILITY: Somewhat excessively or excessively drained; negligible or very low runoff; rapid permeability. Flooding is none to frequent.

USE AND VEGETATION: Used mainly for grazing. Some areas used for growing citrus, grapes and other fruits. Uncultivated areas have a cover of shrubs, annual grasses and forbs.

DISTRIBUTION AND EXTENT: Central and southern California and in the northern San Joaquin Valley and southern Sacramento Valley. The series is of moderate extent in MLRA-14,17,18,19,29, and 30..

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: Los Angeles County (Riverside Area), California, 1915.

REMARKS: Map units of Tujunga soil which occur at elevations above 1500 feet should probably be set up as a new series during MLRA updates. There are no taxonomic or series criteria to separate the high elevation soils. Tujunga soils mapped in the San Bernardino Co., S.W. part, Western Riverside Area, Tulare Co., Central part, occur above 1,500 feet in places and all of the Tujunga soil map units in the Kern Co., N. E. and S.E. parts are above 1,500 feet. Presently used in too many MLRAs: 14, 17, 18, 19, 29, 30.

Diagnostic horizons and features recognized in this pedon:

There are no diagnostic horizons recognized.

VISTA SERIES

LOCATION VISTA CA
Established Series
Rev. GB/RCH/LCL/SBS/RLR/KP
08/2012

The Vista series consists of moderately deep, well drained soils that formed in material weathered from decomposed granitic rocks. Vista soils are on hills and mountainous uplands and have slopes of 2 to 85 percent. The mean annual precipitation is about 40 cm (16 inches) and the mean annual air temperature is about 17 degrees C (62 degrees F).

TAXONOMIC CLASS: Coarse-loamy, mixed, superactive, thermic Typic Haploxerepts

TYPICAL PEDON: Vista coarse sandy loam, annual pasture. (Colors are for dry soil unless otherwise noted.)

A1--0 to 8 cm (0 to 3 inches); dark grayish brown (10YR 4/2) coarse sandy loam, dark brown (10YR 3/3) moist; moderate fine and medium crumb structure; soft, very friable; common fine roots; many very fine and fine pores; neutral (pH 6.7); abrupt smooth boundary. (5 to 10 cm thick)

A2--8 to 23 cm (3 to 9 inches); brown (10YR 4/3) coarse sandy loam, dark brown (10YR 3/3) moist; weak fine and medium granular structure; slightly hard, very friable; common fine roots; common very fine and fine pores; neutral (pH 6.7); diffuse irregular boundary. (10 to 18 cm thick)

A3--23 to 48 cm (9 to 19 inches); brown (10YR 4/3) coarse sandy loam, dark brown (10YR 3/3) moist; weak fine and medium granular structure; slightly hard, very friable; few fine roots; common very fine and fine tubular pores with many very coarse and very coarse tubular pores (krotovinas and animal burrows); slightly acid (pH 6.5); clear wavy boundary. (12 to 30 cm thick)

Bw1--48 to 71 cm (19 to 28 inches); brown (10YR 4/3) coarse sandy loam, dark brown (10YR 3/3) moist; massive; hard, friable; few fine roots; common very fine and fine pores; many krotovinas and animal burrows; slightly acid (pH 6.3); clear wavy boundary. (15 to 36 cm thick)

Bw2--71 to 89 cm (28 to 35 inches); yellowish brown (10YR 5/4) coarse sandy loam, dark yellowish brown (10YR 3/4) moist; massive; hard, friable; few fine roots; common fine and very fine pores with many coarse and very coarse pores (krotovinas and animal burrows); slightly acid (pH 6.3); abrupt irregular boundary. (15 to 25 cm thick)

Cr1--89 to 112 cm (35 to 44 inches); yellowish brown (10YR 5/4) and very pale brown (10YR 7/4) weathered quartz diorite grus composed mostly of plagioclase feldspar, biotite, hornblende, and some quartz; clear irregular boundary. (12 to 25 cm thick)

Cr2--112 to 155 (44 to 61 inches); brown (10YR 5/3) and very pale brown (10YR 7/3) grus, similar to above, but lacking stains on mineral grains.

TYPE LOCATION: San Diego County, California; about 2 1/2 miles southeast of Fallbrook, California, about 134 meters (440 feet) North northwest of the southeast corner of the Fallbrook High School campus; NE 1/4 SW 1/4 section 31, T.9 S., R.3 W. (projected). 33 degrees, 20 minutes, 55.976 seconds

North latitude; 117, 14 minutes, 11.569 seconds West longitude; UTM zone 11, 477990e and 3689990n NAD83.

RANGE IN CHARACTERISTICS:

Depth to paralithic contact: 50 to 100 cm (20 to 40 inches)

Mean Annual Soil Temperature: 16 to 20 degrees C (60 to 68 degrees F)

Soil Moisture: Between a depth of 20 to 60 cm (8 to 24 cm) the soil is moist in some or all parts from about December through April and is dry the rest of the year.

Notes: krotovinas filled with material from overlying horizons in common

A horizon:

Color: hue of 2.5Y or 10YR, Value of 4 or 5, chroma of 2 or 3

Organic Matter: averages less than 1 percent

Texture: coarse sandy loam or sandy loam

Reaction: medium acid to neutral

Bw horizon:

Color: hue of 2.5Y to 7.5YR, value of 4 to 6, chroma of 3 to 4

Texture: coarse sandy loam, sandy loam, or loamy sand

Notes: some pedons have few thin clay films and slightly more clay than the overlying A horizon

C horizon: (where present)

Color: generally 1 chip lighter in value and/or chroma than the overlying Bw

Texture: sandy loam, loamy sand

Notes: above grus layer

Cr: highly weather granitic or closely related bedrock

COMPETING SERIES: These are the [Escondido](#) and [Express](#) series. Escondido soils have a metasedimentary lithic contact at a depth of 50 to 100 cm (20 to 40 inches). Express soils are active cation-exchange activity class and are formed from diorite.

GEOGRAPHIC SETTING: Vista soils are on hilly slopes at elevations of 122 to 1188 meters (400 to 3,900 feet) in southern California and at less than 1066 meters (3,500 feet) elevation in central California. Slopes range from 2 to 75 percent. The soils formed in material weathered from decomposed granite and other closely related rocks. The climate is subhumid mesothermal. The average annual precipitation is 254 to 559 mm (10 to 22 inches). The average January temperature is 8 to 14 degrees C (47 to 58 degrees F); the average July temperature is 19 to 27 degrees C (67 to 80 degrees F); and the mean annual temperature is 15 to 18 degrees C (59 to 65 degrees F). The average frost free season is 210 to 320 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Ahwahnee](#), [Bonsall](#), Cienba, [Crouch](#), [Fallbrook](#), [Garey](#), [Greenfield](#), Las Posas, [Ramona](#) and [Saugus](#) soils. Ahwahnee, Fallbrook, and Greenfield soils have an argillic horizon. Bonsall and Las Posas soils have a fine particle size control section and an argillic horizon. [Cieneba](#) soils have a paralithic contact at a depth of less than 50 cm. Crouch soils have a mollic epipedon >25 cm thick and are deep to granitic bedrock. Fallbrook soils have fine-loamy particle size control section and have an argillic horizon. Las Posas soils have a fine textured argillic horizon and is formed in weathered gabbro. Ramona soils have reddish brown argillic horizons formed in granitic alluvium. Saugus soils lack a cambic horizon and are deep to a paralithic contact.

DRAINAGE AND PERMEABILITY: Well drained; slow to rapid runoff; moderately rapid permeability.

USE AND VEGETATION: Under irrigation avocados and citrus are grown in areas of favorable temperature. A few small areas are used for growing winter truck crops. On areas of moderate relief, grain and hay are grown without irrigation. Range is a common use in areas that are not cultivated. The natural vegetation is annual grasses and forbs and such shrubs as California sagebrush, scrub oak, lilac, chamise, sumac, and flatter buckwheat.

DISTRIBUTION AND EXTENT: Southern California Mountains and Sierra Nevada foothills. The soil is extensive in MLRA 20, 15 and 18.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: San Diego County (Oceanside Area), California, 1929.

REMARKS: English to metric unit conversion, RIC converted to tabular, competing, geographic setting and geographically associated soils updated - 06/2012 RLR

Minor edits to horizon designations made in 1996. Entire official series description needs to be updated, included competing section. UTM added 3/2009 ET

ADDITIONAL DATA: NSSL pedons S64CA-073-001 (type location), S65CA-053-029, S65CA-053-030, S55CA-065-006, S64CA-073-004 and S55CA-065-007.

National Cooperative Soil Survey
U.S.A

WAPI SERIES

LOCATION WAPI ID
Established Series
Rev. HWB
1/79

The Wapi series consists of shallow, excessively drained soils that formed in eolian sand and overlying basalt. Wapi soils are on a basalt plain and have slopes of 0 to 20 percent. The mean annual precipitation is about 8 inches and the mean annual temperature is about 52 degrees F.

TAXONOMIC CLASS: Mixed, mesic Lithic Xeropsamments

TYPICAL PEDON: Wapi loamy fine sand, rangeland. (Colors are for dry soil unless otherwise noted.)

A1--0 to 5 inches; brown (10YR 5/3) loamy fine sand, dark brown (10YR 4/3) moist; weak fine subangular blocky structure parting to weak fine granular; soft, very friable; few medium and many fine and very fine roots; many fine interstitial pores; mildly alkaline (pH 7.4); abrupt smooth boundary. (3 to 7 inches thick)

C1--5 to 10 inches; brown (10YR 5/3) loamy fine sand, dark brown (10YR 4/3) moist; massive; soft, very friable,; few medium and common fine and very fine roots; mildly alkaline (pH 7.4); clear smooth boundary. (2 to 5 inches thick)

C2--10 to 16 inches; brown (10YR 5/3) loamy fine sand, dark brown (10YR 4/3) moist; massive; soft, very friable; common fine and very fine roots; mildly alkaline (pH 7.8); abrupt wavy boundary. (4 to 7 inches thick)

C3--16 to 18 inches; brown (10YR 5/3) loamy fine sand, dark brown (10YR 4/3) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common fine and very fine roots; common fine and very fine tubular pores; mildly alkaline e(pH 7.8); abrupt wavy boundary. (0 to 3 inches thick)

IIR--19 inches; fractured basalt.

TYPE LOCATION: Power County, Idaho; 1 mile northeast of Bonanza Lake; 3,050 feet east and 2,170 feet south of northwest corner of section 15, T.8S., R.29E.

RANGE IN CHARACTERISTICS: The mean annual soil temperature ranges from 47 to 52 degrees F. These soils are usually dry in all parts between a depth of 12 inches and the underlying bedrock. Depth to basalt is less than 20 inches. Rock fragments range from 0 to 5 percent angular pebbles and cobbles. The soils are noncalcareous and neutral or mildly alkaline.

The A horizon has value of 5 or 6 dry, 4 or 5 moist, and chroma of 2 or 3, with less than 1 unit of value difference between surface and subsurface soil in any one pedon. Organic matter is usually less than 1 percent.

The A and C horizons are loamy fine sand or fine sand.

COMPETING SERIES: These are the [Quincy](#), [Somsen](#), [Vining](#), and [Wolverine](#) series. All of these soils have bedrock at depths greater than 20 inches.

GEOGRAPHIC SETTING: Wapi soils are on basalt plains. The soils formed in eolian sands. Slopes range from 0 to 20 percent but are dominantly less than 8 percent. Most slopes are short and irregular due to frequent exposures of rock outcrops as knolls and ridges. Elevations range from 4,000 to 4,400 feet. The mean annual precipitation is 7 to 9 inches. The average annual temperature is 49 to 55 degrees F. The frost free season is 110 to 130 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the competing [Quincy](#) and [Vining](#) soils and the [Trevino](#) soils. Trevino soils have loam or silt loam texture.

DRAINAGE AND PERMEABILITY: Excessively drained; slow runoff; rapid permeability.

USE AND VEGETATION: Used mainly for range. The natural vegetation is mainly bluebunch wheatgrass, needlegrass, big sagebrush, rabbitbrush, and cheatgrass.

DISTRIBUTION AND EXTENT: Small extent in southeastern Idaho.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Portland, Oregon

SERIES ESTABLISHED: Power County, Idaho, 1976.

National Cooperative Soil Survey
U. S. A.

WRIGHTWOOD SERIES

LOCATION WRIGHTWOOD CA
Established Series
Rev. GAW/JWF/GWH
01/2003

The Wrightwood series consists of deep, well drained soils that formed in old alluvium dominantly from granitic sources. Wrightwood soils are on terrace remnants and have slopes of 2 to 9 percent. The mean annual precipitation is about 16 inches and the mean annual temperature is about 56 degrees F.

TAXONOMIC CLASS: Coarse-loamy, mixed, superactive, mesic Typic Haploxeralfs

TYPICAL PEDON: Wrightwood sandy loam on a 2 percent slope under scrub oak and annual grasses at 4,200 feet elevation. (Colors are for dry soil unless otherwise stated. When described the soil was dry throughout.)

A1--0 to 3 inches; brown (10YR 5/3) loamy sand, dark brown (10YR 3/3) moist; weak very thin platy structure; slightly hard, very friable; common very fine roots; few very fine interstitial pores; about 10 percent (1/4 to 3/8 inch) pebbles; neutral (pH 7.0); clear smooth boundary. (1 to 3 inches thick)

B1--3 to 9 inches; brown (10YR 5/3) sandy loam, dark brown (10YR 4/3) moist; weak fine and medium angular blocky structure; slightly hard, very friable, nonsticky and nonplastic; common very fine, few fine roots; few very fine interstitial and fine tubular pores; common thin clay films as bridges between mineral grains and in tubular pores; about 5 percent (1/4 to 3/8 inch) pebbles; neutral (pH 7.0); gradual smooth boundary. (4 to 6 inches thick)

B21t--9 to 22 inches; brown (7.5YR 5/4) sandy loam, dark brown (7.5YR 4/4) moist; moderate medium subangular blocky structure; very hard, friable, slightly sticky and nonplastic; few very fine and fine, few coarse roots; few very fine interstitial and fine tubular pores; few moderately thick clay films on peds, many moderately thick clay films as bridges between mineral grains and in tubular pores; about 5 percent (1/4 to 1/2 inch) pebbles; neutral (pH 6.8); gradual smooth boundary. (10 to 13 inches thick)

B22t--22 to 46 inches; brown (7.5YR 5/2) sandy loam, dark brown (7.5YR 4/2) moist; moderate medium and coarse angular blocky structure; very hard, friable, slightly sticky and nonplastic; few very fine and fine roots; few very fine interstitial and fine tubular pores; clay films as in above horizon; has 1 or 2 oblique discontinuous sandy clay loam bands, about 1/2 to 3/4 inch wide; about 5 to 10 percent (1/4 to 1/2 inch) pebbles; neutral (pH 6.6); gradual smooth boundary. (18 to 24 inches thick)

B23t--46 to 60 inches; brown (7.5YR 5/4) gravelly sandy loam, dark brown (7.5YR 4/4) moist; moderate coarse angular blocky structure; very hard, firm, sticky and plastic; few fine roots; few very fine interstitial pores; common moderately thick clay films on peds; many moderately thick clay films in bridges between mineral grains and in tubular pores; about 20 percent (1/2 to 3/4 inch) pebbles; slightly acid (pH 6.5).

TYPE LOCATION: San Bernardino County, California; east of Oak Hill Road, behind the highway at Summit Inn; about 50 feet from the southwest corner of the water tank in the SE1/4 NE1/4 SE1/4 section 5, T.3N., R.5W.

RANGE IN CHARACTERISTICS: The mean annual soil temperature is about 54 to 59 degrees F. The soil is usually moist in some part between depths of 8 and 24 inches from late November to late April or early May and is continuously dry the rest of the time. There is a 3 to 10 percent clay increase from the A to the B horizon. The solum has 5 to 15 percent gravel in the A and Bt horizons and 15 to 25 percent gravel in the B23tb horizon. It is slightly acid or neutral throughout.

The A horizon is brown, dark brown, yellowish brown, or light yellowish brown (10YR 5/3, 4/3, 5/4, 6/4). Organic carbon is 0.4 to 0.6 percent. This horizon is loamy sand or sandy loam.

The Bt horizon is strong brown, brown, light brown, reddish yellow, or yellowish red (7.5YR 5/6, 5/4, 5/2, 6/4, 6/6; 5YR 5/6). Yellowish red colors are usually in the lower part of the Bt horizon. Structure is weak or moderate fine to coarse angular, subangular blocky or prismatic. Depth to the upper boundary of the B23tb horizon is about 40 to 55 inches and lower boundaries are below a depth of 6 or 6 1/2 feet in some pedons. The B23tb horizon is brown, strong brown, reddish brown, or yellowish red (7.5YR 5/2, 5/4, 5/6; 5YR 5/4, 5/6). It is gravelly sandy loam or gravelly sandy clay loam.

COMPETING SERIES: These are the [Adelanto](#), [Greenfield](#) and [Lucerne](#) series in other families.

Adelanto and Lucerne soils have thermic soil temperatures and an aridic moisture regime bordering on xeric. Greenfield soils have soil temperatures of 59 to 65 degrees F.

GEOGRAPHIC SETTING: Wrightwood soils are on terraces and have slopes of 2 to 9 percent. They formed from older, mixed alluvium dominantly from granitic sources. Elevations are 3,900 to 4,300 feet. The climate is subhumid mesothermal having warm, dry summers and cool, moist winters. The mean annual precipitation is 14 to 18 inches of which 1/3 to 1/2 falls as snow of short duration. The average January temperature is 40 to 44 degrees F.; the average July temperature is 68 to 74 degrees F.; and the mean annual temperature is 54 to 58 degrees F. The frost free season is 160 to 190 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Bull Trail](#) and [Oak Glen](#) soils. Bull Trail soils have a thin dark colored A1 horizon and a sandy clay loam B2t horizon. Oak Glen soils have a mollic epipedon more than 20 inches thick and lack an argillic horizon.

DRAINAGE AND PERMEABILITY: Well drained; medium runoff; moderately rapid permeability in the B2t horizon and moderate in the B23tb horizon.

USE AND VEGETATION: Used mainly for wildlife habitat and for dryland pasture. Vegetation is scrub oak, chamise, and grass.

DISTRIBUTION AND EXTENT: Foothills of the San Bernardino Mountains adjacent to the high Mojave Desert near Cajon Pass. The soils are not extensive.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: San Bernardino County, California, Mojave River Area, 1978.

National Cooperative Soil Survey
U.S.A.

APPENDIX E

*List of Properties within 300 Feet
of the Proposed Project*

APPENDIX E
List of Properties within 300 Feet of the Proposed Project

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
009-603-157	600 N HATHAWAY ST	BANNING	CA	92220	BEASLEY, MAURICE	4709 W WILSON ST	BANNING	CA	92220
419-140-016		BANNING	CA	92220	SUN LAKES COUNTRY CLUB HOMEOWNERS ASSN	850 COUNTRY CLUB DR	BANNING	CA	92220
419-140-018		BANNING	CA	92220	SUN LAKES COUNTRY CLUB HOMEOWNERS ASSN	850 COUNTRY CLUB DR	BANNING	CA	92220
419-140-025	300 S HIGHLAND SPRINGS AVE	BANNING	CA	92220	LAKES, SUN INV	41 E FOOTHILL BLVD STE 105	ARCADIA	CA	91006
419-140-032	300 S HIGHLAND SPRINGS AVE	BANNING	CA	92220	WEC 98D 25	PO BOX 3165	HARRISBURG	PA	17105
419-140-033	300 S HIGHLAND SPRINGS AVE	BANNING	CA	92220	LAKES, SUN INV	41 E FOOTHILL BLVD STE 105	ARCADIA	CA	91006
419-140-037		BANNING	CA	92220	SUN LAKES COUNTRY CLUB HOMEOWNERS ASSN	850 COUNTRY CLUB DR	BANNING	CA	92220
419-140-038		BANNING	CA	92220	SUN LAKES COUNTRY CLUB HOMEOWNERS ASSN	850 COUNTRY CLUB DR	BANNING	CA	92220
419-140-039		BANNING	CA	92220	SUN LAKES COUNTRY CLUB HOMEOWNERS ASSN	850 COUNTRY CLUB DR	BANNING	CA	92220
419-140-040	300 S HIGHLAND SPRINGS AVE	BANNING	CA	92220	S & A GLOBAL	PO BOX 927000	HOFFMAN ESTATES	IL	60192
419-140-041		BANNING	CA	92220	CITY OF BANNING	PO BOX 998	BANNING	CA	92220
419-140-054		BANNING	CA	92220	SUN LAKES COUNTRY CLUB HOMEOWNERS ASSN	850 COUNTRY CLUB DR	BANNING	CA	92220
419-140-057		BANNING	CA	92220	BANNING 47 LLC	8800 N GAINEY CENTER DR STE 255	SCOTTSDALE	AZ	85258
419-140-059		BANNING	CA	92220	RCCI	4411 POINT FOSDICK DR NW STE 203	GIG HARBOR	WA	98335
419-140-063	5801 SUN LAKES BLVD	BANNING	CA	92220	BANNING, MLD INV	18818 TELLER AVE STE 277	IRVINE	CA	92612
419-260-075		BANNING	CA	92220	LOMA, LINDA UNIVERSITY	FOUNDATION ADMINISTRATIO	LOMA LINDA	CA	92350
419-290-002		BANNING	CA	92220	PRESLEY OF, SOUTHERN CALIFORNIA	4490 VON KARMAN AVE	NEWPORT BEACH	CA	92660
419-290-003		BANNING	CA	92220	PRESLEY OF, SOUTHERN CALIFORNIA	4490 VON KARMAN AVE	NEWPORT BEACH	CA	92660
419-290-022		BANNING	CA	92220	SECURITY TRUST CO	19 CORPORATE PLAZA DR	NEWPORT BEACH	CA	92660
419-293-004	432 LA QUINTA DR	BANNING	CA	92220	JOHNSON, NADINE C	432 LA QUINTA DR	BANNING	CA	92220
419-293-005	420 LA QUINTA DR	BANNING	CA	92220	LACEY, GLADYS L	PO BOX 3619	LANDERS	CA	92285
419-293-006	406 LA QUINTA DR	BANNING	CA	92220	KITSUSE, MABEL	3336 DELAWARE AVE	SANTA MONICA	CA	90404
419-293-007	6111 WINGFOOT AVE	BANNING	CA	92220	HARVARDLEE LLC	3240 WILSHIRE BLVD STE 570	LOS ANGELES	CA	90010
419-293-008	6127 WINGFOOT AVE	BANNING	CA	92220	MONK, BUICK	35741 STONEBRIAR DR	PALM DESERT	CA	92211
419-293-009	6141 WINGFOOT AVE	BANNING	CA	92220	JOHNSON, ALLEN E	6141 WINGFOOT AVE	BANNING	CA	92220

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
419-293-010	6155 WINGFOOT AVE	BANNING	CA	92220	BOYD, KEITH O	6155 WINGFOOT AVE	BANNING	CA	92220
419-293-011	6171 WINGFOOT AVE	BANNING	CA	92220	FINELLY, ROBERT D	6171 WINGFOOT AVE	BANNING	CA	92220
419-293-012	6187 WINGFOOT AVE	BANNING	CA	92220	HENNESSEY, JAMES J	31 N PASEO LAREDO	CATHEDRAL CITY	CA	92234
419-293-013	405 LA COSTA DR	BANNING	CA	92220	MILLER, STEPHEN D	314 CAROB LN	ALAMEDA	CA	94502
419-293-014	415 LA COSTA DR	BANNING	CA	92220	PULLIAM, THOMAS OWEN	218 N BLUEROCK ST	ANAHEIM	CA	92807
419-293-015	425 LA COSTA DR	BANNING	CA	92220	DONG, XIAO	425 LA COSTA DR	BANNING	CA	92220
419-293-016	435 LA COSTA DR	BANNING	CA	92220	HORI, HELEN K	435 LA COSTA DR	BANNING	CA	92220
419-293-017	445 LA COSTA DR	BANNING	CA	92220	BOWLES, WILLIAM A	445 LA COSTA DR	BANNING	CA	92220
419-293-018	455 LA COSTA DR	BANNING	CA	92220	CONDON, WILLIAM J	455 LA COSTA DR	BANNING	CA	92220
419-293-023		BANNING	CA	92220	PRESLEY OF, SOUTHERN CALIFORNIA	4490 VON KARMAN AVE	NEWPORT BEACH	CA	92660
419-293-030	440 LA COSTA DR	BANNING	CA	92220	BURKS, ADRIANA J	440 LA COSTA DR	BANNING	CA	92220
419-293-031	430 LA COSTA DR	BANNING	CA	92220	MCCARL, RICHARD L	430 LA COSTA DR	BANNING	CA	92220
419-293-032	6170 WINGFOOT AVE	BANNING	CA	92220	BUTTERWORTH, DIANA J	6170 WINGFOOT AVE	BANNING	CA	92220
419-293-033	6156 WINGFOOT AVE	BANNING	CA	92220	SIERRA, LYDIA F	6156 WINGFOOT AVE	BANNING	CA	92220
419-293-034	6140 WINGFOOT AVE	BANNING	CA	92220	CEJKA, PAULINE A	4916 177TH PL SE	BOTHELL	WA	98012
419-293-035	6126 WINGFOOT AVE	BANNING	CA	92220	GARNETT, WEIGHTMAN CALLOWAY	6126 WINGFOOT AVE	BANNING	CA	92220
419-293-039		BANNING	CA	92220	PRESLEY OF, SOUTHERN CALIFORNIA	4490 VON KARMAN AVE	NEWPORT BEACH	CA	92660
419-300-001	5609 RIVIERA AVE	BANNING	CA	92220	GILBERT, JOHN	5609 RIVIERA AVE	BANNING	CA	92220
419-300-002	5621 RIVIERA AVE	BANNING	CA	92220	CRAWFORD, LARRY A	5621 RIVIERA AVE	BANNING	CA	92220
419-300-003	5633 RIVIERA AVE	BANNING	CA	92220	JOHNSON, HUNTER	2828 LA CIMA RD	CORONA	CA	92879
419-300-004	5647 RIVIERA AVE	BANNING	CA	92220	MATTEGIT, HORST E	5647 RIVIERA AVE	BANNING	CA	92220
419-300-005	5659 RIVIERA AVE	BANNING	CA	92220	HEINS, ROBERT	1401 E EL ALAMEDA	PALM SPRINGS	CA	92262
419-300-006	5671 RIVIERA AVE	BANNING	CA	92220	DAY, CAROLYN Y	5671 RIVIERA AVE	BANNING	CA	92220
419-300-007	5687 RIVIERA AVE	BANNING	CA	92220	DESSLER SCHMIDT, GLORIA	5687 RIVIERA AVE	BANNING	CA	92220
419-300-008	5701 OAKMONT DR	BANNING	CA	92220	SCHILLINGER, RICKY	5701 OAKMONT DR	BANNING	CA	92220
419-300-009	5723 OAKMONT DR	BANNING	CA	92220	RASCHKA, ROBERT R	5723 OAKMONT DR	BANNING	CA	92220
419-300-010	5747 OAKMONT DR	BANNING	CA	92220	WILSON, MARY A	5747 OAKMONT DR	BANNING	CA	92220
419-300-011	5769 OAKMONT DR	BANNING	CA	92220	WIEGAND, JOHN J	5769 OAKMONT DR	BANNING	CA	92220
419-300-012	5787 OAKMONT DR	BANNING	CA	92220	SEMINARO, MARK L	22 RUE CANNES	NEWPORT BEACH	CA	92660
419-300-013	5811 OAKMONT DR	BANNING	CA	92220	DENNIS, HUGH L	5811 OAKMONT DR	BANNING	CA	92220
419-300-014	5831 OAKMONT DR	BANNING	CA	92220	KLING, NORBERT P	5831 OAKMONT DR	BANNING	CA	92220
419-300-015	5851 OAKMONT DR	BANNING	CA	92220	BRETZ, WILHELM	5851 OAKMONT DR	BANNING	CA	92220

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
419-300-016	5871 OAKMONT DR	BANNING	CA	92220	GARBINO, MARGARET	5871 OAKMONT DR	BANNING	CA	92220
419-300-017	5891 OAKMONT DR	BANNING	CA	92220	HERR, WILLIAM L	5891 OAKMONT DR	BANNING	CA	92220
419-300-018	5913 OAKMONT DR	BANNING	CA	92220	POTTLE, SUSAN E	5913 OAKMONT DR	BANNING	CA	92220
419-300-019	5933 OAKMONT DR	BANNING	CA	92220	TANAKA, MARK YASUO	747 CAPP ST	SAN FRANCISCO	CA	94110
419-300-020	5953 OAKMONT DR	BANNING	CA	92220	KAPPEL, ROBERT GEORGE WENDELL	5953 OAKMONT DR	BANNING	CA	92220
419-300-021	5973 OAKMONT DR	BANNING	CA	92220	GETCHELL, JANE L	5973 OAKMONT DR	BANNING	CA	92220
419-300-022	5993 OAKMONT DR	BANNING	CA	92220	LOOS, C JOHN	5993 OAKMONT DR	BANNING	CA	92220
419-300-023	409 INDIAN WELLS RD	BANNING	CA	92220	LUEKER, MARILYN L	409 INDIAN WELLS RD	BANNING	CA	92220
419-300-024	429 INDIAN WELLS RD	BANNING	CA	92220	HOHN, NANCY A	429 INDIAN WELLS RD	BANNING	CA	92220
419-300-052		BANNING	CA	92220	SUN LAKES COUNTRY CLUB HOMEOWNERS ASSN	23726 BIRTCHER DR	EL TORO	CA	92630
419-300-060	5982 OAKMONT DR	BANNING	CA	92220	BROWN, GORDON STARR	5982 OAKMONT DR	BANNING	CA	92220
419-300-061	5954 OAKMONT DR	BANNING	CA	92220	LEWIS, LYNNE D	5954 OAKMONT DR	BANNING	CA	92220
419-300-062	5932 OAKMONT DR	BANNING	CA	92220	MCQUAIDE, THOMAS JON	5932 OAKMONT DR	BANNING	CA	92220
419-300-063	5910 OAKMONT DR	BANNING	CA	92220	PEMBROOK, MYRON J	5910 OAKMONT DR	BANNING	CA	92220
419-300-064	5890 OAKMONT DR	BANNING	CA	92220	MOLSTRE, DAVID C	44859 CORTE SIERRA	TEMECULA	CA	92592
419-300-065	5870 OAKMONT DR	BANNING	CA	92220	KUSHINER, GARY WARREN	5870 OAKMONT DR	BANNING	CA	92220
419-300-066	5850 OAKMONT DR	BANNING	CA	92220	WRIGHT, RUTH I	5850 OAKMONT DR	BANNING	CA	92220
419-300-067	5830 OAKMONT DR	BANNING	CA	92220	NEVEUX, RICHARD E	5830 OAKMONT DR	BANNING	CA	92220
419-300-068	5810 OAKMONT DR	BANNING	CA	92220	JARAMILLO, JEANNINE	5810 OAKMONT DR	BANNING	CA	92220
419-300-069	5788 OAKMONT DR	BANNING	CA	92220	COSTELL, LINDA M	5788 OAKMONT DR	BANNING	CA	92220
419-300-070	5756 OAKMONT DR	BANNING	CA	92220	GROVE, JANET MILLER	5756 OAKMONT DR	BANNING	CA	92220
419-300-071	5717 RIVIERA AVE	BANNING	CA	92220	REYNOLDS JOHNSON, LYN	5717 RIVIERA AVE	BANNING	CA	92220
419-300-072	5735 RIVIERA AVE	BANNING	CA	92220	PITTS, CAROLE M	5735 RIVIERA AVE	BANNING	CA	92220
419-300-084	5672 RIVIERA AVE	BANNING	CA	92220	WALL, JOHN JULIAN	5672 RIVIERA AVE	BANNING	CA	92220
419-300-085	5656 RIVIERA AVE	BANNING	CA	92220	LEE, KWANG YOUNG	5656 RIVIERA AVE	BANNING	CA	92220
419-300-086	5640 RIVIERA AVE	BANNING	CA	92220	BAILEY, NEAL	5640 RIVIERA AVE	BANNING	CA	92220
419-300-087	5624 RIVIERA AVE	BANNING	CA	92220	KENNEDY, YOUNG CHA	5624 RIVIERA AVE	BANNING	CA	92220
419-300-088	5608 RIVIERA AVE	BANNING	CA	92220	WOOLEVER, WILLIAM E	5608 RIVIERA AVE	BANNING	CA	92220
419-320-020	5592 W PINEHURST DR	BANNING	CA	92220	ALEXANDER, CONSTANCE B	5592 W PINEHURST DR	BANNING	CA	92220
419-320-021	477 S MAIDSTONE ST	BANNING	CA	92220	POSALSKI, GRACE	477 S MAIDSTONE ST	BANNING	CA	92220
419-320-022	447 S MAIDSTONE ST	BANNING	CA	92220	JONES, JOHN G	447 S MAIDSTONE ST	BANNING	CA	92220
419-320-023	436 S MAIDSTONE ST	BANNING	CA	92220	MORA, DAVID G	436 S MAIDSTONE ST	BANNING	CA	92220

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
419-320-024	466 S MAIDSTONE ST	BANNING	CA	92220	ROBINSON, SHERYL	466 S MAIDSTONE ST	BANNING	CA	92220
419-320-025	5549 W PINEHURST DR	BANNING	CA	92220	MCMILLION, BETTY D	5549 W PINEHURST DR	BANNING	CA	92220
419-320-029	481 S SEMINOLE CIR	BANNING	CA	92220	BIGONY, JULIE	481 S SEMINOLE CIR	BANNING	CA	92220
419-320-030	5512 RIVIERA AVE	BANNING	CA	92220	CHUNG, JOANNE M	2834 HAMNER AVE # 423	NORCO	CA	92860
419-320-031	5498 RIVIERA AVE	BANNING	CA	92220	REOS, CECIL R	5498 RIVIERA AVE	BANNING	CA	92220
419-320-032	5484 RIVIERA AVE	BANNING	CA	92220	WILSON, GRACE C	5484 RIVIERA AVE	BANNING	CA	92220
419-320-033	5470 RIVIERA AVE	BANNING	CA	92220	SCOTT JR, JOHN CHARLES	5470 RIVIERA AVE	BANNING	CA	92220
419-320-034	5456 RIVIERA AVE	BANNING	CA	92220	CUNNIGAN, JIMMIE L	5456 RIVIERA AVE	BANNING	CA	92220
419-320-035	5440 RIVIERA AVE	BANNING	CA	92220	OWEN, MICHAEL GEOFFREY	5440 RIVIERA AVE	BANNING	CA	92220
419-320-036	490 S SEMINOLE CIR	BANNING	CA	92220	RUBIN, CRAIG	858 S OAK PARK RD STE 200	COVINA	CA	91724
419-320-045	485 S SHOAL CREEK ST	BANNING	CA	92220	POWERS, CHARLES E	485 S SHOAL CREEK ST	BANNING	CA	92220
419-320-046	445 S SHOAL CREEK ST	BANNING	CA	92220	MCGOVERN, JOHN T	445 S SHOAL CREEK ST	BANNING	CA	92220
419-320-047	405 S SHOAL CREEK ST	BANNING	CA	92220	HOFRICHTER, DOROTHY M	28351 LA BAJADA	LAGUNA NIGUEL	CA	92677
419-320-059	5385 W PLAIN FIELD DR	BANNING	CA	92220	MCCAIN, LOUISE B	PO BOX 11244	SANTA ANA	CA	92711
419-320-060	5365 W PLAIN FIELD DR	BANNING	CA	92220	VOS, STEVE A	15122 RUNNYMEDE ST	VAN NUYS	CA	91405
419-320-061	5345 W PLAIN FIELD DR	BANNING	CA	92220	JACKSON, ANTHONY	5345 W PLAIN FIELD DR	BANNING	CA	92220
419-320-062	5325 W PLAIN FIELD DR	BANNING	CA	92220	HARRIS, DIANE S	5325 W PLAIN FIELD DR	BANNING	CA	92220
419-320-063	5305 W PLAIN FIELD DR	BANNING	CA	92220	PIAZZA, MARK G	9934 CULLMAN AVE	WHITTIER	CA	90603
419-320-064	5306 RIVIERA AVE	BANNING	CA	92220	HIER, WILLIAM K	5306 RIVIERA AVE	BANNING	CA	92220
419-320-065	5326 RIVIERA AVE	BANNING	CA	92220	BLEVINS, MARGARET E	5326 RIVIERA AVE	BANNING	CA	92220
419-320-066	5346 RIVIERA AVE	BANNING	CA	92220	PICH, JOHN	5346 RIVIERA AVE	BANNING	CA	92220
419-320-067	5366 RIVIERA AVE	BANNING	CA	92220	COFFEY, MADELINE L	5366 RIVIERA AVE	BANNING	CA	92220
419-320-068	5386 RIVIERA AVE	BANNING	CA	92220	FEDERAL NATIONAL MORTGAGE ASSOCIATION	135 N LOS ROBLES AVE	PASADENA	CA	91101
419-320-069	5589 RIVIERA AVE	BANNING	CA	92220	FORD, ROGER J	5589 RIVIERA AVE	BANNING	CA	92220
419-320-070	5575 RIVIERA AVE	BANNING	CA	92220	RANDEL, JOHN F	5575 RIVIERA AVE	BANNING	CA	92220
419-320-071	5561 RIVIERA AVE	BANNING	CA	92220	PARCHMENT, LOLA J	5561 RIVIERA AVE	BANNING	CA	92220
419-320-072	5547 RIVIERA AVE	BANNING	CA	92220	JACKSON, SIGNE GLADYS	5547 RIVIERA AVE	BANNING	CA	92220
419-320-073	5533 RIVIERA AVE	BANNING	CA	92220	DAVIDE, QUIMBY	5533 RIVIERA AVE	BANNING	CA	92220
419-320-074	5519 RIVIERA AVE	BANNING	CA	92220	HARTMAN, ROBERT DAVIS	5519 RIVIERA AVE	BANNING	CA	92220
419-320-075	5505 RIVIERA AVE	BANNING	CA	92220	LINE, ARTHUR G	5505 RIVIERA AVE	BANNING	CA	92220
419-320-076	5491 RIVIERA AVE	BANNING	CA	92220	MELTVEDT, BONNIE B	5491 RIVIERA AVE	BANNING	CA	92220
419-320-077	5477 RIVIERA AVE	BANNING	CA	92220	FOY, LAWRENCE	5477 RIVIERA AVE	BANNING	CA	92220

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
419-320-078	5463 RIVIERA AVE	BANNING	CA	92220	LINDER, TED D	2207 COTTONWOOD RD	BANNING	CA	92220
419-320-079	5449 RIVIERA AVE	BANNING	CA	92220	CLAVELLOT, RAY W	5449 RIVIERA AVE	BANNING	CA	92220
419-320-080	5435 RIVIERA AVE	BANNING	CA	92220	LEWIS, BILLY J	5435 RIVIERA AVE	BANNING	CA	92220
419-320-081	5421 RIVIERA AVE	BANNING	CA	92220	THE LARRY & CAROL ELLIS TRUST	5421 RIVIERA AVE	BANNING	CA	92220
419-320-082	5407 RIVIERA AVE	BANNING	CA	92220	PAPARIAN, GAIL A	5407 RIVIERA AVE	BANNING	CA	92220
419-320-083	5393 RIVIERA AVE	BANNING	CA	92220	HARRINGTON, DONNA L	5393 RIVIERA AVE	BANNING	CA	92220
419-320-084	5379 RIVIERA AVE	BANNING	CA	92220	MOHAI, ANDRAS	5379 RIVIERA AVE	BANNING	CA	92220
419-320-085	5357 RIVIERA AVE	BANNING	CA	92220	VIEN, DENNIS L	5357 RIVIERA AVE	BANNING	CA	92220
419-320-086	5337 RIVIERA AVE	BANNING	CA	92220	LOY, JOYCE	5337 RIVIERA AVE	BANNING	CA	92220
419-320-087	5323 RIVIERA AVE	BANNING	CA	92220	ZHOU, MIN	PO BOX 26121	ANAHEIM	CA	92825
419-320-088	5309 RIVIERA AVE	BANNING	CA	92220	LONGO, JOSEPH P	5309 RIVIERA AVE	BANNING	CA	92220
419-320-089		BANNING	CA	92220	SUN LAKES COUNTRY CLUB HOMEOWNERS ASSN	PO BOX 19672	IRVINE	CA	92623
419-330-001	5018 RIVIERA AVE	BANNING	CA	92220	SCHULTZ, LESTER A	5018 RIVIERA AVE	BANNING	CA	92220
419-330-002	5038 RIVIERA AVE	BANNING	CA	92220	GONZALES, LARRY M	5038 RIVIERA AVE	BANNING	CA	92220
419-330-003	5062 RIVIERA AVE	BANNING	CA	92220	PENTEK, ROSE	5062 RIVIERA AVE	BANNING	CA	92220
419-330-004	5080 W PINEHURST DR	BANNING	CA	92220	OLSON, MARY A	5080 W PINEHURST DR	BANNING	CA	92220
419-330-033	5287 W PLAIN FIELD DR	BANNING	CA	92220	PICKETT, NED A	5287 W PLAIN FIELD DR	BANNING	CA	92220
419-330-034	5273 W PLAIN FIELD DR	BANNING	CA	92220	CLOSE, MARION ALLAN	5273 W PLAIN FIELD DR	BANNING	CA	92220
419-330-035	5259 W PLAIN FIELD DR	BANNING	CA	92220	RAWNSLEY, ROBERT J	5259 W PLAIN FIELD DR	BANNING	CA	92220
419-330-036	5245 W PLAIN FIELD DR	BANNING	CA	92220	CURTIS, LAWRENCE R	3453 NW HAYES AVE	CORVALLIS	OR	97330
419-330-037	5231 W PLAIN FIELD DR	BANNING	CA	92220	PALMER, JOHN W	5231 W PLAIN FIELD DR	BANNING	CA	92220
419-330-038	5217 W PLAIN FIELD DR	BANNING	CA	92220	DAVIS, MARVIN L	5217 W PLAIN FIELD DR	BANNING	CA	92220
419-330-039	5191 W PLAIN FIELD DR	BANNING	CA	92220	BUSHLOW, LING	1271 LAGUNA SECA CT	BANNING	CA	92220
419-330-040	5177 W PLAIN FIELD DR	BANNING	CA	92220	KLAUS, NICHOLAS	5177 W PLAIN FIELD DR	BANNING	CA	92220
419-330-041	5163 W PLAIN FIELD DR	BANNING	CA	92220	BENSON, JOHN M	5163 W PLAIN FIELD DR	BANNING	CA	92220
419-330-043	5129 W PINEHURST DR	BANNING	CA	92220	BAINBRIDGE, JOAN FAITH	5129 W PINEHURST DR	BANNING	CA	92220
419-330-044	5109 W PINEHURST DR	BANNING	CA	92220	FOSTER, LEWIS E	5109 W PINEHURST DR	BANNING	CA	92220
419-330-045	5120 RIVIERA AVE	BANNING	CA	92220	FALCONER, PAMELA JEAN	5120 RIVIERA AVE	BANNING	CA	92220
419-330-046	5134 RIVIERA AVE	BANNING	CA	92220	HEASLET, LARRY J	5134 RIVIERA AVE	BANNING	CA	92220
419-330-047	5148 RIVIERA AVE	BANNING	CA	92220	MORRIS, MARY LOU	5148 RIVIERA AVE	BANNING	CA	92220
419-330-048	5162 RIVIERA AVE	BANNING	CA	92220	VOS, ALBERT J	5162 RIVIERA AVE	BANNING	CA	92220
419-330-049	5176 RIVIERA AVE	BANNING	CA	92220	TAYLOR, GERTRUDE LOUISE	5176 RIVIERA AVE	BANNING	CA	92220

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
419-330-050	5190 RIVIERA AVE	BANNING	CA	92220	BOYD, EUGENE	2801 ADAMS ST APT 72	RIVERSIDE	CA	92504
419-330-051	5204 RIVIERA AVE	BANNING	CA	92220	THE DONNA R COOK FAMILY TRUST	5204 RIVIERA AVE	BANNING	CA	92220
419-330-052	5218 RIVIERA AVE	BANNING	CA	92220	PETERSON, BOB D	5218 RIVIERA AVE	BANNING	CA	92220
419-330-053	5232 RIVIERA AVE	BANNING	CA	92220	SYMMES, WILLIAM CARRICK	5232 RIVIERA AVE	BANNING	CA	92220
419-330-054	5246 RIVIERA AVE	BANNING	CA	92220	LAWHORN, JOYCE A	605 TWIN HILLS DR	BANNING	CA	92220
419-330-055	5260 RIVIERA AVE	BANNING	CA	92220	ANDERSON, JEROME CARL	13606 W ALEPPO DR	SUN CITY	AZ	85375
419-330-056	5274 RIVIERA AVE	BANNING	CA	92220	FREVERT, LYLE W	5578 W PINEHURST DR	BANNING	CA	92220
419-330-057	5288 RIVIERA AVE	BANNING	CA	92220	BRANEA, VERONICA	5288 RIVIERA AVE	BANNING	CA	92220
419-330-058	5295 RIVIERA AVE	BANNING	CA	92220	BAILEY, BARBARA BLACK	5295 RIVIERA AVE	BANNING	CA	92220
419-330-059	5281 RIVIERA AVE	BANNING	CA	92220	BOWLIN, YVONNE	5281 RIVIERA AVE	BANNING	CA	92220
419-330-060	5267 RIVIERA AVE	BANNING	CA	92220	PASZINSKI, SHIRLEY M	5267 RIVIERA AVE	BANNING	CA	92220
419-330-061	5253 RIVIERA AVE	BANNING	CA	92220	ORAVECZ, EDWARD E	5253 RIVIERA AVE	BANNING	CA	92220
419-330-062	5239 RIVIERA AVE	BANNING	CA	92220	WALKER, ELSIE E	5239 RIVIERA AVE	BANNING	CA	92220
419-330-063	5225 RIVIERA AVE	BANNING	CA	92220	SOLORIO, RAUL C	5225 RIVIERA AVE	BANNING	CA	92220
419-330-064	5211 RIVIERA AVE	BANNING	CA	92220	GUSTAFSON, CHRISTINE KELLY	5211 RIVIERA AVE	BANNING	CA	92220
419-330-065	5197 RIVIERA AVE	BANNING	CA	92220	TEGELER, CONRAD L	300 S HIGHLAND SPRINGS AVE # 6C-198	BANNING	CA	92220
419-330-066	5183 RIVIERA AVE	BANNING	CA	92220	STERLE, DAVID E	5183 RIVIERA AVE	BANNING	CA	92220
419-330-067	5169 RIVIERA AVE	BANNING	CA	92220	CONTRERAS, KAZUKO B	5169 RIVIERA AVE	BANNING	CA	92220
419-330-068	5155 RIVIERA AVE	BANNING	CA	92220	GILL, DESIREE	5155 RIVIERA AVE	BANNING	CA	92220
419-330-069	5141 RIVIERA AVE	BANNING	CA	92220	HENDERSON, JOANNE E	5141 RIVIERA AVE	BANNING	CA	92220
419-330-070	5127 RIVIERA AVE	BANNING	CA	92220	HAYDEN, DOUGLAS JON	5127 RIVIERA AVE	BANNING	CA	92220
419-330-071	5113 RIVIERA AVE	BANNING	CA	92220	MARENCO, ISABEL M	5113 RIVIERA AVE	BANNING	CA	92220
419-330-072	5099 RIVIERA AVE	BANNING	CA	92220	DE NITTO, ALBERT M	429 BROOKLAWN DR	BANNING	CA	92220
419-330-073	5085 RIVIERA AVE	BANNING	CA	92220	CORRAL, JERRY C	5085 RIVIERA AVE	BANNING	CA	92220
419-330-074	5071 RIVIERA AVE	BANNING	CA	92220	ESTRADA, CARLOS	5071 RIVIERA AVE	BANNING	CA	92220
419-330-075	5057 RIVIERA AVE	BANNING	CA	92220	SEMINARO, MARK L	7 ELLIOT DR	PLEASANT HILL	CA	94523
419-330-076	5043 RIVIERA AVE	BANNING	CA	92220	RAMOS, MARCELA	5043 RIVIERA AVE	BANNING	CA	92220
419-330-077	5029 RIVIERA AVE	BANNING	CA	92220	TURNER, ELBERT	5029 RIVIERA AVE	BANNING	CA	92220
419-330-078		BANNING	CA	92220	SUN LAKES COUNTRY CLUB HOMEOWNERS ASSN	PO BOX 19672	IRVINE	CA	92623
419-370-009	569 TWIN HILLS DR	BANNING	CA	92220	NAGY, CHARLES R	569 TWIN HILLS DR	BANNING	CA	92220
419-370-010	557 TWIN HILLS DR	BANNING	CA	92220	HUST, ROBERT A	557 TWIN HILLS DR	BANNING	CA	92220

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
419-370-033	545 TWIN LKS	BANNING	CA	92220	PRESLEY OF, SOUTHERN CALIFORNIA	4490 VON KARMAN AVE	NEWPORT BEACH	CA	92660
419-370-034		BANNING	CA	92220	PRESLEY OF, SOUTHERN CALIFORNIA	4490 VON KARMAN AVE	NEWPORT BEACH	CA	92660
419-370-037		BANNING	CA	92220	SUN LAKES COUNTRY CLUB HOMEOWNERS ASSN	19 CORPORATE PLAZA DR	NEWPORT BEACH	CA	92660
419-391-013	4851 LINKS AVE	BANNING	CA	92220	LUNN, DOLORES E	4851 LINKS AVE	BANNING	CA	92220
419-391-014	4863 LINKS AVE	BANNING	CA	92220	KIECKHAEFER, WILL	4863 LINKS AVE	BANNING	CA	92220
419-391-015	4875 LINKS AVE	BANNING	CA	92220	PHILLIPS, ROBERT L	4875 LINKS AVE	BANNING	CA	92220
419-391-016	4887 LINKS AVE	BANNING	CA	92220	MORGAN, BARBARA P	4887 LINKS AVE	BANNING	CA	92220
419-391-017	4899 LINKS AVE	BANNING	CA	92220	WILLIAMS, PAULINE	4899 LINKS AVE	BANNING	CA	92220
419-391-018	4911 LINKS AVE	BANNING	CA	92220	PATRICK, TANIS L	4911 LINKS AVE	BANNING	CA	92220
419-391-019	4923 LINKS AVE	BANNING	CA	92220	FREGOSO, ARTHUR F	4923 LINKS AVE	BANNING	CA	92220
419-391-020	4935 LINKS AVE	BANNING	CA	92220	JONES, LEELAND R	4935 LINKS AVE	BANNING	CA	92220
419-391-021	929 TWIN HILLS DR	BANNING	CA	92220	HODGSON, JOHN B	929 TWIN HILLS DR	BANNING	CA	92220
419-391-022	917 TWIN HILLS DR	BANNING	CA	92220	TWIN HILLS TRUST #917	27372 ALISO CREEK RD # 200	ALISO VIEJO	CA	92656
419-391-023	905 TWIN HILLS DR	BANNING	CA	92220	RASHIDD, BEVERLY A	905 TWIN HILLS DR	BANNING	CA	92220
419-391-024	893 TWIN HILLS DR	BANNING	CA	92220	BROWN, JULIE C	893 TWIN HILLS DR	BANNING	CA	92220
419-391-025	881 TWIN HILLS DR	BANNING	CA	92220	BERNARD, JAMES E	881 TWIN HILLS DR	BANNING	CA	92220
419-391-029	833 TWIN HILLS DR	BANNING	CA	92220	MARSEILLES, WILLIAM M	833 TWIN HILLS DR	BANNING	CA	92220
419-391-030	821 TWIN HILLS DR	BANNING	CA	92220	FINCH, ELMER R	821 TWIN HILLS DR	BANNING	CA	92220
419-391-031	809 TWIN HILLS DR	BANNING	CA	92220	EAST, JUNE A	14200 69TH DR SE UNIT L6	SNOHOMISH	WA	98296
419-391-032	797 TWIN HILLS DR	BANNING	CA	92220	PALMIERI, SALVATORE F	797 TWIN HILLS DR	BANNING	CA	92220
419-391-033	785 TWIN HILLS DR	BANNING	CA	92220	MCGEE, MARK CODY	785 TWIN HILLS DR	BANNING	CA	92220
419-391-034	773 TWIN HILLS DR	BANNING	CA	92220	RAYNER, COLIN F	773 TWIN HILLS DR	BANNING	CA	92220
419-391-035	761 TWIN HILLS DR	BANNING	CA	92220	KLEIN, FRANKLIN	761 TWIN HILLS DR	BANNING	CA	92220
419-391-036	749 TWIN HILLS DR	BANNING	CA	92220	JOHNSON, TERRY	749 TWIN HILLS DR	BANNING	CA	92220
419-391-043		BANNING	CA	92220	SUN LAKES COUNTRY CLUB HOMEOWNERS ASSN	23726 BIRTCHER DR	EL TORO	CA	92630
419-400-032	578 NORTHWOOD AVE	BANNING	CA	92220	WHEMPNER, KAREN RAE	578 NORTHWOOD AVE	BANNING	CA	92220
419-400-033	590 NORTHWOOD AVE	BANNING	CA	92220	PECK, RICHARD N	590 NORTHWOOD AVE	BANNING	CA	92220
419-400-034	602 NORTHWOOD AVE	BANNING	CA	92220	NEUGEBAUER, HANNSJUERGEN H	602 NORTHWOOD AVE	BANNING	CA	92220
419-400-035	614 NORTHWOOD AVE	BANNING	CA	92220	RAWLE, JOHN A	614 NORTHWOOD AVE	BANNING	CA	92220
419-400-036	591 NORTHWOOD AVE	BANNING	CA	92220	JORDAN, MICHAEL B	591 NORTHWOOD AVE	BANNING	CA	92220
419-400-037	579 NORTHWOOD AVE	BANNING	CA	92220	BURKE, CARMEN	14722 W TOMAHAWK WAY	SUN CITY WEST	AZ	85375
419-400-038	567 NORTHWOOD AVE	BANNING	CA	92220	PEDERSEN, CAROLYN	567 NORTHWOOD AVE	BANNING	CA	92220

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
419-400-039	555 NORTHWOOD AVE	BANNING	CA	92220	PAWLIN, ROBERT S	555 NORTHWOOD AVE	BANNING	CA	92220
419-400-040	543 NORTHWOOD AVE	BANNING	CA	92220	GOSS, DAWN E	543 NORTHWOOD AVE	BANNING	CA	92220
419-400-089		BANNING	CA	92220	SUN LAKES COUNTRY CLUB HOMEOWNERS ASSN	5062 ROLLING HILLS AVE	BANNING	CA	92220
421-280-061		BANNING	CA	92220	SUN LAKES COUNTRY CLUB HOMEOWNERS ASSN	850 COUNTRY CLUB DR	BANNING	CA	92220
421-300-013	612 PINE VALLEY RD	BANNING	CA	92220	KEHLET, FRED L	612 PINE VALLEY RD	BANNING	CA	92220
421-300-014	598 PINE VALLEY RD	BANNING	CA	92220	MONTESSORO, MAYRE LOU	769 INDIAN WELLS RD	BANNING	CA	92220
421-300-015	588 PINE VALLEY RD	BANNING	CA	92220	CAIN, JOHN R	588 PINE VALLEY RD	BANNING	CA	92220
421-300-016	576 PINE VALLEY RD	BANNING	CA	92220	DE NITTO, ALBERT M	429 BROOKLAWN DR	BANNING	CA	92220
421-300-017	564 PINE VALLEY RD	BANNING	CA	92220	ELROD, SHERMAN GLENN	8419 6TH ST	DOWNEY	CA	90241
421-300-018	552 PINE VALLEY RD	BANNING	CA	92220	MOORE, JOHN	20980 SHADOW OAK DR	YORBA LINDA	CA	92886
421-300-019	540 PINE VALLEY RD	BANNING	CA	92220	JESUS, ULYSSES A	540 PINE VALLEY RD	BANNING	CA	92220
421-300-020	625 S SHINECOCK DR	BANNING	CA	92220	EARLY, HAROLD L	625 S SHINNECOCK DR	BANNING	CA	92220
421-300-021	631 S SHINECOCK DR	BANNING	CA	92220	GRIEPSMA, RUDOLF	631 S SHINNECOCK DR	BANNING	CA	92220
421-300-022	653 S SHINNECOCK DR	BANNING	CA	92220	RODRIGUEZ, ESTERVINA	653 S SHINECOCK DR	BANNING	CA	92220
421-300-023	667 S SHINECOCK DR	BANNING	CA	92220	WASSERMAN, HOPE	667 S SHINECOCK DR	BANNING	CA	92220
421-300-024	681 S SHINECOCK DR	BANNING	CA	92220	JENSEN, ROBERT ALLEN	681 S SHINNECOCK DR	BANNING	CA	92220
421-300-025	695 S SHINECOCK DR	BANNING	CA	92220	SCHNEIDER, GERALDINE	695 S SHINNECOCK DR	BANNING	CA	92220
421-300-026	709 S SHINECOCK DR	BANNING	CA	92220	GUILBAULT, GERARD	530 NORTHWOOD AVE	BANNING	CA	92220
421-300-027	723 S SHINECOCK DR	BANNING	CA	92220	TASKO, KAROLY	723 S SHINNECOCK DR	BANNING	CA	92220
421-300-028	739 S SHINECOCK DR	BANNING	CA	92220	C & S BONITA APARTMENTS	739 S SHINNECOCK DR	BANNING	CA	92220
421-300-029	6390 W OAK TREE AVE	BANNING	CA	92220	LAUDER, DON C	6390 W OAK TREE AVE	BANNING	CA	92220
421-300-030	6376 W OAK TREE AVE	BANNING	CA	92220	JACKSON, HOWARD L	6376 W OAK TREE AVE	BANNING	CA	92220
421-300-031	6362 W OAK TREE AVE	BANNING	CA	92220	FENNER, CHRISTOPHER W	2001 LINDAUER DR	LA HABRA	CA	90631
421-300-032	6348 W OAK TREE AVE	BANNING	CA	92220	HAAS, MARVIN	6348 W OAK TREE AVE	BANNING	CA	92220
421-300-033	6334 W OAK TREE AVE	BANNING	CA	92220	SHIN, MICHAEL	7377 BEDOUIN AVE	TWENTYNINE PALMS	CA	92277
421-300-034	6320 W OAK TREE AVE	BANNING	CA	92220	THE STORIE FAMILY TRUST	6320 W OAK TREE AVE	BANNING	CA	92220
421-300-036	732 S SHINECOCK DR	BANNING	CA	92220	THE SECRETARY OF HOUSING & URBAN DEVELOP	2500 MICHELSON DR #100	IRVINE	CA	92612
421-300-037	712 S SHINECOCK DR	BANNING	CA	92220	SEYMOUR, RUSSELL F	712 S SHINNECOCK DR	BANNING	CA	92220
421-300-038	698 S SHINECOCK DR	BANNING	CA	92220	HYDE, ROCHELLE ANNE	698 S SHINNECOCK DR	BANNING	CA	92220
421-300-039	686 S SHINECOCK DR	BANNING	CA	92220	ROJAS, CARLOS ARTURO	686 S SHINECOCK DR	BANNING	CA	92220
421-300-040	674 S SHINECOCK DR	BANNING	CA	92220	HABERECHT, PAUL	674 S SHINNECOCK DR	BANNING	CA	92220

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
421-300-041	656 S SHINECOCK DR	BANNING	CA	92220	VAN WHY, BRUCE C	656 S SHINECOCK DR	BANNING	CA	92220
421-300-042	630 S SHINECOCK DR	BANNING	CA	92220	STRICKLAND, LINDA	630 S SHINECOCK DR	BANNING	CA	92220
421-300-043	669 PINE VALLEY RD	BANNING	CA	92220	SGROI, JOHN P	669 PINE VALLEY RD	BANNING	CA	92220
421-300-044	709 PINE VALLEY RD	BANNING	CA	92220	FIGUEIREDO, ALVARO M	7346 HARDING CT	HIGHLAND	CA	92346
421-300-045	723 PINE VALLEY RD	BANNING	CA	92220	HABERECHT, PAUL	2165 BIRDIE DR	BANNING	CA	92220
421-300-046	751 PINE VALLEY RD	BANNING	CA	92220	SEAY, EULALAH K	751 PINE VALLEY RD	BANNING	CA	92220
421-300-058	6327 CHERRY HILL AVE	BANNING	CA	92220	BANNING PROPERTY LLC	689 WINDSOR LN	KAYSVILLE	UT	84037
421-300-059	6339 CHERRY HILL AVE	BANNING	CA	92220	KARRIKER, YVETTE GREENE	6339 CHERRY HILL AVE	BANNING	CA	92220
421-300-060	6349 CHERRY HILL AVE	BANNING	CA	92220	COLLINS, ANNA M	6349 CHERRY HILL AVE	BANNING	CA	92220
421-300-061	6359 CHERRY HILL AVE	BANNING	CA	92220	CURCIN, GEORGE	6359 CHERRY HILL AVE	BANNING	CA	92220
421-300-062	6369 CHERRY HILL AVE	BANNING	CA	92220	WHITESIDE, ROBERT CUNNINGHAM	6369 CHERRY HILL AVE	BANNING	CA	92220
421-300-063	6383 CHERRY HILL AVE	BANNING	CA	92220	FOX, YVONNE B	6383 CHERRY HILL AVE	BANNING	CA	92220
421-300-064	813 CYPRESS POINT DR	BANNING	CA	92220	DECESARE, FRANK	813 CYPRESS POINT DR	BANNING	CA	92220
421-300-065	835 CYPRESS POINT DR	BANNING	CA	92220	COCHRAN, SONJA H	835 CYPRESS POINT DR	BANNING	CA	92220
421-300-066	853 CYPRESS POINT DR	BANNING	CA	92220	SCHOEN, MILTON	853 CYPRESS POINT DR	BANNING	CA	92220
421-300-067	871 CYPRESS POINT DR	BANNING	CA	92220	BALTENSPERGER, FRANK	871 CYPRESS POINT DR	BANNING	CA	92220
421-300-068	891 CYPRESS POINT DR	BANNING	CA	92220	HOLSTROM, JANET N	891 CYPRESS POINT DR	BANNING	CA	92220
421-300-069	909 CYPRESS POINT DR	BANNING	CA	92220	LANN, JOANNE JONES	909 CYPRESS POINT DR	BANNING	CA	92220
421-300-070	923 CYPRESS POINT DR	BANNING	CA	92220	KRUG, KNOX E	1554 MALLORCA DR	VISTA	CA	92081
421-300-071	943 CYPRESS POINT DR	BANNING	CA	92220	SABIN, PAMELA	943 CYPRESS POINT DR	BANNING	CA	92220
421-300-072	6352 CHERRY HILL AVE	BANNING	CA	92220	U S BANK NATIONAL ASSOCIATION	641 OCEAN VIEW DR	CAMARILLO	CA	93010
421-300-073	6340 CHERRY HILL AVE	BANNING	CA	92220	SCHAFFHAUSER, ANNAMARIE	6340 CHERRY HILL AVE	BANNING	CA	92220
421-300-074	6332 CHERRY HILL AVE	BANNING	CA	92220	MCKENNA, MARY E	6332 CHERRY HILL AVE	BANNING	CA	92220
421-300-079	6381 PLAYER CT	BANNING	CA	92220	RUBIN, ANNE	6381 PLAYER CT	BANNING	CA	92220
421-300-080	854 CYPRESS POINT DR	BANNING	CA	92220	RETH, LINDA	854 CYPRESS POINT DR	BANNING	CA	92220
421-300-081	872 CYPRESS POINT DR	BANNING	CA	92220	ONEILL, LAWRENCE E	10618 SUMMERBROOK	WHITTIER	CA	90634
421-300-082	890 CYPRESS POINT DR	BANNING	CA	92220	ESCARZA, PATRICIA A	890 CYPRESS POINT DR	BANNING	CA	92220
421-300-083	912 CYPRESS POINT DR	BANNING	CA	92220	HYATT, TOM	912 CYPRESS POINT DR	BANNING	CA	92220
421-300-084	928 CYPRESS POINT DR	BANNING	CA	92220	KRIETZMAN, ROBERT	928 CYPRESS POINT DR	BANNING	CA	92220
421-300-085	946 CYPRESS POINT DR	BANNING	CA	92220	DELAVARA, CARLOS	946 CYPRESS POINT DR	BANNING	CA	92220
421-300-088	6382 PLAYER CT	BANNING	CA	92220	DONNA J LAPINE REVOCABLE LIVING TRUST	6382 PLAYER CT	BANNING	CA	92220
421-300-090		BANNING	CA	92220	SUN LAKES COUNTRY CLUB HOMEOWNERS ASSN	17991 MITCHELL S	IRVINE	CA	92614

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
421-300-091		BANNING	CA	92220	SUN LAKES COUNTRY CLUB HOMEOWNERS ASSN	17991 MITCHELL S	IRVINE	CA	92614
421-310-018	963 CYPRESS POINT DR	BANNING	CA	92220	PURSEL, ROBERT P	963 CYPRESS POINT DR	BANNING	CA	92220
421-310-019	975 CYPRESS POINT DR	BANNING	CA	92220	YOAKUM, CHARLES D	975 CYPRESS POINT DR	BANNING	CA	92220
421-310-020	993 CYPRESS POINT DR	BANNING	CA	92220	GRANITE, HARRIET	993 CYPRESS POINT DR	BANNING	CA	92220
421-310-021	1007 CYPRESS POINT DR	BANNING	CA	92220	JUAREZ, ALBERTO A	1007 CYPRESS POINT DR	BANNING	CA	92220
421-310-022	1025 CYPRESS POINT DR	BANNING	CA	92220	WORBY, GLENN S	236 FALLING WATER DR	DADEVILLE	AL	36853
421-310-023	1041 CYPRESS POINT DR	BANNING	CA	92220	HANZ, WALTER R	1041 CYPRESS POINT DR	BANNING	CA	92220
421-310-024	1057 CYPRESS POINT DR	BANNING	CA	92220	MILLER, GALE M	1057 CYPRESS POINT DR	BANNING	CA	92220
421-310-025	1073 CYPRESS POINT DR	BANNING	CA	92220	GOLDING, JUDITH M	1073 CYPRESS POINT DR	BANNING	CA	92220
421-310-026	1091 CYPRESS POINT DR	BANNING	CA	92220	FILAS, ALLAN H	1091 CYPRESS POINT DR	BANNING	CA	92220
421-310-027	1109 CYPRESS POINT DR	BANNING	CA	92220	LOEFFERT, ROBERT P	1109 CYPRESS POINT DR	BANNING	CA	92220
421-310-028	1129 CYPRESS POINT DR	BANNING	CA	92220	ENTERANTE, FRANK	19401 ROMAR ST	NORTHRIDGE	CA	91324
421-310-029	1149 CYPRESS POINT DR	BANNING	CA	92220	SCHROEDER, MARGARET E	1149 CYPRESS POINT DR	BANNING	CA	92220
421-310-030	1167 CYPRESS POINT DR	BANNING	CA	92220	THEER, WALTER J	1167 CYPRESS POINT DR	BANNING	CA	92220
421-310-031	1189 CYPRESS POINT DR	BANNING	CA	92220	POWELL, ROBERT C	1189 CYPRESS POINT DR	BANNING	CA	92220
421-310-032	1205 CYPRESS POINT DR	BANNING	CA	92220	DENNIS, GEORGE H	1205 CYPRESS POINT DR	BANNING	CA	92220
421-310-033	1219 CYPRESS POINT DR	BANNING	CA	92220	EWERT, ROBERT L	1219 CYPRESS POINT DR	BANNING	CA	92220
421-310-034	1231 CYPRESS POINT DR	BANNING	CA	92220	KEALY, SHIRLEY D	1231 CYPRESS POINT DR	BANNING	CA	92220
421-310-035	1245 CYPRESS POINT DR	BANNING	CA	92220	JUHAS, ANDREW	1245 CYPRESS POINT DR	BANNING	CA	92220
421-310-036	1257 CYPRESS POINT DR	BANNING	CA	92220	OCHART, RICHARD	1257 CYPRESS POINT DR	BANNING	CA	92220
421-310-037	6385 COLONIAL AVE	BANNING	CA	92220	CRAFTS, BARBARA L	6385 COLONIAL AVE	BANNING	CA	92220
421-310-038	6367 COLONIAL AVE	BANNING	CA	92220	LOVEJOY, GEOFFREY A	1709 CRANSHIRE CT	DEERFIELD	IL	60015
421-310-039	6353 COLONIAL AVE	BANNING	CA	92220	CASAGA, WILLIAM J	6353 COLONIAL AVE	BANNING	CA	92220
421-310-042	6384 COLONIAL AVE	BANNING	CA	92220	PALMER, EDITH E	6384 COLONIAL AVE	BANNING	CA	92220
421-310-043	6370 COLONIAL AVE	BANNING	CA	92220	SWARTZ, RICHARD V	6370 COLONIAL AVE	BANNING	CA	92220
421-310-044	6354 COLONIAL AVE	BANNING	CA	92220	KIELISZEK, STANLEY S	6354 COLONIAL AVE	BANNING	CA	92220
421-310-052	6289 FIRESTONE CIR	BANNING	CA	92220	TWARDOWSKI, TED P	6289 FIRESTONE CIR	BANNING	CA	92220
421-310-053	1056 CYPRESS POINT DR	BANNING	CA	92220	BUSCH, ROBERT G	1056 CYPRESS POINT DR	BANNING	CA	92220
421-310-054	1072 CYPRESS POINT DR	BANNING	CA	92220	SIEBERT, CAROLE M	1072 CYPRESS POINT DR	BANNING	CA	92220
421-310-055	1090 CYPRESS POINT DR	BANNING	CA	92220	FRANK, VINCE	1090 CYPRESS POINT DR	BANNING	CA	92220
421-310-056	1110 CYPRESS POINT DR	BANNING	CA	92220	JOHNS, GEORGE ARNOLD	1110 CYPRESS POINT DR	BANNING	CA	92220
421-310-057	1126 CYPRESS POINT DR	BANNING	CA	92220	ELY, JOHN LEWIS	1126 CYPRESS POINT DR	BANNING	CA	92220

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
421-310-058	1144 CYPRESS POINT DR	BANNING	CA	92220	DAVIS, JAMES C	1144 CYPRESS POINT DR	BANNING	CA	92220
421-310-059	6375 SPYGLASS AVE	BANNING	CA	92220	MCGOOKIN, JON	6375 SPYGLASS AVE	BANNING	CA	92220
421-310-060	6351 SPYGLASS AVE	BANNING	CA	92220	MAY, CURTIS	6351 SPYGLASS AVE	BANNING	CA	92220
421-310-061	6327 SPYGLASS AVE	BANNING	CA	92220	BARNES, FRANK AUGUSTUS	6327 SPYGLASS AVE	BANNING	CA	92220
421-310-071	6292 FIRESTONE CIR	BANNING	CA	92220	BAKER, JANE DEGALA	6292 FIRESTONE CIR	BANNING	CA	92220
421-310-072	6376 SPYGLASS AVE	BANNING	CA	92220	JACOBSON, PATSY	6376 SPYGLASS AVE	BANNING	CA	92220
421-310-073	6352 SPYGLASS AVE	BANNING	CA	92220	CALLAHAN, MICHAEL J	6352 SPYGLASS AVE	BANNING	CA	92220
421-310-074	6328 SPYGLASS AVE	BANNING	CA	92220	HARRIS, ARTHUR	6328 SPYGLASS AVE	BANNING	CA	92220
421-310-081		BANNING	CA	92220	SUN LAKES COUNTRY CLUB HOMEOWNERS ASSN	PO BOX 19672	IRVINE	CA	92623
421-331-001	4995 BERMUDA DUNES AVE	BANNING	CA	92220	MOLZAN, CAROLINE T	4995 BERMUDA DUNES AVE	BANNING	CA	92220
421-331-002	4985 BERMUDA DUNES AVE	BANNING	CA	92220	SAKURAI, FRED H	4985 BERMUDA DUNES AVE	BANNING	CA	92220
421-331-003	4975 BERMUDA DUNES AVE	BANNING	CA	92220	LAUNDREAUX, DONALD D	4975 BERMUDA DUNES AVE	BANNING	CA	92220
421-331-004	4965 BERMUDA DUNES AVE	BANNING	CA	92220	WRICK, MARIANNE	4965 BERMUDA DUNES AVE	BANNING	CA	92220
421-331-005	4955 BERMUDA DUNES AVE	BANNING	CA	92220	SWIATEK, ARTHUR	4955 BERMUDA DUNES AVE	BANNING	CA	92220
421-331-006	4945 BERMUDA DUNES AVE	BANNING	CA	92220	LONG JR, RONALD C	4945 BERMUDA DUNES AVE	BANNING	CA	92220
421-331-007	4935 BERMUDA DUNES AVE	BANNING	CA	92220	TROUTMAN, SHERYL A	4935 BERMUDA DUNES AVE	BANNING	CA	92220
421-331-008	4925 BERMUDA DUNES AVE	BANNING	CA	92220	ROSES, DONALD JACK	4925 BERMUDA DUNES AVE	BANNING	CA	92220
421-331-009	4915 BERMUDA DUNES AVE	BANNING	CA	92220	PERRY, DAVIE	4915 BERMUDA DUNES AVE	BANNING	CA	92220
421-331-010	4905 BERMUDA DUNES AVE	BANNING	CA	92220	KNICK, HARRY L	4905 BERMUDA DUNES AVE	BANNING	CA	92220
421-331-011	4893 BERMUDA DUNES AVE	BANNING	CA	92220	BRICKNER, RICHARD E	4893 BERMUDA DUNES AVE	BANNING	CA	92220
421-331-012	4881 BERMUDA DUNES AVE	BANNING	CA	92220	PRESTON, CURTIS	4881 BERMUDA DUNES AVE	BANNING	CA	92220

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
421-331-013	4873 BERMUDA DUNES AVE	BANNING	CA	92220	FRIEDBERG, HAROLD	4873 BERMUDA DUNES AVE	BANNING	CA	92220
421-331-014	4861 BERMUDA DUNES AVE	BANNING	CA	92220	CAMPANA, ANTHONY D	4861 BERMUDA DUNES AVE	BANNING	CA	92220
421-331-015	4851 BERMUDA DUNES AVE	BANNING	CA	92220	WEBBER, DONALD G	4851 BERMUDA DUNES AVE	BANNING	CA	92220
421-331-016	4841 BERMUDA DUNES AVE	BANNING	CA	92220	JIMENEZ, JANET H	4841 BERMUDA DUNES AVE	BANNING	CA	92220
421-331-017	4831 BERMUDA DUNES AVE	BANNING	CA	92220	RICHEY, JANE	4831 BERMUDA DUNES AVE	BANNING	CA	92220
421-331-018	4823 BERMUDA DUNES AVE	BANNING	CA	92220	CORNEJO, FERNANDO A	4823 BERMUDA DUNES AVE	BANNING	CA	92220
421-331-019	4811 BERMUDA DUNES AVE	BANNING	CA	92220	WILLIAMS, WINOA	4811 BERMUDA DUNES AVE	BANNING	CA	92220
421-331-020	4805 BERMUDA DUNES AVE	BANNING	CA	92220	NELSON, MARY L	4805 BERMUDA DUNES AVE	BANNING	CA	92220
421-331-021	802 S BAY HILL RD	BANNING	CA	92220	FOGARTY, RICHARD P	802 S BAY HILL RD	BANNING	CA	92220
421-331-022	856 S BAY HILL RD	BANNING	CA	92220	CHANDLER, CHARLES R	856 S BAY HILL RD	BANNING	CA	92220
421-331-023	872 S BAY HILL RD	BANNING	CA	92220	BEUERMANN, RODOLFO L	872 S BAY HILL RD	BANNING	CA	92220
421-331-024	882 S BAY HILL RD	BANNING	CA	92220	PARDUE, JEROME P	882 S BAY HILL RD	BANNING	CA	92220
421-331-033		BANNING	CA	92220	SUN LAKES COUNTRY CLUB HOMEOWNERS ASSN	23726 BIRTCHER DR	EL TORO	CA	92630
421-331-034		BANNING	CA	92220	SUN LAKES COUNTRY CLUB HOMEOWNERS ASSN	23726 BIRTCHER DR	EL TORO	CA	92630
421-334-001	4809 W FOREST OAKS AVE	BANNING	CA	92220	BRITTON, LENARD D	4809 W FOREST OAKS AVE	BANNING	CA	92220
421-334-002	4819 W FOREST OAKS AVE	BANNING	CA	92220	STROHL, TRUDY	4819 W FOREST OAKS AVE	BANNING	CA	92220
421-334-003	4829 W FOREST OAKS AVE	BANNING	CA	92220	FERNANDEZ, LESTOR R	16480 PALM DR	DESERT HOT SPRINGS	CA	92240
421-334-004	4839 W FOREST OAKS AVE	BANNING	CA	92220	PORTER, DOLORES ANNE	4839 W FOREST OAKS AVE	BANNING	CA	92220
421-334-005	4851 W FOREST OAKS AVE	BANNING	CA	92220	PETTERSSON, ROGER	4851 W FOREST OAKS AVE	BANNING	CA	92220
421-334-006	4863 W FOREST OAKS AVE	BANNING	CA	92220	OFARRELL, WALTER W	4863 W FOREST OAKS AVE	BANNING	CA	92220
421-334-007	4871 W FOREST OAKS AVE	BANNING	CA	92220	MCLANE, RAY E	4871 W FOREST OAKS AVE	BANNING	CA	92220
421-334-008	4883 W FOREST OAKS AVE	BANNING	CA	92220	YOUNG, JOANNE E	4883 W FOREST OAKS AVE	BANNING	CA	92220
421-334-009	4895 W FOREST OAKS AVE	BANNING	CA	92220	HUFFMAN, MARY C	4895 W FOREST OAKS AVE	BANNING	CA	92220
421-334-010	4907 W FOREST OAKS AVE	BANNING	CA	92220	TUTTLE, JAMES DENNIS	4907 W FOREST OAKS AVE	BANNING	CA	92220
421-334-011	4917 W FOREST OAKS AVE	BANNING	CA	92220	ETHERIDGE, ANNE L	4917 W FOREST OAKS AVE	BANNING	CA	92220

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
421-334-012	4929 W FOREST OAKS AVE	BANNING	CA	92220	JOLLY, EDWARD NEAL	4929 W FOREST OAKS AVE	BANNING	CA	92220
421-334-013	4939 W FOREST OAKS AVE	BANNING	CA	92220	LONG, JAMES J	4939 W FOREST OAKS AVE	BANNING	CA	92220
421-334-014	4951 W FOREST OAKS AVE	BANNING	CA	92220	DAVIS, DORIS A	4951 W FOREST OAKS AVE	BANNING	CA	92220
421-334-018	4812 BERMUDA DUNES AVE	BANNING	CA	92220	LUCAS, MANUEL P	4812 BERMUDA DUNES AVE	BANNING	CA	92220
421-334-019	4824 BERMUDA DUNES AVE	BANNING	CA	92220	KNITTLE, OLGA	4824 BERMUDA DUNES AVE	BANNING	CA	92220
421-334-020	4832 BERMUDA DUNES AVE	BANNING	CA	92220	WHITE, ALFRED L	1276 KATHERINE CT	BEAUMONT	CA	92223
421-334-021	4842 BERMUDA DUNES AVE	BANNING	CA	92220	CICCARELLI, ALBERTA BENNETT	4842 BERMUDA DUNES AVE	BANNING	CA	92220
421-334-022	4852 BERMUDA DUNES AVE	BANNING	CA	92220	LA TERRA, MICHAEL F	4852 BERMUDA DUNES AVE	BANNING	CA	92220
421-334-023	4862 BERMUDA DUNES AVE	BANNING	CA	92220	ETZ, JOHN D	4862 BERMUDA DUNES AVE	BANNING	CA	92220
421-334-024	4874 BERMUDA DUNES AVE	BANNING	CA	92220	PUMPHERY, GERALD D	4874 BERMUDA DUNES AVE	BANNING	CA	92220
421-334-025	4882 BERMUDA DUNES AVE	BANNING	CA	92220	SAULSBURY, JEAN	4882 BERMUDA DUNES AVE	BANNING	CA	92220
421-334-026	4894 BERMUDA DUNES AVE	BANNING	CA	92220	SMITH, EMILY J	4894 BERMUDA DUNES AVE	BANNING	CA	92220
421-334-027	4906 BERMUDA DUNES AVE	BANNING	CA	92220	NEMETH, LOUIS	5801 SUN LAKES BLVD # 112	BANNING	CA	92220
421-334-028	4916 BERMUDA DUNES AVE	BANNING	CA	92220	CAYLOR, WALP LEWIS	4916 BERMUDA DUNES AVE	BANNING	CA	92220
421-334-029	4926 BERMUDA DUNES AVE	BANNING	CA	92220	RODGERS, W MICHAEL	4926 BERMUDA DUNES AVE	BANNING	CA	92220
421-334-030	4936 BERMUDA DUNES AVE	BANNING	CA	92220	MCCUNE, SARAH SADYE A	5801 SUN LAKES BLVD # 115	BANNING	CA	92220
421-334-031	4946 BERMUDA DUNES AVE	BANNING	CA	92220	BENZON, RODERICK R	2212 B PULLMAN LN	REDONDO BEACH	CA	90278
421-334-032	4956 BERMUDA DUNES AVE	BANNING	CA	92220	ALEXANDER, RICHARD J	4956 BERMUDA DUNES AVE	BANNING	CA	92220
421-334-033	4966 BERMUDA DUNES AVE	BANNING	CA	92220	WUNDERLICH, LESTER	4966 BERMUDA DUNES AVE	BANNING	CA	92220

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
421-334-034	4976 BERMUDA DUNES AVE	BANNING	CA	92220	FUNKHOUSER JR, ROSCO E	1639 WOODLANDS RD	BEAUMONT	CA	92223
421-334-035	4986 BERMUDA DUNES AVE	BANNING	CA	92220	KING, ROBERT D	4986 BERMUDA DUNES AVE	BANNING	CA	92220
421-335-013	833 RIVIERA AVE	BANNING	CA	92220	KRAUS, JILL	833 RIVIERA AVE	BANNING	CA	92220
421-335-014	823 RIVIERA AVE	BANNING	CA	92220	BROWN, STEVEN P	14310 N CREEK DR APT 1712	MILL CREEK	WA	98012
421-335-015	811 RIVIERA AVE	BANNING	CA	92220	SCHAUER, MERLE E	811 RIVIERA AVE	BANNING	CA	92220
421-401-019	6312 W BARDMOOR AVE	BANNING	CA	92220	WILTSHIRE, RICHARD E	6312 W BARDMOOR AVE	BANNING	CA	92220
421-401-020	6328 W BARDMOOR AVE	BANNING	CA	92220	TAPPATA, OSVALDO E	6328 W BARDMOOR AVE	BANNING	CA	92220
421-401-021	6344 W BARDMOOR AVE	BANNING	CA	92220	STRUCHEN, RAYMOND F	6344 W BARDMOOR AVE	BANNING	CA	92220
421-401-022	6386 W BARDMOOR AVE	BANNING	CA	92220	TOD, GEORGE J	6386 W BARDMOOR AVE	BANNING	CA	92220
421-401-023	1523 PARADISE ISLAND LN	BANNING	CA	92220	SMITH, PHILLIP G	1523 PARADISE ISLAND LN	BANNING	CA	92220
421-401-024	1509 PARADISE ISLAND LN	BANNING	CA	92220	BOILY, JOSEPH L	1509 PARADISE ISLAND LN	BANNING	CA	92220
421-401-025	1495 PARADISE ISLAND LN	BANNING	CA	92220	NETHERCOTT, DAVID	110 S 4TH ST	FULTON	NY	13069
421-401-026	1481 PARADISE ISLAND LN	BANNING	CA	92220	CARGILL, RONALD C	1481 PARADISE ISLAND LN	BANNING	CA	92220
421-401-027	1465 PARADISE ISLAND LN	BANNING	CA	92220	MATTESON, LEONARD J	1465 PARADISE ISLAND LN	BANNING	CA	92220
421-401-028	1451 PARADISE ISLAND LN	BANNING	CA	92220	VAUGHAN, JAMES R	1451 PARADISE ISLAND LN	BANNING	CA	92220
421-401-029	1435 PARADISE ISLAND LN	BANNING	CA	92220	CRIDER, CHARLOTTE	1435 PARADISE ISLAND LN	BANNING	CA	92220
421-401-030	1421 PARADISE ISLAND LN	BANNING	CA	92220	NELSON, RONALD A	1421 PARADISE ISLAND LN	BANNING	CA	92220
421-401-031	1407 PARADISE ISLAND LN	BANNING	CA	92220	NINNESS, WARREN J	1407 PARADISE ISLAND LN	BANNING	CA	92220
421-401-032	1395 PARADISE ISLAND LN	BANNING	CA	92220	COSGROVE, EDWARD F	PMB 183 # 6C	BANNING	CA	92220
421-401-033	6375 TUCKAWAY AVE	BANNING	CA	92220	MORELLI, RAY	PO BOX 6336	CORONA	CA	92878
421-401-034	6363 TUCKAWAY AVE	BANNING	CA	92220	RENEKER, DON G	6363 TUCKAWAY AVE	BANNING	CA	92220
421-401-035	6347 TUCKAWAY AVE	BANNING	CA	92220	ELSWORTH, ROBERT G	6347 TUCKAWAY AVE	BANNING	CA	92220
421-401-036	6333 TUCKAWAY AVE	BANNING	CA	92220	ZATTO, MICHAEL A	6333 TUCKAWAY AVE	BANNING	CA	92220
421-401-037	6317 TUCKAWAY AVE	BANNING	CA	92220	WORDEN, ROBERT E	6317 TUCKAWAY AVE	BANNING	CA	92220
421-401-044	6320 TUCKAWAY AVE	BANNING	CA	92220	SESANTO, ALEXANDER	6320 TUCKAWAY AVE	BANNING	CA	92220
421-401-045	6336 TUCKAWAY AVE	BANNING	CA	92220	KELLY, WILLIAM D	6336 TUCKAWAY AVE	BANNING	CA	92220
421-401-046	6356 TUCKAWAY AVE	BANNING	CA	92220	DEMARIA, ROSE M	6356 TUCKAWAY AVE	BANNING	CA	92220
421-401-047	6359 W LAUREL VALLEY AVE	BANNING	CA	92220	REECE, M JERRY	6359 W LAUREL VALLEY AVE	BANNING	CA	92220
421-401-048	6339 W LAUREL VALLEY AVE	BANNING	CA	92220	THACKER, RONALD B	6339 W LAUREL VALLEY AVE	BANNING	CA	92220

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
421-401-049	6323 W LAUREL VALLEY AVE	BANNING	CA	92220	PENNINGTON, ALBERT AURELIUS	6323 W LAUREL VALLEY AVE	BANNING	CA	92220
421-401-056	6318 W LAUREL VALLEY AVE	BANNING	CA	92220	MARK, FERN L	13356 BRETON CT	CORONA	CA	92880
421-401-057	1478 PARADISE ISLAND LN	BANNING	CA	92220	GORELICK, ROBERT STANLEY	1478 PARADISE ISLAND LN	BANNING	CA	92220
421-401-058	1492 PARADISE ISLAND LN	BANNING	CA	92220	WILLIAMS, STEPHEN VERN	1492 PARADISE ISLAND LN	BANNING	CA	92220
421-401-059	1512 PARADISE ISLAND LN	BANNING	CA	92220	ODONNELL, BRUCE CHARLES	1512 PARADISE ISLAND LN	BANNING	CA	92220
421-401-060	6315 W BARDMOOR AVE	BANNING	CA	92220	TURNBULL, FRANK T	6315 W BARDMOOR AVE	BANNING	CA	92220
421-401-067		BANNING	CA	92220	SUN LAKES COUNTRY CLUB HOMEOWNERS ASSN	19 CORPORATE PLAZA DR	NEWPORT BEACH	CA	92660
421-401-068		BANNING	CA	92220	SUN LAKES COUNTRY CLUB HOMEOWNERS ASSN	19 CORPORATE PLAZA DR	NEWPORT BEACH	CA	92660
421-402-019	6324 HARBOUR TOWN WAY	BANNING	CA	92220	BUCK, RONALD WALLIS	6324 HARBOUR TOWN WAY	BANNING	CA	92220
421-402-020	6336 HARBOUR TOWN WAY	BANNING	CA	92220	FALLON, BETTY M	4408 SHILOH CHURCH RD	AIKEN	SC	29801
421-402-021	6348 HARBOUR TOWN WAY	BANNING	CA	92220	POTTER, CHERYL J	6348 HARBOUR TOWN WAY	BANNING	CA	92220
421-402-027	1315 CYPRESS POINT DR	BANNING	CA	92220	RHINE, MICHAEL E	1315 CYPRESS POINT DR	BANNING	CA	92220
421-402-028	1307 CYPRESS POINT DR	BANNING	CA	92220	CONWAY, LEILA R	1307 CYPRESS POINT DR	BANNING	CA	92220
421-402-029	1299 CYPRESS POINT DR	BANNING	CA	92220	BARGFREDE, DANIEL L	1299 CYPRESS POINT DR	BANNING	CA	92220
421-402-030	1291 CYPRESS POINT DR	BANNING	CA	92220	SAGER, JAMES W	1291 CYPRESS POINT DR	BANNING	CA	92220
421-402-031	1283 CYPRESS POINT DR	BANNING	CA	92220	QUIRKE, EDMUND T	1283 CYPRESS POINT DR	BANNING	CA	92220
421-402-032	1271 CYPRESS POINT DR	BANNING	CA	92220	LEONE, IRENE M	1271 CYPRESS POINT DR	BANNING	CA	92220
421-402-033	1284 CYPRESS POINT DR	BANNING	CA	92220	FRAVOR, JOHN G	1284 CYPRESS POINT DR	BANNING	CA	92220
421-402-034	1292 CYPRESS POINT DR	BANNING	CA	92220	ELLIS, BRUCE R	1292 CYPRESS POINT DR	BANNING	CA	92220
421-402-035	1300 CYPRESS POINT DR	BANNING	CA	92220	LAWRENCE, ROBERT E	1300 CYPRESS POINT DR	BANNING	CA	92220
421-402-036	1308 CYPRESS POINT DR	BANNING	CA	92220	FAREN, ROBERT V	1308 CYPRESS POINT DR	BANNING	CA	92220
421-402-037	1316 CYPRESS POINT DR	BANNING	CA	92220	KITTLER, EMIL T	1316 CYPRESS POINT DR	BANNING	CA	92220
421-402-038	1324 CYPRESS POINT DR	BANNING	CA	92220	WEILAND, DONALD A	1324 CYPRESS POINT DR	BANNING	CA	92220
421-402-039	1323 GREEN ISLAND ST	BANNING	CA	92220	PROVENCAL, ROBERT L	1323 GREEN ISLAND ST	BANNING	CA	92220
421-402-040	1313 GREEN ISLAND ST	BANNING	CA	92220	RICHARDS, ALFRED M	1313 GREEN ISLAND ST	BANNING	CA	92220
421-402-041	1305 GREEN ISLAND ST	BANNING	CA	92220	MEE, GARY W	1305 GREEN ISLAND ST	BANNING	CA	92220
421-402-042	1297 GREEN ISLAND ST	BANNING	CA	92220	RICHARDS, POLLY JEAN	1297 GREEN ISLAND ST	BANNING	CA	92220
421-402-043	1289 GREEN ISLAND ST	BANNING	CA	92220	LYONS, BETTY JO	1289 GREEN ISLAND ST	BANNING	CA	92220

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
421-402-044	1281 GREEN ISLAND ST	BANNING	CA	92220	FLAGEL, BERTRAM M	1281 GREEN ISLAND ST	BANNING	CA	92220
421-402-057	6373 KAPALUA BAY AVE	BANNING	CA	92220	ALLEN, JAMES L	6373 KAPALUA BAY AVE	BANNING	CA	92220
421-402-058	6355 KAPALUA BAY AVE	BANNING	CA	92220	SCHOEN, JOSEPH	6355 KAPALUA BAY AVE	BANNING	CA	92220
421-402-059	6339 KAPALUA BAY AVE	BANNING	CA	92220	CHO, PHILLIP	6339 KAPALUA BAY AVE	BANNING	CA	92220
421-402-066		BANNING	CA	92220	SUN LAKES COUNTRY CLUB HOMEOWNERS ASSN	19 CORPORATE PLAZA DR	NEWPORT BEACH	CA	92660
421-402-067	6370 HARBOUR TOWN WAY	BANNING	CA	92220	HAYES, DOROTHY M	6370 HARBOUR TOWN WAY	BANNING	CA	92220
421-402-068	6392 HARBOUR TOWN WAY	BANNING	CA	92220	OCHIEANO, TERESA ANN	6392 HARBOUR TOWN WAY	BANNING	CA	92220
421-402-069	1339 CYPRESS POINT DR	BANNING	CA	92220	EBNER, LESLIE W	1339 CYPRESS POINT DR	BANNING	CA	92220
421-402-070	1331 CYPRESS POINT DR	BANNING	CA	92220	LAU, ROLAND E	1331 CYPRESS POINT DR	BANNING	CA	92220
421-402-071	1321 CYPRESS POINT DR	BANNING	CA	92220	RUNDELL, RICHARD J	1321 CYPRESS POINT DR	BANNING	CA	92220
421-600-008	6309 TURNBERRY DR	BANNING	CA	92220	BADGER, TOMMY L	6309 TURNBERRY DR	BANNING	CA	92220
421-600-009	6323 TURNBERRY DR	BANNING	CA	92220	LABA, GARY J	6323 TURNBERRY DR	BANNING	CA	92220
421-600-010	6337 TURNBERRY DR	BANNING	CA	92220	SCHARF, HELEN	6337 TURNBERRY DR	BANNING	CA	92220
421-600-011	6351 TURNBERRY DR	BANNING	CA	92220	PIECHOWSKI, KENNETH J	6351 TURNBERRY DR	BANNING	CA	92220
421-600-012	1574 LITCHFIELD CT	BANNING	CA	92220	SPAHN, WILLIAM M	1574 LITCHFIELD CT	BANNING	CA	92220
421-600-013	1588 LITCHFIELD CT	BANNING	CA	92220	ALLBAUGH, ROBERT L	1588 LITCHFIELD CT	BANNING	CA	92220
421-600-014	1602 LITCHFIELD CT	BANNING	CA	92220	LOWE, GWENDOLYN	1602 LITCHFIELD CT	BANNING	CA	92220
421-600-053	6336 TURNBERRY DR	BANNING	CA	92220	TENNIS, DONALD S	6336 TURNBERRY DR	BANNING	CA	92220
421-600-063		BANNING	CA	92220	SUN LAKES COUNTRY CLUB HOMEOWNERS ASSN	850 COUNTRY CLUB DR	BANNING	CA	92220
421-600-064		BANNING	CA	92220	SUN LAKES COUNTRY CLUB HOMEOWNERS ASSN	5062 ROLLING HILLS AVE	BANNING	CA	92220
532-100-001		BANNING	CA	92220	USA MORONGO BAND CAHUILLA MISSION, INDIANS	11581 POTRERO RD	BANNING	CA	92220
532-130-003	700 S HATHAWAY ST	BANNING	CA	92220	BANNING DEVELOPMENT LLC	11041 GOLD STAR LN	SANTA ANA	CA	92705
532-130-005	770 S HATHAWAY ST	BANNING	CA	92220	ISRAELS, HARVEY	621 N GRANADA AVE	ALHAMBRA	CA	91801
532-130-006	700 S HATHAWAY ST	BANNING	CA	92220	BANNING DEVELOPMENT LLC	11041 GOLD STAR LN	SANTA ANA	CA	92705
532-130-007	1973 W WESTWARD AVE	BANNING	CA	92220	BANNING DEVELOPMENT LLC	11041 GOLD STAR LN	SANTA ANA	CA	92705
532-130-008		BANNING	CA	92220	2831 BRISTOL	4525 A MACARTHUR BLVD	NEWPORT BEACH	CA	92660
532-130-011		BANNING	CA	92220	CITY OF BANNING	99 E RAMSEY ST	BANNING	CA	92220
532-130-013		BANNING	CA	92220	CITY OF BANNING	PO BOX 998	BANNING	CA	92220
532-130-017		BANNING	CA	92220	JOHNSON, MERLIN K	PO BOX 777	MENTONE	CA	92359
532-130-021		BANNING	CA	92220	HOSSEINIOUN, ABOLFATH	1 HARBOR DR STE 205	SAUSALITO	CA	94965
532-160-003	896 S HATHAWAY ST	BANNING	CA	92220	LAW, DAVID W	PO BOX 956	BANNING	CA	92220

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
532-160-005	1750 E WESTWARD AVE	BANNING	CA	92220	EXCEL PROPERTY MANAGEMENT SERVICES INC	9034 W SUNSET BLVD	WEST HOLLYWOOD	CA	90069
532-160-006		BANNING	CA	92220	GREEN, LENARD O	1469 ADAM ST	BANNING	CA	92220
532-160-007	1910 E WESTWARD AVE	BANNING	CA	92220	ZENNER PERFORMANCE METERS INC	PO BOX 256	BANNING	CA	92220
532-160-009	1952 E WESTWARD AVE	BANNING	CA	92220	ANDERSEN, ANDY B	36050 ELAINE WAY	YUCAIPA	CA	92399
532-160-012	820 S HATHAWAY ST	BANNING	CA	92220	DARLING INDUSTRIAL LLC	19181 VIA DEL CABALLO	YORBA LINDA	CA	92886
532-160-013	1990 E WESTWARD AVE	BANNING	CA	92220	DOMINGUEZ, STEPHANIE	22965 VISTA GRANDE WAY	GRAND TERRACE	CA	92313
532-180-030		BANNING	CA	92220	CHANDLER, STEPHEN	20635 VALLEY BLVD STE B	WALNUT	CA	91789
532-180-032	951 DOROTHY ANNA DR	BANNING	CA	92220	BIGGERS, MARVIN	951 DOROTHY ANNA DR	BANNING	CA	92220
532-180-034		BANNING	CA	92220	CITY OF BANNING	99 E RAMSEY ST	BANNING	CA	92220
532-180-035		BANNING	CA	92220	CITY OF BANNING	PO BOX 998	BANNING	CA	92220
532-180-036		BANNING	CA	92220	CITY OF BANNING	PO BOX 998	BANNING	CA	92220
532-180-037		BANNING	CA	92220	CITY OF BANNING	PO BOX 998	BANNING	CA	92220
532-180-043		BANNING	CA	92220	BANNING, CHARLES	43980 MAHLON VAIL RD # 2404	TEMECULA	CA	92592
532-180-044		BANNING	CA	92220	WILLIAMS COMMUNICATIONS INC	PO BOX 22067	TULSA	OK	74121
532-210-001		BANNING	CA	92220	BEAUMONT CONCRETE CO	PO BOX 216	BEAUMONT	CA	92223
537-110-007		BANNING	CA	92220	LENNAR HOMES OF CALIF INC	980 MONTECITO DR # 302	CORONA	CA	92879
537-110-008		BANNING	CA	92220	LENNAR HOMES OF CALIF INC	980 MONTECITO DR # 302	CORONA	CA	92879
537-110-009		BANNING	CA	92220	LENNAR HOMES OF CALIF INC	980 MONTECITO DR # 302	CORONA	CA	92879
537-110-010		BANNING	CA	92220	LENNAR HOMES OF CALIF INC	980 MONTECITO DR # 302	CORONA	CA	92879
537-120-023		BANNING	CA	92220	CITY OF BANNING	PO BOX 998	BANNING	CA	92220
537-120-024		BANNING	CA	92220	CITY OF BANNING	PO BOX 998	BANNING	CA	92220
537-120-025	14050 S HIGHLAND HOME RD	BANNING	CA	92220	LENNAR HOMES OF CALIF INC	980 MONTECITO DR # 302	CORONA	CA	92879
537-120-026		BANNING	CA	92220	CITY OF BANNING	PO BOX 998	BANNING	CA	92220
537-120-027		BANNING	CA	92220	CITY OF BANNING	PO BOX 998	BANNING	CA	92220
537-120-028		BANNING	CA	92220	LENNAR HOMES OF CALIF INC	980 MONTECITO DR # 302	CORONA	CA	92879
537-120-029		BANNING	CA	92220	LENNAR HOMES OF CALIF INC	980 MONTECITO DR # 302	CORONA	CA	92879
537-120-030		BANNING	CA	92220	LENNAR HOMES OF CALIF INC	980 MONTECITO DR # 302	CORONA	CA	92879
537-120-031		BANNING	CA	92220	LENNAR HOMES OF CALIF INC	980 MONTECITO DR # 302	CORONA	CA	92879
537-120-032		BANNING	CA	92220	LENNAR HOMES OF CALIF INC	980 MONTECITO DR # 302	CORONA	CA	92879
537-120-033		BANNING	CA	92220	LENNAR HOMES OF CALIF INC	980 MONTECITO DR # 302	CORONA	CA	92879

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
537-120-034		BANNING	CA	92220	LENNAR HOMES OF CALIF INC	980 MONTECITO DR # 302	CORONA	CA	92879
537-140-001	3144 W WESTWARD AVE	BANNING	CA	92220	MT SAN JACINTO COMMUNITY COLLEGE DISTRIC	1499 N STATE ST	SAN JACINTO	CA	92583
537-140-002		BANNING	CA	92220	MT SAN JACINTO COMMUNITY COLLEGE DISTRIC	1499 N STATE ST	SAN JACINTO	CA	92583
537-140-003		BANNING	CA	92220	MT SAN JACINTO COMMUNITY COLLEGE DISTRIC	1499 N STATE ST	SAN JACINTO	CA	92583
537-140-004		BANNING	CA	92220	MT SAN JACINTO COMMUNITY COLLEGE DISTRIC	1499 N STATE ST	SAN JACINTO	CA	92583
537-140-012	2814 W WESTWARD AVE	BANNING	CA	92220	MT SAN JACINTO COMMUNITY COLLEGE DIST	1499 N STATE ST	SAN JACINTO	CA	92583
537-150-001		BANNING	CA	92220	MT SAN JACINTO COMMUNITY COLLEGE DIST	1499 N STATE ST	SAN JACINTO	CA	92583
537-150-005		BANNING	CA	92220	LAND, BANNING FUND	10621 CIVIC CENTER DR	RANCHO CUCAMONGA	CA	91730
537-150-006		BANNING	CA	92220	LAND, BANNING FUND	10621 CIVIC CENTER DR	RANCHO CUCAMONGA	CA	91730
537-150-007		BANNING	CA	92220	LAND, BANNING FUND	10621 CIVIC CENTER DR	RANCHO CUCAMONGA	CA	91730
537-150-008		BANNING	CA	92220	MT SAN JACINTO COMMUNITY COLLEGE DIST	1499 N STATE ST	SAN JACINTO	CA	92583
537-150-009		BANNING	CA	92220	CITY OF BANNING	PO BOX 998	BANNING	CA	92220
537-160-004	2112 W WESTWARD AVE	BANNING	CA	92220	DUEBBERT, JEANNE H	2112 W WESTWARD AVE	BANNING	CA	92220
537-160-005	2070 W WESTWARD AVE	BANNING	CA	92220	LE, BAO GIA	2070 W WESTWARD AVE	BANNING	CA	92220
537-160-006	2034 W WESTWARD AVE	BANNING	CA	92220	FEDERAL NATIONAL MORTGAGE ASSOCIATION	3476 STATEVIEW BLVD	FORT MILL	SC	29715
537-160-007	1976 W WESTWARD AVE	BANNING	CA	92220	ALVAREZ, CHARLES R	10918 EMERSON ST	RANCHO CUCAMONGA	CA	91701
537-160-008	1908 W WESTWARD AVE	BANNING	CA	92220	MULLEN, KENNETH D	1908 W WESTWARD AVE	BANNING	CA	92220
537-160-009	1884 W WESTWARD AVE	BANNING	CA	92220	COLE, JOE	1884 W WESTWARD AVE	BANNING	CA	92220
537-160-010	1864 W WESTWARD AVE	BANNING	CA	92220	PENUNURI, ADELINE	6233 ROCKNE AVE	WHITTIER	CA	90606
537-160-011	1844 W WESTWARD AVE	BANNING	CA	92220	HOPE, DAVID J	1844 W WESTWARD AVE	BANNING	CA	92220
537-160-012	1824 W WESTWARD AVE	BANNING	CA	92220	SEYMOUR, JERRY D	1824 W WESTWARD AVE	BANNING	CA	92220
537-160-013	883 LOVELL ST	BANNING	CA	92220	DOLAN, STEVEN	PO BOX 26903	SAN FRANCISCO	CA	94126
537-160-014	907 LOVELL ST	BANNING	CA	92220	SPSSM INVESTMENTS VIII LP	4900 SANTA ANITA AVE # 20	EL MONTE	CA	91731
537-160-019	810 S 22ND ST	BANNING	CA	92220	TAYLOR, KEVIN	810 S 22ND ST	BANNING	CA	92220
537-160-020	860 S 22ND ST	BANNING	CA	92220	FERREE, PHILLIP A	878 HIGHLAND HOME RD	BANNING	CA	92220
537-170-002		BANNING	CA	92220	LAND, BANNING FUND	10621 CIVIC CENTER DR	RANCHO CUCAMONGA	CA	91730
537-170-003		BANNING	CA	92220	LAND, BANNING FUND	10621 CIVIC CENTER DR	RANCHO CUCAMONGA	CA	91730

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
537-170-004		BANNING	CA	92220	RANCHO SAN GORGONIO LLC	10621 CIVIC CENTER DR	RANCHO CUCAMONGA	CA	91730
538-250-010	2435 W WESTWARD AVE	BANNING	CA	92220	TREJO, JUAN CARLOS	2435 W WESTWARD AVE	BANNING	CA	92220
538-250-017	2475 W WESTWARD AVE	BANNING	CA	92220	LINTON, BALAN K	2475 W WESTWARD AVE	BANNING	CA	92220
538-250-019	682 S WOODLAND AVE	BANNING	CA	92220	EDWARDS, MATTHEW CALDWELL	682 S WOODLAND AVE	BANNING	CA	92220
538-250-020	2553 W WESTWARD AVE	BANNING	CA	92220	PIPPENGER, RICKEY L	2553 W WESTWARD AVE	BANNING	CA	92220
538-250-023	2485 W WESTWARD AVE	BANNING	CA	92220	YANG, THAI	1557 MOUNTAIN VIEW TRL	BEAUMONT	CA	92223
538-271-001	2375 W WESTWARD AVE	BANNING	CA	92220	WRIGHT, RALPH PATRICK	PO BOX 836	BANNING	CA	92220
538-271-002	2337 W WESTWARD AVE	BANNING	CA	92220	TAMAYO, AGUSTIN	2337 W WESTWARD AVE	BANNING	CA	92220
538-271-008	2281 W WESTWARD AVE	BANNING	CA	92220	CRISTALES, RUTH N	2281 W WESTWARD AVE	BANNING	CA	92220
538-271-009		BANNING	CA	92220	YANG, TOU YEU	11062 POLARIS DR	SAN DIEGO	CA	92126
538-271-011	2271 W WESTWARD AVE	BANNING	CA	92220	SILVA, JOSE GUADALUPE	753 S 22ND ST	BANNING	CA	92220
538-271-014	723 S 22ND ST	BANNING	CA	92220	SNYDER, BEVERLY	40715 DYNAMITE CT	CALIENTE	CA	93518
538-271-015	739 S 22ND ST	BANNING	CA	92220	WHITE, KATHERYN	42725 DARIEN DR	BERMUDA DUNES	CA	92203
538-271-019	711 S 22ND ST # A	BANNING	CA	92220	ANDERSON, BRUCE W	711 S 22ND ST # A	BANNING	CA	92220
538-271-020	753 S 22ND ST	BANNING	CA	92220	ALEXANDER, BERNICE	1154 N CHERRY ST	BANNING	CA	92220
538-272-001	612 S 22ND ST	BANNING	CA	92220	MARTIN, MARIA	4375 VERNON AVE	RIVERSIDE	CA	92509
538-272-002	2129 W WESTWARD AVE	BANNING	CA	92220	STEPHENS, CHRIS W	2129 W WESTWARD AVE	BANNING	CA	92220
538-272-003	2079 W WESTWARD AVE	BANNING	CA	92220	DELANEY, GARY L	2079 W WESTWARD AVE	BANNING	CA	92220
538-272-004		BANNING	CA	92220	STAFFORD, ROBERT I	501 N SUNSET AVE APT 3240	BANNING	CA	92220
538-272-005	2071 W WESTWARD AVE	BANNING	CA	92220	STAFFORD, ROBERT I	501 N SUNSET AVE APT 3240	BANNING	CA	92220
538-272-006	2051 W WESTWARD AVE	BANNING	CA	92220	ANGUIANO, ALFREDO	2011 W WESTWARD AVE	BANNING	CA	92220
538-272-007	2011 W WESTWARD AVE	BANNING	CA	92220	ANGUIANO, ALFREDO	2011 W WESTWARD AVE	BANNING	CA	92220
538-280-002		BANNING	CA	92220	BANNING UNIFIED SCHOOL DIST	161 W WILLIAMS ST	BANNING	CA	92220
538-300-008	1663 W WESTWARD AVE	BANNING	CA	92220	SMITH, KENNETH W	1663 W WESTWARD AVE	BANNING	CA	92220
538-300-009	1715 W WESTWARD AVE	BANNING	CA	92220	YODER, PHIL	1715 W WESTWARD AVE	BANNING	CA	92220
538-300-010	1759 W WESTWARD AVE	BANNING	CA	92220	JAMESON, ROSE NELL	1759 W WESTWARD AVE	BANNING	CA	92220
538-300-011	1781 W WESTWARD AVE	BANNING	CA	92220	MOORE, VIRGINIA DIOSES	1781 W WESTWARD AVE	BANNING	CA	92220
538-300-025	1610 W BARBOUR ST	BANNING	CA	92220	SAVOLAINEN, DANNY ERIK	1610 W BARBOUR ST	BANNING	CA	92220
538-321-001	3123 RAINBOW LN	BANNING	CA	92220	ALVISO, ANTHONY J	3123 RAINBOW LN	BANNING	CA	92220
538-321-002	3107 RAINBOW LN	BANNING	CA	92220	FORTON, DELBERT JOSEPH	3107 RAINBOW LN	BANNING	CA	92220
538-321-003	3091 RAINBOW LN	BANNING	CA	92220	ANTRIM, ROBERT L	3091 RAINBOW LN	BANNING	CA	92220

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
538-321-004	761 STORMIE WAY	BANNING	CA	92220	HOGAN, VERNA	761 STORMIE WAY	BANNING	CA	92220
538-321-005	743 STORMIE WAY	BANNING	CA	92220	JOHNSON, CHARLIE	743 STORMIE WAY	BANNING	CA	92220
538-321-006	729 STORMIE WAY	BANNING	CA	92220	HASSEY, DAN H	729 STORMIE WAY	BANNING	CA	92220
538-321-007	709 STORMIE WAY	BANNING	CA	92220	JACKSON, GERALD LEE	709 STORMIE WAY	BANNING	CA	92220
538-321-014	710 DUSK CT	BANNING	CA	92220	MADRID, CHARLES	4420 W GILMAN ST	BANNING	CA	92220
538-321-015	732 DUSK CT	BANNING	CA	92220	ARMANI PASCU, SILVIA CATHERINE	732 DUSK CT	BANNING	CA	92220
538-321-016	748 DUSK CT	BANNING	CA	92220	CHACE, RUTH	748 DUSK CT	BANNING	CA	92220
538-321-017	764 DUSK CT	BANNING	CA	92220	KUSEN, HOWARD J	764 DUSK CT	BANNING	CA	92220
538-321-018	765 DAYBREAK WAY	BANNING	CA	92220	NEGRON, RAFAEL	765 DAYBREAK WAY	BANNING	CA	92220
538-321-019	749 DAYBREAK WAY	BANNING	CA	92220	WARDELL, MICHAEL J	749 DAYBREAK WAY	BANNING	CA	92220
538-321-020	733 DAYBREAK WAY	BANNING	CA	92220	US BANK NATIONAL ASSOCIATION	PO BOX 91322	SEATTLE	WA	98111
538-321-021	711 DAYBREAK WAY	BANNING	CA	92220	JENSEN, DARCY J	711 DAYBREAK WAY	BANNING	CA	92220
538-321-028	716 MOONLIGHT CT	BANNING	CA	92220	ZLOMKE, GUADALUPE	716 MOONLIGHT CT	BANNING	CA	92220
538-321-029	736 MOONLIGHT CT	BANNING	CA	92220	BRASSY, SANDRA L	736 MOONLIGHT CT	BANNING	CA	92220
538-321-030	750 MOONLIGHT CT	BANNING	CA	92220	LENE, CLAUDIA M	750 MOONLIGHT CT	BANNING	CA	92220
538-321-031	768 MOONLIGHT CT	BANNING	CA	92220	MCGINNIS, LAWRENCE W	768 MOONLIGHT CT	BANNING	CA	92220
538-321-032	769 AMBER SKY ST	BANNING	CA	92220	BLACKMON, JAMES A	769 AMBER SKY ST	BANNING	CA	92220
538-321-033	753 AMBER SKY ST	BANNING	CA	92220	OLIVAN, DANIEL	753 AMBER SKY ST	BANNING	CA	92220
538-321-034	737 AMBER SKY ST	BANNING	CA	92220	FRAUSTO, JUAN J	737 AMBER SKY ST	BANNING	CA	92220
538-321-058	760 STORMIE WAY	BANNING	CA	92220	JAMES, JEFF	12918 4TH ST	YUCAIPA	CA	92399
538-321-059	744 STORMIE WAY	BANNING	CA	92220	GONZALEZ, ELENA	744 STORMIE WAY	BANNING	CA	92220
538-321-060	728 STORMIE WAY	BANNING	CA	92220	DOMINGO, TERESITA A	728 STORMIE WAY	BANNING	CA	92220
538-321-061	731 DUSK CT	BANNING	CA	92220	SALCIDO, DANNY	731 DUSK CT	BANNING	CA	92220
538-321-062	745 DUSK CT	BANNING	CA	92220	DUNAHOO, RANDY C	745 DUSK CT	BANNING	CA	92220
538-321-063	763 DUSK CT	BANNING	CA	92220	VANCURA, MILOS	763 DUSK CT	BANNING	CA	92220
538-321-064	766 DAYBREAK WAY	BANNING	CA	92220	MEANS, SHIRLEY	766 DAYBREAK WAY	BANNING	CA	92220
538-321-065	750 DAYBREAK WAY	BANNING	CA	92220	BRADY, RONALD K	750 DAYBREAK WAY	BANNING	CA	92220
538-321-066	734 DAYBREAK WAY	BANNING	CA	92220	CASBY, BARBARA E	734 DAYBREAK WAY	BANNING	CA	92220
538-321-067	735 MOONLIGHT CT	BANNING	CA	92220	HENDON, PATRICIA MAE	735 MOONLIGHT CT	BANNING	CA	92220
538-321-068	751 MOONLIGHT CT	BANNING	CA	92220	ALCAZAR, JESUS R	751 MOONLIGHT CT	BANNING	CA	92220
538-321-069	767 MOONLIGHT CT	BANNING	CA	92220	CUMISKEY, OK	767 MOONLIGHT CT	BANNING	CA	92220
538-321-071		BANNING	CA	92220	SERRANO DEL VISTA HOMEOWNERS, ASSN	PO BOX 1510	UPLAND	CA	91785

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
538-321-075	700 S SUNSET AVE	BANNING	CA	92220	SERRANO DEL VISTA HOMEOWNERS, ASSN	PO BOX 1510	UPLAND	CA	91785
538-323-001	2784 RAINBOW LN	BANNING	CA	92220	BROOKS, LOUIS O	2784 RAINBOW LN	BANNING	CA	92220
538-323-002	2802 RAINBOW LN	BANNING	CA	92220	JANDREAU, ONEIL J	2802 RAINBOW LN	BANNING	CA	92220
538-323-003	2820 RAINBOW LN	BANNING	CA	92220	SHEARMAN, CAROL	2820 RAINBOW LN	BANNING	CA	92220
538-323-004	2836 RAINBOW LN	BANNING	CA	92220	MILLER, ROBERT L	2836 RAINBOW LN	BANNING	CA	92220
538-323-005	2850 RAINBOW LN	BANNING	CA	92220	BENINK, KARL	2850 RAINBOW LN	BANNING	CA	92220
538-323-006	2864 RAINBOW LN	BANNING	CA	92220	CUSTER, LUCY	800 SERPENTINE DR	REDLANDS	CA	92373
538-323-007	2880 RAINBOW LN	BANNING	CA	92220	HUERTA, SHEILA H	2880 RAINBOW LN	BANNING	CA	92220
538-323-008	2896 RAINBOW LN	BANNING	CA	92220	ABNER, BEVERLY	2896 RAINBOW LN	BANNING	CA	92220
538-323-009	2910 RAINBOW LN	BANNING	CA	92220	HARRIS, SHARON K	2910 RAINBOW LN	BANNING	CA	92220
538-323-010	2926 RAINBOW LN	BANNING	CA	92220	CHRISTIANSON, ROBERTA	2926 RAINBOW LN	BANNING	CA	92220
538-323-011	2942 RAINBOW LN	BANNING	CA	92220	COVERT, BARBARA PENNY	2942 RAINBOW LN	BANNING	CA	92220
538-323-012	2956 RAINBOW LN	BANNING	CA	92220	JIMENEZ, VIDAL J	15357 MURIETA SOUTH PKWY	RANCHO MURIETA	CA	95683
538-323-013	2972 RAINBOW LN	BANNING	CA	92220	SCHMIDT, JOAQUIN	2972 RAINBOW LN	BANNING	CA	92220
538-323-014	2986 RAINBOW LN	BANNING	CA	92220	PEREZ, ROSARIO A	2986 RAINBOW LN	BANNING	CA	92220
538-323-015	3002 RAINBOW LN	BANNING	CA	92220	PASALIS, ALEXANDRIA S	3002 RAINBOW LN	BANNING	CA	92220
538-323-016	3016 RAINBOW LN	BANNING	CA	92220	DECKER, JOSEPHNIE	3016 RAINBOW LN	BANNING	CA	92220
538-323-017	3030 RAINBOW LN	BANNING	CA	92220	OLDHAM, RALPH L	3030 RAINBOW LN	BANNING	CA	92220
538-323-018	3046 RAINBOW LN	BANNING	CA	92220	DETAR, LAUREN M	3046 RAINBOW LN	BANNING	CA	92220
538-323-019	3062 RAINBOW LN	BANNING	CA	92220	ROSS, LUCILLE	3062 RAINBOW LN	BANNING	CA	92220
538-323-020	3078 RAINBOW LN	BANNING	CA	92220	CELESTIAL, ROWENA PALLA	3078 RAINBOW LN	BANNING	CA	92220
538-323-021	3090 RAINBOW LN	BANNING	CA	92220	COUGHLIN, ROBERT J	3090 RAINBOW LN	BANNING	CA	92220
538-323-022	3108 RAINBOW LN	BANNING	CA	92220	FERRARO, CURTIS RAY	3108 RAINBOW LN	BANNING	CA	92220
538-323-023	3124 RAINBOW LN	BANNING	CA	92220	MOREAU, DANIEL PIERRE	3124 RAINBOW LN	BANNING	CA	92220
538-323-024	3146 RAINBOW LN	BANNING	CA	92220	KUSEN, KENNETH A	3146 RAINBOW LN	BANNING	CA	92220
538-323-028		BANNING	CA	92220	SERRANO DEL VISTA HOMEOWNERS, ASSN	PO BOX 1510	UPLAND	CA	91785
538-323-029	783 SUNSHINE ST	BANNING	CA	92220	MONTECINOS, BARBARA F	783 SUNSHINE ST	BANNING	CA	92220
538-323-030	757 SUNSHINE ST	BANNING	CA	92220	FULBRIGHT, ANN M	757 SUNSHINE ST	BANNING	CA	92220
538-323-031		BANNING	CA	92220	SERRANO DEL VISTA HOMEOWNERS, ASSN	PO BOX 1510	UPLAND	CA	91785
538-331-006	722 AMBER SKY ST	BANNING	CA	92220	MCGARY, PATRICK H	722 AMBER SKY ST	BANNING	CA	92220
538-331-007	738 AMBER SKY ST	BANNING	CA	92220	EBERHARDT, MYRNA	738 AMBER SKY ST	BANNING	CA	92220

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
538-331-008	754 AMBER SKY ST	BANNING	CA	92220	CARRIZAL, SALVADOR	754 AMBER SKY ST	BANNING	CA	92220
538-331-009	770 AMBER SKY ST	BANNING	CA	92220	BATRES, NIKKI	770 AMBER SKY ST	BANNING	CA	92220
538-331-010	791 AUTUMN WAY	BANNING	CA	92220	BOEGLIN, FRANK R	791 AUTUMN WAY	BANNING	CA	92220
538-331-011	777 AUTUMN WAY	BANNING	CA	92220	FERNANDEZ, JOE	777 AUTUMN WAY	BANNING	CA	92220
538-331-012	761 AUTUMN WAY	BANNING	CA	92220	FEDERAL NATIONAL MORTGAGE ASSOCIATION	PO BOX 650043	DALLAS	TX	75265
538-332-053	2648 CLEAR CT	BANNING	CA	92220	DOMINGO, VIRGILIO C	2648 CLEAR CT	BANNING	CA	92220
538-332-054	2664 CLEAR CT	BANNING	CA	92220	RAY, ELEANOR M	6901 BALTUSROL RD	FORT WORTH	TX	76132
538-332-055	2680 CLEAR CT	BANNING	CA	92220	FLORES, GEORGE	2680 CLEAR CT	BANNING	CA	92220
538-332-056	2694 CLEAR CT	BANNING	CA	92220	SENDIS, PATRICIA CORRALES	1847 NOAH DR	CORONA	CA	92880
538-332-057	2708 CLEAR CT	BANNING	CA	92220	BOBENG, JOHN W	2708 CLEAR CT	BANNING	CA	92220
538-332-058	2724 CLEAR CT	BANNING	CA	92220	GRIEGO, STEPHEN F	26205 W MILESTONE DR	PLAINFIELD	IL	60585
538-332-059	2723 RAINBOW LN	BANNING	CA	92220	BOYD, MARY	2723 RAINBOW LN	BANNING	CA	92220
538-332-060	2707 RAINBOW LN	BANNING	CA	92220	BENNETT, NOVELL	2707 RAINBOW LN	BANNING	CA	92220
538-332-061	2691 RAINBOW LN	BANNING	CA	92220	MEANOR, JOHN PRICE	2691 RAINBOW LN	BANNING	CA	92220
538-332-062	2675 RAINBOW LN	BANNING	CA	92220	NAWROCKI, GLORIA ANN	2675 RAINBOW LN	BANNING	CA	92220
538-332-063	2661 RAINBOW LN	BANNING	CA	92220	DELGADO, VIDAL G	2661 RAINBOW LN	BANNING	CA	92220
538-332-064	2645 RAINBOW LN	BANNING	CA	92220	ROA, GILBERT R	PO BOX 702	COLTON	CA	92324
538-332-067		BANNING	CA	92220	SERRANO DEL VISTA HOMEOWNERS ASSN	PO BOX 1510	UPLAND	CA	91785
538-333-015	728 WEATHER WAY	BANNING	CA	92220	ELLISON, CLIFFORD	728 WEATHER WAY	BANNING	CA	92220
538-333-016	746 WEATHER WAY	BANNING	CA	92220	MARCHESE, RICHARD	746 WEATHER WAY	BANNING	CA	92220
538-333-017	760 WEATHER WAY	BANNING	CA	92220	TULLEDGE, HAROLD A	760 WEATHER WAY	BANNING	CA	92220
538-333-018	776 WEATHER WAY	BANNING	CA	92220	HAINES, EVELYN JEAN	776 WEATHER WAY	BANNING	CA	92220
538-333-019	798 WEATHER WAY	BANNING	CA	92220	CASTILLO, ROBERT P	798 WEATHER WAY	BANNING	CA	92220
538-333-020	2620 RAINBOW LN	BANNING	CA	92220	SEDDON, WALTER J	2620 RAINBOW LN	BANNING	CA	92220
538-333-021	2644 RAINBOW LN	BANNING	CA	92220	WYSS, PATRICIA L	2644 RAINBOW LN	BANNING	CA	92220
538-333-022	2660 RAINBOW LN	BANNING	CA	92220	COYLE, SONIA F	PO BOX 863	BANNING	CA	92220
538-333-023	2674 RAINBOW LN	BANNING	CA	92220	MORALES, RENE	2674 RAINBOW LN	BANNING	CA	92220
538-333-024	2690 RAINBOW LN	BANNING	CA	92220	BOWMAN, BRADEN M	2690 RAINBOW LN	BANNING	CA	92220
538-333-025	2706 RAINBOW LN	BANNING	CA	92220	BRAATZ, SONJA INGA	2706 RAINBOW LN	BANNING	CA	92220
538-333-026	2722 RAINBOW LN	BANNING	CA	92220	SEIP, LEROY N	2722 RAINBOW LN	BANNING	CA	92220
538-333-027	2736 RAINBOW LN	BANNING	CA	92220	DECOUD, EUGENE S	2736 RAINBOW LN	BANNING	CA	92220
538-333-028	2754 RAINBOW LN	BANNING	CA	92220	MARTINEZ, RALPH B	2724 RAINBOW LN	BANNING	CA	92220

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
538-333-029	2768 RAINBOW LN	BANNING	CA	92220	CRAGIE, ALEX W	791 VIA MANANA	SANTA BARBARA	CA	93108
540-180-020		BANNING	CA	92220	BALDI, BROS CONST	PO BOX 500	BEAUMONT	CA	92223
540-180-026	1219 W LINCOLN ST	BANNING	CA	92220	BALDI, BROS CONST	PO BOX 500	BEAUMONT	CA	92223
540-180-030		BANNING	CA	92220	SELBY AAGAARD, GAIL	3895 MORROW LN	CHICO	CA	95928
540-180-031		BANNING	CA	92220	CITY OF BANNING	PO BOX 998	BANNING	CA	92220
540-180-057		BANNING	CA	92220	I-10 COMMERCE CENTER SAN BERNARDINO LP	1301 DOVE ST STE 1080	NEWPORT BEACH	CA	92660
540-180-059	1143 W LINCOLN ST	BANNING	CA	92220	I-10 COMMERCE CENTER SAN BERNARDINO LP	1301 DOVE ST STE 1080	NEWPORT BEACH	CA	92660
540-210-009		BANNING	CA	92220	WEST, LINCOLN PROP	PO BOX 456	BEAUMONT	CA	92223
540-210-010		BANNING	CA	92220	WEST, LINCOLN PROP	PO BOX 456	BEAUMONT	CA	92223
540-210-014	201 W LINCOLN ST	BANNING	CA	92220	WEST, LINCOLN PROP	PO BOX 456	BEAUMONT	CA	92223
540-210-015	161 W LINCOLN ST	BANNING	CA	92220	ANDERSON, ROBERT S	1550 E RAMSEY ST	BANNING	CA	92220
540-210-017	251 S SAN GORGONIO AVE	BANNING	CA	92220	SQUARED, CJ	3020 ROLLINGS AVE	THOUSAND OAKS	CA	91360
540-210-018	101 W LINCOLN ST	BANNING	CA	92220	SQUARED, CJ	5210 ACQUA LN	PAHRUMP	NV	89061
540-220-007	679 W LINCOLN ST	BANNING	CA	92220	LOHMAN, SLADE A	42305 10TH ST W	LANCASTER	CA	93534
540-220-008	649 W LINCOLN ST	BANNING	CA	92220	ZUKAZA LLC	23772 CORONEL DR	MISSION VIEJO	CA	92691
540-220-009	649 W LINCOLN ST	BANNING	CA	92220	40 BRUIN LANCASTER LLC	12671 HIGH BLUFF DR STE 150	SAN DIEGO	CA	92130
540-220-013	200 S 8TH ST	BANNING	CA	92220	BIRCHARD, CLYDE	PO BOX 746	BANNING	CA	92220
540-220-017	649 W LINCOLN ST	BANNING	CA	92220	ADAD LLC	2118 WILSHIRE BLVD # 1142	SANTA MONICA	CA	90403
540-220-018		BANNING	CA	92220	SAFFO, ANTHONY A	5900B OLEANDER DR	WILMINGTON	NC	28403
540-230-007	1222 W LINCOLN ST	BANNING	CA	92220	MALLOY FAMILY PARTNERS LP	556 MALLOY CT	CORONA	CA	92880
540-230-009	284 S 8TH ST	BANNING	CA	92220	MALLOY FAMILY PARTNERS	556 MALLOY CT	CORONA	CA	92880
540-230-014	1184 W LINCOLN ST	BANNING	CA	92220	MALLOY FAMILY PARTNERS	556 MALLOY CT	CORONA	CA	92880
540-230-015	1184 W LINCOLN ST	BANNING	CA	92220	MALLOY FAMILY PARTNERS	556 MALLOY CT	CORONA	CA	92880
540-240-001		BANNING	CA	92220	WAGAR, LARRY BRIAN	9640 MIDDLETON RD	PHELAN	CA	92371
540-240-002	644 S 12TH ST	BANNING	CA	92220	SANCHEZ, MANOLITO G	644 S 12TH ST	BANNING	CA	92220
540-240-003	654 S 12TH ST	BANNING	CA	92220	DOOLITTLE, JAMES M	1430 W LINCOLN ST	BANNING	CA	92220
540-240-004	678 S 12TH ST	BANNING	CA	92220	AVALOS, LIONSO	678 S 12TH ST	BANNING	CA	92220
540-240-005	714 S 12TH ST	BANNING	CA	92220	FOSKETT, RODNEY CHARLES	714 S 12TH ST	BANNING	CA	92220
540-240-007	750 S 12TH ST	BANNING	CA	92220	DEARMOND, DEBORAH M	218 DWYER AVE	BEAUMONT	CA	92223
540-240-008	786 S 12TH ST	BANNING	CA	92220	SPSSM INVESTMENTS VI LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
540-240-009	1145 W WESTWARD AVE	BANNING	CA	92220	HOLTROP, JOSHUA	1145 W WESTWARD AVE	BANNING	CA	92220

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
540-240-010	1087 W WESTWARD AVE	BANNING	CA	92220	LEFLER, HENRY M	195 E LINCOLN ST	BANNING	CA	92220
540-250-001		BANNING	CA	92220	YELLOWJACKET	430 CAMBRIDGE AVE STE 100	PALO ALTO	CA	94306
540-250-002	185 W WESTWARD AVE	BANNING	CA	92220	SHIN, GILBERT	387 MAGNOLIA AVE	CORONA	CA	92879
540-250-003		BANNING	CA	92220	SHIN, GILBERT	387 MAGNOLIA AVE	CORONA	CA	92879
540-250-008	445 S SAN GORGONIO AVE	BANNING	CA	92220	RINGGOLD, COWLA	1047 VIA PANORAMA	BANNING	CA	92220
540-250-035	300 W LINCOLN ST	BANNING	CA	92220	BURGESS, FRANK J	PO BOX 54	BANNING	CA	92220
540-250-036		BANNING	CA	92220	SHIN, GILBERT	387 MAGNOLIA AVE	CORONA	CA	92879
540-250-037		BANNING	CA	92220	RIVERSIDE COUNTY FLOOD CONT	1995 MARKET ST	RIVERSIDE	CA	92501
540-250-045		BANNING	CA	92220	BURGESS, FRANK J	PO BOX 54	BANNING	CA	92220
540-250-061		BANNING	CA	92220	BYERLY, JAMES R	1308 DUBONNET CT	OAK PARK	CA	91377
540-270-015	1296 W BARBOUR ST	BANNING	CA	92220	BUZZINI, LYNN CAROL	1296 W BARBOUR ST	BANNING	CA	92220
540-270-016	1274 W BARBOUR ST	BANNING	CA	92220	VOLK, KEITH	1692 E 6TH ST	BEAUMONT	CA	92223
540-270-017	649 S 12TH ST	BANNING	CA	92220	GOODMAN, SHARON L	649 S 12TH ST	BANNING	CA	92220
540-270-018	681 S 12TH ST	BANNING	CA	92220	GARRETT, VAN THOMAS	681 S 12TH ST	BANNING	CA	92220
540-270-019	731 S 12TH ST	BANNING	CA	92220	PIMENTEL, JOSH	731 S 12TH ST	BANNING	CA	92220
540-270-020	743 S 12TH ST	BANNING	CA	92220	PARKER, MARVIN E	743 S 12TH ST	BANNING	CA	92220
540-270-021	773 S 12TH ST	BANNING	CA	92220	DOMINGUEZ, BRUCE AUGUSTINE	773 S 12TH ST	BANNING	CA	92220
540-270-022	1271 W WESTWARD AVE	BANNING	CA	92220	FLORES, GABRIEL	1271 W WESTWARD AVE	BANNING	CA	92220
540-270-023	1293 W WESTWARD AVE	BANNING	CA	92220	RIOS III, EDDIE A	1293 W WESTWARD AVE	BANNING	CA	92220
540-270-024	1315 W WESTWARD AVE	BANNING	CA	92220	RODRIGUEZ, FRANK R	1315 W WESTWARD AVE	BANNING	CA	92220
540-270-025	1337 W WESTWARD AVE	BANNING	CA	92220	MEDICKE, RICHARD W	1337 W WESTWARD AVE	BANNING	CA	92220
540-270-026	1359 W WESTWARD AVE	BANNING	CA	92220	SORENSEN, STEVEN G	1359 W WESTWARD AVE	BANNING	CA	92220
540-270-027	1381 W WESTWARD AVE	BANNING	CA	92220	SYLVESTER, MARK J	40334 AVENIDA ALTEJO BELLA	CHERRY VALLEY	CA	92223
540-270-028	1403 W WESTWARD AVE	BANNING	CA	92220	VALDEZ, ERNEST	1403 W WESTWARD AVE	BANNING	CA	92220
540-270-029	1425 W WESTWARD AVE	BANNING	CA	92220	SHARP, WILLIAM R	1425 W WESTWARD AVE	BANNING	CA	92220
540-270-030	1447 W WESTWARD AVE	BANNING	CA	92220	THORNBURY, PATRICIA LEE	3525 JULCREST RD	YUCCA VALLEY	CA	92284
540-270-031	1471 W WESTWARD AVE	BANNING	CA	92220	NAVA, JOSE G	40652 BROOKSIDE AVE	CHERRY VALLEY	CA	92223
540-270-032	1489 W WESTWARD AVE	BANNING	CA	92220	THIBAUT, MARCEL F	1489 W WESTWARD AVE	BANNING	CA	92220
540-270-033	1505 W WESTWARD AVE	BANNING	CA	92220	STUKA, RICHARD	4983 TOLO WAY	OCEANSIDE	CA	92056
540-270-034	1523 W WESTWARD AVE	BANNING	CA	92220	THE GLENN W ATKISSON LIVING TRUST	1595 W WESTWARD AVE	BANNING	CA	92220
540-270-036	625 S 12TH ST	BANNING	CA	92220	DAVIDSON, GAYLE L	625 S 12TH ST	BANNING	CA	92220

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
540-270-037	1596 W BARBOUR ST	BANNING	CA	92220	DIVITA, MICHAEL J	PO BOX 1492	BANNING	CA	92220
540-270-039	1574 W BARBOUR ST	BANNING	CA	92220	BALL, KEVIN J	1574 W BARBOUR ST	BANNING	CA	92220
540-270-041	1554 W BARBOUR ST	BANNING	CA	92220	TRINIDAD, ADOLPH J	1554 W BARBOUR ST	BANNING	CA	92220
540-270-045	1595 W WESTWARD AVE	BANNING	CA	92220	THE GLENN W ATKISSON LIVING TRUST	1595 W WESTWARD AVE	BANNING	CA	92220
541-220-001	260 S SAN GORGONIO AVE	BANNING	CA	92220	MONFORT, LEON B	980 W MILL ST	SAN BERNARDINO	CA	92410
541-220-002	280 S SAN GORGONIO AVE	BANNING	CA	92220	MONFORT, LEON B	980 W MILL ST	SAN BERNARDINO	CA	92410
541-220-003	312 S SAN GORGONIO AVE	BANNING	CA	92220	GAMEZ, JORGE LEONARDO AVELAR	29886 WHISPERING PALMS TRL	CATHEDRAL CITY	CA	92234
541-220-015	275 E LINCOLN ST	BANNING	CA	92220	KIRK, CHRISTOPHER O	PO BOX 3793	RIVERSIDE	CA	92519
541-220-016	390 S SAN GORGONIO AVE	BANNING	CA	92220	KHUSHI INC	1477 MIDNIGHT SUN DR	BEAUMONT	CA	92223
541-220-017	195 E LINCOLN ST	BANNING	CA	92220	LEFLER, HENRY M	195 E LINCOLN ST	BANNING	CA	92220
541-220-018	313 S GALLAHER WAY	BANNING	CA	92220	CORDOVA, CANDICE YAGHJIAN	5900 OLEANDER DR	WILMINGTON	NC	28403
541-220-019		BANNING	CA	92220	TUTTLE, DEXTER L	1177 W LINCOLN ST	BANNING	CA	92220
541-220-020		BANNING	CA	92220	SOUTHERN CALIFORNIA EDISON CO	PO BOX 800	ROSEMEAD	CA	91770
541-231-007		BANNING	CA	92220	AGUILERA, LARRY	18200 CAMRA WAY	RIVERSIDE	CA	92508
541-231-009		BANNING	CA	92220	WOLFENDEN, ROBERT T	49 LINCOLN PL	RANCHO MIRAGE	CA	92270
541-232-014	781 PLAZA ST	BANNING	CA	92220	ZEPEDA, JOHN	781 PLAZA ST	BANNING	CA	92220
541-232-015		BANNING	CA	92220	BEALE, DONALD	674 N SUNSET AVE	BANNING	CA	92220
541-232-016	759 PLAZA ST	BANNING	CA	92220	RAMOS, EMILIE M	759 E PINES ST	BANNING	CA	92220
541-232-017	741 PLAZA ST	BANNING	CA	92220	CARMENATTI, JOSE MANUEL	741 PLAZA ST	BANNING	CA	92220
541-232-018	731 PLAZA ST	BANNING	CA	92220	LOERA, NATIVIDAD	731 PLAZA ST	BANNING	CA	92220
541-232-019	699 PLAZA ST	BANNING	CA	92220	MIRANDA, CIRILA G	1517 W WILLIAMS ST	BANNING	CA	92220
541-232-020	691 PLAZA ST	BANNING	CA	92220	MIRANDA, AUGUSTINE GONZALES	1517 W WILLIAMS ST	BANNING	CA	92220
541-232-021	685 PLAZA ST	BANNING	CA	92220	BRESKAL, GEOFFREY	771 N KENTER AVE	LOS ANGELES	CA	90049
541-232-022	673 PLAZA ST	BANNING	CA	92220	GARCIA, JOE F	920 APRIL LN	BANNING	CA	92220
541-232-023	655 PLAZA ST	BANNING	CA	92220	VALLESILLO, JOHN B	655 PLAZA ST	BANNING	CA	92220
541-232-024		BANNING	CA	92220	VALLESILLO, JOHN B	655 PLAZA ST	BANNING	CA	92220
541-232-025	619 PLAZA ST	BANNING	CA	92220	RIOS, MARY B	619 PLAZA ST	BANNING	CA	92220
541-232-026	619 PLAZA ST	BANNING	CA	92220	RIOS, MARY B	619 PLAZA ST	BANNING	CA	92220
541-233-001	618 PLAZA ST	BANNING	CA	92220	MACIAS, JIM	PO BOX 3208	CATHEDRAL CITY	CA	92235
541-233-002		BANNING	CA	92220	LAVOIE, REGINALD	780 S HARGRAVE ST	BANNING	CA	92220
541-233-003	638 PLAZA ST	BANNING	CA	92220	VALLESILLO, FIDELA	638 PLAZA ST	BANNING	CA	92220

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
541-233-004		BANNING	CA	92220	VALLESILLO, FIDELA	638 PLAZA ST	BANNING	CA	92220
541-233-005		BANNING	CA	92220	MORA, SILVIA	1503 N IRIS AVE	RIALTO	CA	92376
541-233-006	684 PLAZA ST	BANNING	CA	92220	HANKS, DALE	684 PLAZA ST	BANNING	CA	92220
541-233-007		BANNING	CA	92220	HANKS, HERMAN D	684 PLAZA ST	BANNING	CA	92220
541-233-008	708 PLAZA ST	BANNING	CA	92220	DIAZ, FRANCES C	PO BOX 514	BANNING	CA	92220
541-233-009	726 PLAZA ST	BANNING	CA	92220	NATIVIDAD, LEERA	731 PLAZA ST	BANNING	CA	92220
541-233-010	742 PLAZA ST	BANNING	CA	92220	PEREZ, JUAN	676 S MILLARD AVE	RIALTO	CA	92376
541-233-011	754 PLAZA ST	BANNING	CA	92220	RODRIGUEZ, AMPARO	PO BOX 353	BANNING	CA	92220
541-233-012		BANNING	CA	92220	GONZALES, LEONOR	6311 W CAMPBELL AVE	PHOENIX	AZ	85033
541-233-013	782 PLAZA ST	BANNING	CA	92220	GONZALES, LEONOR	6311 W CAMPBELL AVE	PHOENIX	AZ	85033
541-233-014	775 E LINCOLN ST	BANNING	CA	92220	SANCHEZ, ANGIE	30292 SAN LUIS REY DR	CATHEDRAL CITY	CA	92234
541-233-015	775 E LINCOLN ST	BANNING	CA	92220	SANCHEZ, ANGIE	30292 SAN LUIS REY DR	CATHEDRAL CITY	CA	92234
541-233-016		BANNING	CA	92220	NOBLES, LEORA E	11012 CRENSHAW BLVD APT 4	INGLEWOOD	CA	90303
541-233-017	743 E LINCOLN ST	BANNING	CA	92220	DIAZ, DANNY ANTHONY	4386 HILLSIDE DR	BANNING	CA	92220
541-233-018	731 E LINCOLN ST	BANNING	CA	92220	GIRARD, PAUL N	731 E LINCOLN ST	BANNING	CA	92220
541-233-019		BANNING	CA	92220	TRAN, NHU THI	PO BOX 27738	LAS VEGAS	NV	89126
541-233-020		BANNING	CA	92220	HANKS, HERMAN D	684 PLAZA ST	BANNING	CA	92220
541-233-021		BANNING	CA	92220	HANKS, JENNIE	669 E LINCOLN ST	BANNING	CA	92220
541-233-022	669 E LINCOLN ST	BANNING	CA	92220	HANKS, JENNIE	669 E LINCOLN ST	BANNING	CA	92220
541-233-023		BANNING	CA	92220	LINET, DOLORES S	641 S LINCOLN ST	BANNING	CA	92220
541-233-024	641 E LINCOLN ST	BANNING	CA	92220	LINET, DOLORES S	641 E LINCOLN ST	BANNING	CA	92220
541-233-025		BANNING	CA	92220	MUNOZ, JESUS	485 S FLORIDA ST	BANNING	CA	92220
541-233-026	627 E LINCOLN ST	BANNING	CA	92220	MUNOZ, JENNIE	627 E LINCOLN ST	BANNING	CA	92220
541-240-006	825 E LINCOLN ST	BANNING	CA	92220	DELACRUZ, ESTHER	825 E LINCOLN ST	BANNING	CA	92220
541-240-013	931 E LINCOLN ST	BANNING	CA	92220	MHALAY, SHAE	PO BOX 3282	BAKERSFIELD	CA	93385
541-240-015	322 S HARGRAVE ST	BANNING	CA	92220	ARREOLA, THOMAS	322 S HARGRAVE ST	BANNING	CA	92220
541-240-016		BANNING	CA	92220	CORIA, MARTIN PARRA	1068 NIGHTHAWK PL	BEAUMONT	CA	92223
541-240-017		BANNING	CA	92220	CORIA, MARTIN PARRA	1068 NIGHTHAWK PL	BEAUMONT	CA	92223
541-240-018		BANNING	CA	92220	MHALAY, SHAE	PO BOX 3282	BAKERSFIELD	CA	93385
541-260-028	1094 DOROTHY ANNA DR	BANNING	CA	92220	ROMBERG, DAVID	8475 BLUFF ST	BANNING	CA	92220
541-260-032		BANNING	CA	92220	BANNING UNIFIED SCHOOL DIST	161 W WILLIAMS ST	BANNING	CA	92220

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
541-260-038		BANNING	CA	92220	CITY OF BANNING	PO BOX 998	BANNING	CA	92220
541-260-039		BANNING	CA	92220	CITY OF BANNING	PO BOX 998	BANNING	CA	92220
541-271-004	551 E BARBOUR ST	BANNING	CA	92220	CHATIGNY, JOE	551 E BARBOUR ST	BANNING	CA	92220
541-271-025		BANNING	CA	92220	ROMBERG, DAVID	8475 BLUFF ST	BANNING	CA	92220
541-271-027		BANNING	CA	92220	ROMBERG, DAVID	8475 BLUFF ST	BANNING	CA	92220
541-271-034	485 S FLORIDA ST	BANNING	CA	92220	MUNOZ, JUAN G	485 S FLORIDA ST	BANNING	CA	92220
541-271-039	491 S FLORIDA ST	BANNING	CA	92220	COSLETT, THOMAS P	491 S FLORIDA ST	BANNING	CA	92220
541-271-040	433 S FLORIDA ST	BANNING	CA	92220	HELM, JOHN D	433 S FLORIDA ST	BANNING	CA	92220
541-271-041	415 S FLORIDA ST	BANNING	CA	92220	PRISTINE BUILDERS INC	671 E SUNSET DR N	REDLANDS	CA	92373
541-271-042	504 E LINCOLN ST	BANNING	CA	92220	WACREB LLC	3530 W GARRY AVE	SANTA ANA	CA	92704
541-272-008	478 S FLORIDA ST	BANNING	CA	92220	DOUGLAS, RUIL C	PO BOX 742	BANNING	CA	92220
541-272-009	460 S FLORIDA ST	BANNING	CA	92220	CHAPAROSA, ANDREW S	460 S FLORIDA ST	BANNING	CA	92220
541-272-010	446 S FLORIDA ST	BANNING	CA	92220	HERNANDEZ, CONSUELO	446 S FLORIDA ST	BANNING	CA	92220
541-272-011	430 S FLORIDA ST	BANNING	CA	92220	FUENTES, VIRGILIO	430 S FLORIDA ST	BANNING	CA	92220
541-272-012		BANNING	CA	92220	ADAD LLC	2118 WILSHIRE BLVD # 1142	SANTA MONICA	CA	90403
541-272-013		BANNING	CA	92220	GARCIA, THEODORE M	2581 E CENTRAL AVE SPC 5	FRESNO	CA	93725
541-272-014		BANNING	CA	92220	GARCIA, THEODORE M	2581 E CENTRAL AVE SPC 5	FRESNO	CA	93725
541-272-015	447 S HERMOSA AVE	BANNING	CA	92220	GARCIA, MARGARET	447 S HERMOSA AVE	BANNING	CA	92220
541-272-016	451 S HERMOSA AVE	BANNING	CA	92220	SPSSM INVESTMENTS IV LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
541-272-017	479 S HERMOSA AVE	BANNING	CA	92220	RIO, DEL ROSARIO	PO BOX 422	BANNING	CA	92220
541-273-001	719 E BARBOUR ST	BANNING	CA	92220	MEDWAY, ANTHONY D	11580 WELEBIR ST	LOMA LINDA	CA	92354
541-273-002	737 E BARBOUR ST	BANNING	CA	92220	MOORE, KATIE O	737 E BARBOUR ST	BANNING	CA	92220
541-273-003	560 S HERMOSA AVE	BANNING	CA	92220	NEVAREZ, MARIALINA	1131 HOODS CROSS RD LOT 1	ONEONTA	AL	35121
541-273-004		BANNING	CA	92220	PATEL, ASHOK D	1226 MESA DEL SOL	FULLERTON	CA	92833
541-273-005	522 S HERMOSA AVE	BANNING	CA	92220	BELTRAN, LORETO C	522 S HERMOSA AVE	BANNING	CA	92220
541-273-006	510 S HERMOSA AVE	BANNING	CA	92220	MORA, MARIA BEATRIZ	510 S HERMOSA AVE	BANNING	CA	92220
541-273-007		BANNING	CA	92220	CALDERON, NETTIE	PO BOX 165	BANNING	CA	92220
541-273-008	420 S HERMOSA AVE	BANNING	CA	92220	MICHAEL MONIAK INC	PO BOX 3906	SAN CLEMENTE	CA	92674
541-273-009	523 S HARGRAVE ST	BANNING	CA	92220	WILSON, JAMES	523 S HARGRAVE ST	BANNING	CA	92220
541-273-010		BANNING	CA	92220	MACIAS, JIM B	1984 E PARK DR	PALM SPRINGS	CA	92262
541-273-011		BANNING	CA	92220	MACIAS, JIM B	1984 E PARK DR	PALM SPRINGS	CA	92262

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
541-273-012	779 E BARBOUR ST	BANNING	CA	92220	MACIAS, ELSA D	779 E BARBOUR ST	BANNING	CA	92220
541-280-001	422 S HARGRAVE ST	BANNING	CA	92220	PACIFIC LATIN AM DIST COUNCIL ASSEM, OF GOD	422 S HARGRAVE ST	BANNING	CA	92220
541-280-003	520 S HARGRAVE ST	BANNING	CA	92220	RODRIGUEZ, GERARDO	520 S HARGRAVE ST	BANNING	CA	92220
541-280-004	540 S HARGRAVE ST	BANNING	CA	92220	LIZAMA, MARIA LOURDES	540 S HARGRAVE ST	BANNING	CA	92220
541-280-005	576 S HARGRAVE ST	BANNING	CA	92220	MACIAS, JIM B	1984 E PARK DR	PALM SPRINGS	CA	92262
541-280-006	900 E LINCOLN ST	BANNING	CA	92220	MANSKE, EDWIN E	PO BOX 1209	WILDOMAR	CA	92595
541-280-009	837 E BARBOUR ST	BANNING	CA	92220	BURGIN, BESSIE ANN	837 E BARBOUR ST	BANNING	CA	92220
541-280-011	933 E BARBOUR ST	BANNING	CA	92220	PRENDERGAST, JOHN E	46025 HIGHWAY 60 # 70	SALOME	AZ	85348
541-280-014		BANNING	CA	92220	HILDE, TODD	2530 XENIUM LN N	MINNEAPOLIS	MN	55441
541-280-015	1017 E BARBOUR ST	BANNING	CA	92220	WHEELER, RICHARD LEE	1017 E BARBOUR ST	BANNING	CA	92220
541-280-016	1047 E BARBOUR ST	BANNING	CA	92220	ROCHA, JOHN J	1047 E BARBOUR ST	BANNING	CA	92220
541-280-017	1126 E LINCOLN ST	BANNING	CA	92220	HADERER, RICHARD A	3449 ENTERPRISE AVE	HAYWARD	CA	94545
541-280-018	1073 E BARBOUR ST	BANNING	CA	92220	OLVERA, JOSEPH ESTRADA	1073 E BARBOUR ST	BANNING	CA	92220
541-280-020	1103 E BARBOUR ST	BANNING	CA	92220	MEDVEDEFF, JAMIE	1103 E BARBOUR ST	BANNING	CA	92220
541-280-021	1123 E BARBOUR ST	BANNING	CA	92220	PIERCE, DENNIS C	48 N DOC HOLIDAY LN	CENTRAL	UT	84722
541-280-022	1157 E BARBOUR ST	BANNING	CA	92220	REYNOLDS, ROBERT A	4936 MEADOW WAY	BANNING	CA	92220
541-280-024	545 S JUAREZ ST	BANNING	CA	92220	HUGHES, ANGELA FLORES	545 S JUAREZ ST	BANNING	CA	92220
541-280-025	1177 E BARBOUR ST	BANNING	CA	92220	SPSSM INVESTMENTS VI LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
541-280-027	562 S HARGRAVE ST	BANNING	CA	92220	ORTEGA, TONY H	562 S HARGRAVE ST	BANNING	CA	92220
541-280-030	971 E BARBOUR ST	BANNING	CA	92220	PIPPENGER, RICKEY L	2553 W WESTWARD AVE	BANNING	CA	92220
541-280-031	991 E BARBOUR ST	BANNING	CA	92220	PIPPENGER, RICKEY L	2553 W WESTWARD AVE	BANNING	CA	92220
541-280-037	837 E BARBOUR ST	BANNING	CA	92220	BURGIN, VERNER A	837 E BARBOUR ST	BANNING	CA	92220
541-280-038	486 S HARGRAVE ST	BANNING	CA	92220	FISHER, JEFFREY A	PO BOX 141	BANNING	CA	92220
541-280-039	1150 E LINCOLN ST	BANNING	CA	92220	WAUSAU TILE CO	PO BOX 1520	WAUSAU	WI	54402
541-280-040		BANNING	CA	92220	BERTRAM, RUDOLPH F	PO BOX 2302	CARMEL	CA	93921
541-290-002	1395 E BARBOUR ST	BANNING	CA	92220	VOLK, KEITH W	1692 E 6TH ST	BEAUMONT	CA	92223
541-290-009	1487 E BARBOUR ST	BANNING	CA	92220	SPSSM INVESTMENTS VIII LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
541-290-010	1521 E BARBOUR ST	BANNING	CA	92220	HEILIG, PAUL J	8515 ARJONS DR STE K	SAN DIEGO	CA	92126
541-290-012	1284 E LINCOLN ST	BANNING	CA	92220	HALE, FAMILY PROP	19200 S REYES AVE	COMPTON	CA	90221
541-290-013		BANNING	CA	92220	QUENTAL, EDWARD	1838 VALENCIA AVE	PLACENTIA	CA	92870
541-290-018		BANNING	CA	92220	CALIFORNIA CREDIT UNION	701 N BRAND BLVD	GLENDALE	CA	91203

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
541-290-019		BANNING	CA	92220	TURNER, KEITH	2247 EL CAPITAN DR	RIVERSIDE	CA	92506
541-310-017	686 E BARBOUR ST	BANNING	CA	92220	SALAZAR, GEORGINA R	686 E BARBOUR ST	BANNING	CA	92220
541-310-020	621 S HARGRAVE ST	BANNING	CA	92220	FRANCO, KARINA	621 S HARGRAVE ST	BANNING	CA	92220
541-310-021		BANNING	CA	92220	FRANCO, KARINA	7255 BAYMEADOWS WAY	JACKSONVILLE	FL	32256
541-310-022	657 S HARGRAVE ST	BANNING	CA	92220	TORRES, MARIA	657 S HARGRAVE ST	BANNING	CA	92220
541-310-024	720 E BARBOUR ST	BANNING	CA	92220	MARQUEZ TOSTADO, JOSE R	720 E BARBOUR ST	BANNING	CA	92220
541-320-001	620 S HARGRAVE ST	BANNING	CA	92220	BURNEY, THOMAS E	620 S HARGRAVE ST	BANNING	CA	92220
541-320-002	640 S HARGRAVE ST	BANNING	CA	92220	SEALS, VERNELL	PO BOX 1544	BANNING	CA	92220
541-320-003	660 S HARGRAVE ST	BANNING	CA	92220	EARTHLY, PATRICK	432 E 6TH ST	BEAUMONT	CA	92223
541-320-004	680 S HARGRAVE ST	BANNING	CA	92220	CARBAJAL, MAXIMO PEREZ	PO BOX 630	CABAZON	CA	92230
541-320-010		BANNING	CA	92220	MORRIS, CARL RICHARD	1166 N 4TH ST	BANNING	CA	92220
541-320-011		BANNING	CA	92220	MORRIS, RONALD	12226 CHINABERRY ST	YUCAIPA	CA	92399
541-320-012	1300 E RAMSEY ST	BANNING	CA	92220	CRUZ, KRYSTAL PEREZ	1300 E RAMSEY ST	BANNING	CA	92220
541-320-013	1060 E BARBOUR ST	BANNING	CA	92220	SMITH, JOSEPH A	1060 E BARBOUR ST	BANNING	CA	92220
541-320-014	1070 E BARBOUR ST	BANNING	CA	92220	CHAVEZ, FRANCISCO JAVIER	1289 W NICOLET ST	BANNING	CA	92220
541-320-015	1116 E BARBOUR ST	BANNING	CA	92220	MERAZ, JOSPEH	1116 E BARBOUR ST	BANNING	CA	92220
541-320-018	1190 E BARBOUR ST	BANNING	CA	92220	MANZANO, GABRIEL	1190 E BARBOUR ST	BANNING	CA	92220
541-320-019	1144 E BARBOUR ST	BANNING	CA	92220	GARCIA, THOMAS M	3788 REBLUFF ST	BANNING	CA	92220
541-320-020	1164 E BARBOUR ST	BANNING	CA	92220	LARSON, LARRY G	90503 LEWIS RD	WARRENTON	OR	97146
541-330-002		BANNING	CA	92220	CAL OAKS PARTNERS	629 CAMNO DELOS MARES # 206	SAN CLEMENTE	CA	92673
541-330-004	1350 E BARBOUR ST	BANNING	CA	92220	RECUPIDO, FREDRICK R	1350 E BARBOUR ST	BANNING	CA	92220
541-330-005		BANNING	CA	92220	CR & R INC	11292 WESTERN AVE	STANTON	CA	90680
543-020-001		BANNING	CA	92220	RANCHO SAN GORGONIO LLC	10621 CIVIC CENTER DR	RANCHO CUCAMONGA	CA	91730
543-020-002		BANNING	CA	92220	RANCHO SAN GORGONIO LLC	10621 CIVIC CENTER DR	RANCHO CUCAMONGA	CA	91730
543-020-004	1452 W WESTWARD AVE	BANNING	CA	92220	BALBER, SALVADOR	1452 W WESTWARD AVE	BANNING	CA	92220
543-020-007	1442 W WESTWARD AVE	BANNING	CA	92220	JACKSON, DEWAN R	1442 W WESTWARD AVE	BANNING	CA	92220
543-020-008	1440 W WESTWARD AVE	BANNING	CA	92220	BARNES, ROBERT W	43275 CRESTVIEW CT	BANNING	CA	92220
543-020-011	1300 W WESTWARD AVE	BANNING	CA	92220	RICE, MYRLENE	1300 W WESTWARD AVE	BANNING	CA	92220
543-020-015	1104 W WESTWARD AVE	BANNING	CA	92220	LEFLER, HENRY M	195 E LINCOLN ST	BANNING	CA	92220
543-020-022	1502 W WESTWARD AVE	BANNING	CA	92220	KRAFT, DONALD LEE	1502 W WESTWARD AVE	BANNING	CA	92220

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
543-020-030	855 APRIL LN	BANNING	CA	92220	MONUGIAN, TIMOTHY JAMES	PO BOX 548	BEAUMONT	CA	92223
543-020-031	897 APRIL LN	BANNING	CA	92220	MEDINA, GLORIA	897 APRIL LN	BANNING	CA	92220
543-020-042	892 APRIL LN	BANNING	CA	92220	BURKE, LORNA L	892 APRIL LN	BANNING	CA	92220
543-020-043	895 S 12TH ST	BANNING	CA	92220	SAVARD, DANIEL A	895 S 12TH ST	BANNING	CA	92220
543-020-055	892 S 12TH ST	BANNING	CA	92220	MCCURDY, THOMAS L	892 S 12TH ST	BANNING	CA	92220
543-020-056	1180 W WESTWARD AVE	BANNING	CA	92220	RACKLEY, MARK A	1180 W WESTWARD AVE	BANNING	CA	92220
543-020-057	1180 W WESTWARD AVE	BANNING	CA	92220	RACKLEY, MARK	1180 W WESTWARD AVE	BANNING	CA	92220
543-020-061	1264 W WESTWARD AVE	BANNING	CA	92220	POTTER, CATHY LYNN	1264 W WESTWARD AVE	BANNING	CA	92220
543-020-063	1224 W WESTWAD AVE	BANNING	CA	92220	CALDER, ROBIN L	902 CHARLES ST	BANNING	CA	92220
543-020-065	1446 W WESTWARD AVE	BANNING	CA	92220	MCCLELLAN, TERRY LYN	18939 JULISA CT	GRASS VALLEY	CA	95949
543-090-008	1581 CHARLES ST	BANNING	CA	92220	FINNIE, DOUGLAS D	10410 LIVE OAK AVE	CHERRY VALLEY	CA	92223
419-260-067		BEAUMONT	CA	92223	LOMA, LINDA UNIVERSITY	FOUNDATION ADMINISTRATIO	LOMA LINDA	CA	92350
419-260-068	81 HIGHLAND SPRINGS AVE	BEAUMONT	CA	92223	LOMA, LINDA UNIVERSITY	PO BOX 728	LOMA LINDA	CA	92354
421-080-002		BEAUMONT	CA	92223	PRESERVE	PO BOX 55317	RIVERSIDE	CA	92517
421-080-004		BEAUMONT	CA	92223	COUNTY OF RIVERSIDE	PO BOX 1180	RIVERSIDE	CA	92502
421-090-008	14453 CALIFORNIA AVE	BEAUMONT	CA	92223	GUERRIERO, NATHAN D	PO BOX 666	CHERRY VALLEY	CA	92223
421-090-010		BEAUMONT	CA	92223	SEYL, MERRILL H	9243 RANCHO DR	CHERRY VALLEY	CA	92223
421-090-014		BEAUMONT	CA	92223	SOUTHERN CALIFORNIA GAS CO	555 W 5TH ST	LOS ANGELES	CA	90013
421-090-019		BEAUMONT	CA	92223	UNION PACIFIC RAILROAD COMPANY	1400 DOUGLAS ST	OMAHA	NE	68179
421-090-020	14265 CALIFORNIA AVE	BEAUMONT	CA	92223	JENSEN, ROBERT H	14265 CALIFORNIA AVE	BEAUMONT	CA	92223
421-090-021		BEAUMONT	CA	92223	CENOZ & PEREZ	37300 POURROY RD	WINCHESTER	CA	92596
421-090-023	38537 BOLTON DR	BEAUMONT	CA	92223	LANE, RONALD	15157 HIBISCUS AVE	CHINO HILLS	CA	91709
421-090-027		BEAUMONT	CA	92223	TAUREK, MICHAEL T	18819 WILDFLOWER WAY	RIVERSIDE	CA	92504
421-090-028		BEAUMONT	CA	92223	TAUREK, MICHAEL T	18819 WILDFLOWER WAY	RIVERSIDE	CA	92504
421-090-029		BEAUMONT	CA	92223	TAUREK, MICHAEL T	18819 WILDFLOWER WAY	RIVERSIDE	CA	92504
421-090-030	38725 RELAY DR	BEAUMONT	CA	92223	LEFEVRE, JERRY D	515 LUCILLE CT	BEAUMONT	CA	92223
421-090-032	14490 GREEN ACRES DR	BEAUMONT	CA	92223	STACEY LOVE PROPERTIES LLC	14490 GREEN ACRES DR	BEAUMONT	CA	92223
421-090-034	14483 CALIFORNIA AVE	BEAUMONT	CA	92223	GUERRIERO, NATHAN D	PO BOX 666	CHERRY VALLEY	CA	92223
421-090-035	14405 CALIFORNIA AVE	BEAUMONT	CA	92223	HO, HANRY	14405 CALIFORNIA AVE	BEAUMONT	CA	92223
421-100-001	14625 MT DAVID RD	BEAUMONT	CA	92223	ATC TOWER CORP	PO BOX 723597	ATLANTA	GA	31139
421-100-002		BEAUMONT	CA	92223	PRESERVE	PO BOX 55317	RIVERSIDE	CA	92517

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
421-110-014		BEAUMONT	CA	92223	BEHZAD, MOZAFAR	PO BOX 3100	SANTA MONICA	CA	90408
421-110-025		BEAUMONT	CA	92223	DANIEL, WILLIAM E	PO BOX 2041	BEAUMONT	CA	92223
421-110-026		BEAUMONT	CA	92223	DANIEL, WILLIAM E	PO BOX 2041	BEAUMONT	CA	92223
421-110-028	14250 BEAUMONT AVE	BEAUMONT	CA	92223	DANIEL, WILLIAM E	PO BOX 2041	BEAUMONT	CA	92223
421-110-029		BEAUMONT	CA	92223	THOMAS, DANIEL L	PO BOX 2041	BEAUMONT	CA	92223
421-110-033		BEAUMONT	CA	92223	CHILDHELP INC	14700 MANZANITA RD	BEAUMONT	CA	92223
421-110-034		BEAUMONT	CA	92223	CHILDHELP INC	14700 MANZANITA RD	BEAUMONT	CA	92223
421-120-009		BEAUMONT	CA	92223	BEAUMONT UNIFIED SCHOOL DIST	500 GRACE AVE	BEAUMONT	CA	92223
421-120-013	14700 MANZANITA RD	BEAUMONT	CA	92223	CHILDHELP INC	14700 MANZANITA RD	BEAUMONT	CA	92223
421-120-014	14700 MANZANITA RD	BEAUMONT	CA	92223	CHILDHELP INC	14700 MANZANITA RD	BEAUMONT	CA	92223
421-130-036		BEAUMONT	CA	92223	K HOVNIANIAN FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-130-037		BEAUMONT	CA	92223	K HOVNIANIANS FOUR SEASONS AT BEAUMONT LL	2525 CAMPUS DR	IRVINE	CA	92612
421-130-054	285 WHITE SANDS ST	BEAUMONT	CA	92223	PORTER, FREDRICK	285 WHITE SANDS ST	BEAUMONT	CA	92223
421-130-061		BEAUMONT	CA	92223	K HOVNIANIANS FOUR SEASONS AT BEAUMONT LL	2525 CAMPUS DR	IRVINE	CA	92612
421-130-065		BEAUMONT	CA	92223	K HOVNIANIANS FOUR SEASON BEAUMONT COMM, ASSN	2525 CAMPUS DR	IRVINE	CA	92612
421-130-069		BEAUMONT	CA	92223	K HOVNIANIANS FOUR SEASONS BEAUMONT COM, ASSN	2525 CAMPUS DR	IRVINE	CA	92612
421-130-076		BEAUMONT	CA	92223	K HOVNIANIANS FOUR SEASONS AT BEAUMONT, COMM	2525 CAMPUS DR	IRVINE	CA	92612
421-650-032	131 THISTLE CRK	BEAUMONT	CA	92223	VARONE, GIORGIO	131 THISTLE CRK	BEAUMONT	CA	92223
421-650-033	129 THISTLE CRK	BEAUMONT	CA	92223	PYLE, WILLIAM	129 THISTLE CRK	BEAUMONT	CA	92223
421-650-034	125 THISTLE CRK	BEAUMONT	CA	92223	HALLBERT, STEVEN	125 THISTLE CRK	BEAUMONT	CA	92223
421-650-035	121 THISTLE CRK	BEAUMONT	CA	92223	WADE, JANELLE	121 THISTLE CRK	BEAUMONT	CA	92223
421-650-036	119 THISTLE CRK	BEAUMONT	CA	92223	WHITE, JANE A	119 THISTLE CRK	BEAUMONT	CA	92223
421-650-037	115 THISTLE CRK	BEAUMONT	CA	92223	SENSTAD, RUDY	115 THISTLE CRK	BEAUMONT	CA	92223
421-650-038	111 THISTLE CRK	BEAUMONT	CA	92223	HORENBURG, NANCY E	111 THISTLE CRK	BEAUMONT	CA	92223
421-650-039	109 THISTLE CRK	BEAUMONT	CA	92223	TANOUYE, MICHAEL TAKA	109 THISTLE CRK	BEAUMONT	CA	92223
421-650-040	107 THISTLE CRK	BEAUMONT	CA	92223	DAVIS, MARTHA J	107 THISTLE CRK	BEAUMONT	CA	92223
421-650-041	110 THISTLE CRK	BEAUMONT	CA	92223	HOBBS, MICHAEL	110 THISTLE CRK	BEAUMONT	CA	92223
421-650-042	114 THISTLE CRK	BEAUMONT	CA	92223	KING, VERNON C	114 THISTLE CRK	BEAUMONT	CA	92223
421-650-043	118 THISTLE CRK	BEAUMONT	CA	92223	ATKINSON, STODOMINGODIANE ELIZABETH	118 THISTLE CRK	BEAUMONT	CA	92223
421-650-044	120 THISTLE CRK	BEAUMONT	CA	92223	AVILA, ADELA	120 THISTLE CRK	BEAUMONT	CA	92223

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
421-650-045	124 THISTLE CRK	BEAUMONT	CA	92223	WESTBROOK, PHILLIP ANDREW	6719 ROCA CIR	SAN BERNARDINO	CA	92404
421-650-046	126 THISTLE CRK	BEAUMONT	CA	92223	VILLALOBOS, GLECY B	126 THISTLE CRK	BEAUMONT	CA	92223
421-650-047	130 THISTLE CRK	BEAUMONT	CA	92223	LAMB, JERRY D	130 THISTLE CRK	BEAUMONT	CA	92223
421-650-048	132 THISTLE CRK	BEAUMONT	CA	92223	ANDERSON, LARRY E	132 THISTLE CRK	BEAUMONT	CA	92223
421-650-049	1697 QUIET CRK	BEAUMONT	CA	92223	UTHE, ROBERT C	1697 QUIET CRK	BEAUMONT	CA	92223
421-650-050	1695 QUIET CRK	BEAUMONT	CA	92223	CYPHER, ROSE MARIE	1695 QUIET CRK	BEAUMONT	CA	92223
421-650-051	1691 QUIET CRK	BEAUMONT	CA	92223	HENDERSON, CRAIG EUGENE	1691 QUIET CRK	BEAUMONT	CA	92223
421-650-052	1689 QUIET CRK	BEAUMONT	CA	92223	PAULSON, ANN	1689 QUIET CRK	BEAUMONT	CA	92223
421-650-079	1688 LEWIS CRK	BEAUMONT	CA	92223	VALENTINE, WANDA F	1688 LEWIS CRK	BEAUMONT	CA	92223
421-650-080	1690 LEWIS CRK	BEAUMONT	CA	92223	KIM, YONG C	1690 LEWIS CRK	BEAUMONT	CA	92223
421-650-081	1692 LEWIS CRK	BEAUMONT	CA	92223	HALDEMAN, MEREDITH A	1692 LEWIS CRK	BEAUMONT	CA	92223
421-650-082	1694 LEWIS CRK	BEAUMONT	CA	92223	HARTER, BRAD RYAN	1694 LEWIS CRK	BEAUMONT	CA	92223
421-650-083	1698 LEWIS CRK	BEAUMONT	CA	92223	POPE, BARRY	1698 LEWIS CRK	BEAUMONT	CA	92223
421-650-084		BEAUMONT	CA	92223	K HOVNANIAN FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-650-085		BEAUMONT	CA	92223	K HOVANIANS FOUR SEASONS BEAUMONT COMM, ASSN	1500 S HAVEN AVE STE 100	ONTARIO	CA	91761
421-650-086		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS BEAUMONT COM, ASSN	1500 S HVN # 100	ONTARIO	CA	91764
421-650-087		BEAUMONT	CA	92223	K HOVNANIAN FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-650-088		BEAUMONT	CA	92223	K HOVANIANS FOUR SEASONS BEAUMONT COMM, ASSN	1500 S HAVEN AVE STE 100	ONTARIO	CA	91761
421-650-089		BEAUMONT	CA	92223	K HOVNANIAN FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-650-090		BEAUMONT	CA	92223	K HOVANIANS FOUR SEASONS BEAUMONT COMM, ASSN	1500 S HAVEN AVE STE 100	ONTARIO	CA	91761
421-650-092		BEAUMONT	CA	92223	K HOVNANIAN FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-650-093		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS BEAUMONT COM, ASSN	1500 S HVN # 100	ONTARIO	CA	91764
421-650-094		BEAUMONT	CA	92223	K HOVNANIAN FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-660-001	154 SALT CRK	BEAUMONT	CA	92223	HAYES, THELMA J	154 SALT CRK	BEAUMONT	CA	92223
421-660-002	158 SALT CRK	BEAUMONT	CA	92223	CLARK, JAMES M	158 SALT CRK	BEAUMONT	CA	92223
421-660-003	160 SALT CRK	BEAUMONT	CA	92223	NEWBERRY, GARTH	160 SALT CRK	BEAUMONT	CA	92223
421-660-004	166 SALT CRK	BEAUMONT	CA	92223	PERALTA, PEDRO M	166 SALT CRK	BEAUMONT	CA	92223
421-660-005	172 SALT CRK	BEAUMONT	CA	92223	PARNELL, MARIA	172 SALT CRK	BEAUMONT	CA	92223

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
421-660-006	174 SALT CRK	BEAUMONT	CA	92223	WONG, JAY K	350 FLYERS LN	TUSTIN	CA	92782
421-660-007	178 SALT CRK	BEAUMONT	CA	92223	KLIMOWICZ, DENNIS	178 SALT CRK	BEAUMONT	CA	92223
421-660-008	180 SALT CRK	BEAUMONT	CA	92223	MORGAN, RONALD N	180 SALT CRK	BEAUMONT	CA	92223
421-660-009	182 SALT CRK	BEAUMONT	CA	92223	WORTHEN, ANITA L	182 SALT CRK	BEAUMONT	CA	92223
421-660-010	188 SALT CRK	BEAUMONT	CA	92223	RUSCHE, WILLIAM	188 SALT CRK	BEAUMONT	CA	92223
421-660-011	190 SALT CRK	BEAUMONT	CA	92223	BROWDERS, GLOVE L	190 SALT CRK	BEAUMONT	CA	92223
421-660-012	194 SALT CRK	BEAUMONT	CA	92223	ACEVEDO, MATILDE EUNICE	194 SALT CRK	BEAUMONT	CA	92223
421-660-013	196 SALT CRK	BEAUMONT	CA	92223	GRAY DWYER, SANDRA A	196 SALT CRK	BEAUMONT	CA	92223
421-660-014	1697 CLARK CRK	BEAUMONT	CA	92223	HOLT, MICHAEL J	28 CINDY AVE	THOUSAND OAKS	CA	91320
421-660-015	1693 CLARK CRK	BEAUMONT	CA	92223	SERRANO, SERGIO C	1693 CLARK CRK	BEAUMONT	CA	92223
421-660-016	1691 CLARK CRK	BEAUMONT	CA	92223	COLEMAN, GEORGIA J	1691 CLARK CRK	BEAUMONT	CA	92223
421-660-052	1690 CLARK CRK	BEAUMONT	CA	92223	TYREE, MELVIN D	1690 CLARK CRK	BEAUMONT	CA	92223
421-660-053	187 SALT CRK	BEAUMONT	CA	92223	LEANO, WILFRED V	187 SALT CRK	BEAUMONT	CA	92223
421-660-054	181 SALT CRK	BEAUMONT	CA	92223	WRIGHT, LEROY	186 KETTLE CRK	BEAUMONT	CA	92223
421-660-055	1693 PIPER CRK	BEAUMONT	CA	92223	STIFTER, GARY E	1693 PIPER CRK	BEAUMONT	CA	92223
421-660-068	1692 PIPER CRK	BEAUMONT	CA	92223	BELL, STEVEN LARRY	1692 PIPER CRK	BEAUMONT	CA	92223
421-660-069	1689 LEWIS CRK	BEAUMONT	CA	92223	MACK, SUSAN V	1689 LEWIS CRK	BEAUMONT	CA	92223
421-660-081		BEAUMONT	CA	92223	K HOVANIANS FOUR SEASONS BEAUMONT COMM, ASSN	1500 S HAVEN AVE STE 100	ONTARIO	CA	91761
421-660-082		BEAUMONT	CA	92223	K HOVANIANS FOUR SEASONS BEAUMONT COMM, ASSN	1500 S HAVEN AVE STE 100	ONTARIO	CA	91761
421-660-083		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT BEAMONT, ASSN	2525 CAMPUS DR	IRVINE	CA	92612
421-660-084		BEAUMONT	CA	92223	K HOVNANIAN FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-660-085		BEAUMONT	CA	92223	K HOVNANIAN FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-670-009		BEAUMONT	CA	92223	K HOVNANIAN FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-670-010		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS BEAUMONT COM, ASSN	1500 S HVN # 100	ONTARIO	CA	91764
421-670-011		BEAUMONT	CA	92223	K HOVNANIAN FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-670-012		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT BEAUMONT, ASSN	2525 CAMPUS DR	IRVINE	CA	92612
421-671-006	1615 BEAVER CRK # B	BEAUMONT	CA	92223	TORNELL, JAMES L	6323 PONTE VERDE CIR	BANNING	CA	92220
421-671-007	1617 BEAVER CRK # A	BEAUMONT	CA	92223	GETTMAN, JOHN AL	1617 BEAVER CRK # A	BEAUMONT	CA	92223

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
421-671-008	1627 BEAVER CRK # A	BEAUMONT	CA	92223	ASHTON, WILLIAM P	18160 COTTONWOOD RD # 734	SUNRIVER	OR	97707
421-671-009	1627 BEAVER CRK # B	BEAUMONT	CA	92223	HUSSEY, JAMES	1627 BEAVER CRK # B	BEAUMONT	CA	92223
421-671-010	1625 BEAVER CRK # B	BEAUMONT	CA	92223	AMERICAN ESTATE & TRUST LC	6900 WESTCLIFF DR STE 603	LAS VEGAS	NV	89145
421-671-015		BEAUMONT	CA	92223	K HOVNIANS FOUR SEASONS BEAUMONT, CMMNTY	1500 S HVN # 100	ONTARIO	CA	91764
421-671-033	1635 BEAVER CRK # B	BEAUMONT	CA	92223	GRIEGO, STEPHEN F	26205 W MILESTONE DR	PLAINFIELD	IL	60585
421-671-034	1635 BEAVER CRK # A	BEAUMONT	CA	92223	BONALDO, ANDRE	1635 BEAVER CRK # A	BEAUMONT	CA	92223
421-671-035	1637 BEAVER CRK # A	BEAUMONT	CA	92223	BONNAR, GERARD RICHARD	385 MESA VERDE PARK	BEAUMONT	CA	92223
421-671-036	1637 BEAVER CRK # B	BEAUMONT	CA	92223	SAMUEL, VIVIEN	175 BRUSH CRK	BEAUMONT	CA	92223
421-671-037	1647 BEAVER CRK # A	BEAUMONT	CA	92223	HURT, STEPHEN DOUGLAS	2596 MAGELLAN LN	VISTA	CA	92081
421-671-038	1645 BEAVER CRK # B	BEAUMONT	CA	92223	DILLY, DONALD C	1525 BIG BND	BEAUMONT	CA	92223
421-671-039	1645 BEAVER CRK # A	BEAUMONT	CA	92223	GOODMAN, H ALLEN	4960 LERKAS WAY	OCEANSIDE	CA	92056
421-671-044		BEAUMONT	CA	92223	K HOVNIANS FOUR SEASON BEAUMONT COMM, ASSN	1500 S HVN # 100	ONTARIO	CA	91764
421-671-063	1653 BEAVER CRK APT B	BEAUMONT	CA	92223	TOPP, JUDITH KAY	1653 BEAVER CRK # B	BEAUMONT	CA	92223
421-671-064	1655 BEAVER CRK # A	BEAUMONT	CA	92223	KELCH, DELORES M	1655 BEAVER CRK # A	BEAUMONT	CA	92223
421-671-065	1655 BEAVER CRK # B	BEAUMONT	CA	92223	KELLEY, DOUGLAS M	1655 BEAVER CRK # B	BEAUMONT	CA	92223
421-671-066	1665 BEAVER CRK # B	BEAUMONT	CA	92223	WILLIAMS, NORMA JOYCE	1665 BEAVER CRK # B	BEAUMONT	CA	92223
421-671-067	1663 BEAVER CRK # B	BEAUMONT	CA	92223	STEPHENS GREGORY WAYNE REV TRUST	234 HILLCREST DR	LA PUENTE	CA	91744
421-671-068	1663 BEAVER CRK # A	BEAUMONT	CA	92223	SARAFIAN, MONICA	1663 BEAVER CRK # A	BEAUMONT	CA	92223
421-671-069	1661 BEAVER CRK # B	BEAUMONT	CA	92223	DOUGLAS, LYNDA S	1661 BEAVER CRK # B	BEAUMONT	CA	92223
421-671-070	1661 BEAVER CRK # A	BEAUMONT	CA	92223	LITRAS, JAMES N	1661 BEAVER CRK # A	BEAUMONT	CA	92223
421-671-071		BEAUMONT	CA	92223	K HOVNIANIAN FOUR SEASONS BEAUMONT COMM, ASSN	800 HAVEN HVN # 300	ONTARIO	CA	91764
421-671-072	1660 BEAVER CRK # A	BEAUMONT	CA	92223	YONZON, FRANCISCO C	1660 BEAVER CRK # A	BEAUMONT	CA	92223
421-671-073	1660 BEAVER CRK # B	BEAUMONT	CA	92223	ALDRICH, DAVID L	1660 BEAVER CRK # B	BEAUMONT	CA	92223
421-671-074	1662 BEAVER CRK # A	BEAUMONT	CA	92223	BERZABAL, VIC C	1662 BEAVER CRK # A	BEAUMONT	CA	92223
421-671-075	1662 BEAVER CRK # B	BEAUMONT	CA	92223	UNTERKOEFLER, GERALD T	1662 BEAVER CRK # B	BEAUMONT	CA	92223
421-671-076	1664 BEAVER CRK # A	BEAUMONT	CA	92223	LEGER, CHARLES W	1664 BEAVER CRK # A	BEAUMONT	CA	92223
421-671-077	1664 BEAVER CRK # B	BEAUMONT	CA	92223	ROWLAND, MARIE	1664 BEAVER CRK # B	BEAUMONT	CA	92223
421-671-078	1666 BEAVER CRK # A	BEAUMONT	CA	92223	HUANG, SHARON S Y	715 FRANCESCA DR UNIT 202	WALNUT	CA	91789
421-671-087		BEAUMONT	CA	92223	K HOVNIANIAN FOUR SEASONS BEAUMONT COMM,	800 HAVEN HVN # 300	ONTARIO	CA	91764

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
					ASSN				
421-671-088	1671 BEAVER CRK # A	BEAUMONT	CA	92223	PRITCHETT, HENRY V	1671 BEAVER CRK # A	BEAUMONT	CA	92223
421-671-089	1671 BEAVER CRK # B	BEAUMONT	CA	92223	JAHNKE, RICHARD A	1506 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-671-090	1673 BEAVER CRK # A	BEAUMONT	CA	92223	FANT, DONALD D	412 GOODRICH ROCK	BEAUMONT	CA	92223
421-671-091	1673 BEAVER CRK # B	BEAUMONT	CA	92223	DAWSON, HO TS	1673 BEAVER CRK # B	BEAUMONT	CA	92223
421-671-092	1685 BEAVER CRK # A	BEAUMONT	CA	92223	STIFTER, GARY E	1693 PIPER CRK	BEAUMONT	CA	92223
421-671-093	1683 BEAVER CRK # B	BEAUMONT	CA	92223	POLLACK, MARIA	1683 BEAVER CRK # B	BEAUMONT	CA	92223
421-671-094	1683 BEAVER CRK # A	BEAUMONT	CA	92223	HSU, IRIS T	21006 WENDY DR	TORRANCE	CA	90503
421-671-095	1681 BEAVER CRK # B	BEAUMONT	CA	92223	CARSON, CARL E	1681 BEAVER CRK # B	BEAUMONT	CA	92223
421-671-096	1681 BEAVER CRK # A	BEAUMONT	CA	92223	DAVID, JOSEFINO C	1681 BEAVER CRK # A	BEAUMONT	CA	92223
421-671-097		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT BEAUMONT, ASSN	1500 S HVN # 100	ONTARIO	CA	91764
421-671-098	1680 BEAVER CRK # A	BEAUMONT	CA	92223	CAESAR, HERBERT M	1680 BEAVER CRK # A	BEAUMONT	CA	92223
421-671-099	1680 BEAVER CRK # B	BEAUMONT	CA	92223	RALSTON, ROBERT E	1680 BEAVER CRK # B	BEAUMONT	CA	92223
421-671-100	1682 BEAVER CRK # A	BEAUMONT	CA	92223	DIDIER, DANIEL R	1682 BEAVER CRK # A	BEAUMONT	CA	92223
421-671-101	1682 BEAVER CRK # B	BEAUMONT	CA	92223	HUNTER, LEDIA R	1682 BEAVER CRK # B	BEAUMONT	CA	92223
421-671-102	1684 BEAVER CRK # A	BEAUMONT	CA	92223	TAYLOR, WILLIAM C	1684 BEAVER CRK # A	BEAUMONT	CA	92223
421-671-103	1684 BEAVER CRK # B	BEAUMONT	CA	92223	MAZUR, KATHLEEN P	1684 BEAVER CRK # B	BEAUMONT	CA	92223
421-671-104	1686 BEAVER CRK # A	BEAUMONT	CA	92223	THOMSEN, JEROME LYNN	1686 BEAVER CRK # A	BEAUMONT	CA	92223
421-671-105	1686 BEAVER CRK # B	BEAUMONT	CA	92223	WASHINGTON JR, COLLIE	1686 BEAVER CRK # B	BEAUMONT	CA	92223
421-671-106	1688 BEAVER CRK # A	BEAUMONT	CA	92223	GILLETTE, RICHARD LYNN	1688 BEAVER CRK # A	BEAUMONT	CA	92223
421-671-107	1676 BEAVER CRK APT B	BEAUMONT	CA	92223	CABUCO, ALBERT	1676 BEAVER CRK # B	BEAUMONT	CA	92223
421-671-108	1676 BEAVER CRK APT A	BEAUMONT	CA	92223	CUMMINGS, DON W	1676 BEAVER CRK APT A	BEAUMONT	CA	92223
421-671-109	1674 BEAVER CRK APT B	BEAUMONT	CA	92223	ZAMBRANA, RAMONA	1674 BEAVER CRK # B	BEAUMONT	CA	92223
421-671-110	1674 BEAVER CRK APT A	BEAUMONT	CA	92223	HARVEY, KATHERINE	1674 BEAVER CRK # A	BEAUMONT	CA	92223
421-671-111	1672 BEAVER CRK APT B	BEAUMONT	CA	92223	SARCHETT, STEPHEN L	100 CASCADE CRK	BEAUMONT	CA	92223
421-671-112	1672 BEAVER CRK APT A	BEAUMONT	CA	92223	BUTTA, MATTHEW C	1672A BEAVER CRK	BEAUMONT	CA	92223
421-671-113	1670 BEAVER CRK APT B	BEAUMONT	CA	92223	PAYNE, HENRIETTA M	1670 BEAVER CRK # B	BEAUMONT	CA	92223
421-671-114	1670 BEAVER CRK # A	BEAUMONT	CA	92223	PENDERGRAPH, PATRICIA TAYLOR	1670 BEAVER CRK # A	BEAUMONT	CA	92223
421-671-115		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS BEAUMONT COM, ASSN	1500 S HVN # 100	ONTARIO	CA	91764
421-721-001	1417 FAIRCLIFF ST	BEAUMONT	CA	92223	TORTES, HOWARD D	1417 FAIRCLIFF ST	BEAUMONT	CA	92223
421-721-002	1415 FAIRCLIFF ST	BEAUMONT	CA	92223	MILLER JR, ROBERT JAMES	1415 FAIRCLIFF ST	BEAUMONT	CA	92223

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
421-721-003	1411 FAIRCLIFF ST	BEAUMONT	CA	92223	BROWN, RYAN W	1411 FAIRCLIFF ST	BEAUMONT	CA	92223
421-721-004	1407 FAIRCLIFF ST	BEAUMONT	CA	92223	DELOSREYES, JOHN ARNOLD	1407 FAIRCLIFF ST	BEAUMONT	CA	92223
421-721-005	259 GABLE CT	BEAUMONT	CA	92223	WICHLAC, LOREN	259 GABLE CT	BEAUMONT	CA	92223
421-721-006	253 GABLE CT	BEAUMONT	CA	92223	REDDEN, GREGORY	253 GABLE CT	BEAUMONT	CA	92223
421-721-019	229 DWYER AVE	BEAUMONT	CA	92223	MA, SHUN HUA	229 DWYER AVE	BEAUMONT	CA	92223
421-721-028		BEAUMONT	CA	92223	CITY OF BEAUMONT	550 E 6TH ST	BEAUMONT	CA	92223
421-721-029		BEAUMONT	CA	92223	CITY OF BEAUMONT	550 E 6TH ST	BEAUMONT	CA	92223
421-721-030	236 GABLE CT	BEAUMONT	CA	92223	LINSMEIER, CHARLES	236 GABLE CT	BEAUMONT	CA	92223
421-730-016	252 FINLEY AVE	BEAUMONT	CA	92223	MARTINO, STEPHEN A	10161 WOODRIDGE DR	RANCHO CUCAMONGA	CA	91737
421-730-017	256 FINLEY AVE	BEAUMONT	CA	92223	SOLORZANO, CHRISTOPHER	256 FINLEY AVE	BEAUMONT	CA	92223
421-730-018	260 FINLEY AVE	BEAUMONT	CA	92223	MCCLINTOCK, MIKE	13414 CANYON HEIGHTS DR	YUCAIPA	CA	92399
421-730-019	1457 FAIRCLIFF ST	BEAUMONT	CA	92223	KRAUS, TAMRA DAWN	1457 FAIRCLIFF ST	BEAUMONT	CA	92223
421-730-020	1453 FAIRCLIFF ST	BEAUMONT	CA	92223	BENTLEY, BRAD A	1453 FAIRCLIFF ST	BEAUMONT	CA	92223
421-730-021	1449 FAIRCLIFF ST	BEAUMONT	CA	92223	TAPP, STUART A	1449 FAIRCLIFF ST	BEAUMONT	CA	92223
421-730-022	1445 FAIRCLIFF ST	BEAUMONT	CA	92223	LONGFELLOW, KAYLA M	1445 FAIRCLIFF ST	BEAUMONT	CA	92223
421-730-023	1441 FAIRCLIFF ST	BEAUMONT	CA	92223	COSTAS, EDWARD	1441 FAIRCLIFF ST	BEAUMONT	CA	92223
421-730-024	1437 FAIRCLIFF ST	BEAUMONT	CA	92223	MARTINEZ, ANGELA	1437 FAIRCLIFF ST	BEAUMONT	CA	92223
421-730-025	1431 FAIRCLIFF ST	BEAUMONT	CA	92223	TRINIDAD, CHRIS M	1431 FAIRCLIFF ST	BEAUMONT	CA	92223
421-730-026	1427 FAIRCLIFF ST	BEAUMONT	CA	92223	SANCHEZ, JESSE E	1427 FAIRCLIFF ST	BEAUMONT	CA	92223
421-730-027	1423 FAIRCLIFF ST	BEAUMONT	CA	92223	SAUCEDO, MIGUEL ALMAZAN	1423 FAIRCLIFF ST	BEAUMONT	CA	92223
421-730-028	1421 FAIRCLIFF ST	BEAUMONT	CA	92223	ILOPUTAIFE, NNEKA I	1421 FAIRCLIFF ST	BEAUMONT	CA	92223
421-730-029		BEAUMONT	CA	92223	CITY OF BEAUMONT	550 E 6TH ST	BEAUMONT	CA	92223
421-730-030		BEAUMONT	CA	92223	KB HOME COASTAL INC	36310 INLAND VALLEY DR	WILDOMAR	CA	92595
421-731-009	1420 FAIRCLIFF ST	BEAUMONT	CA	92223	MARSHALL, EDWARD JAMES	1420 FAIRCLIFF ST	BEAUMONT	CA	92223
421-731-010	1424 FAIRCLIFF ST	BEAUMONT	CA	92223	WOOLERY, JACK	1424 FAIRCLIFF ST	BEAUMONT	CA	92223
421-731-011	1430 FAIRCLIFF ST	BEAUMONT	CA	92223	BARBOZA, JOSE I	1430 FAIRCLIFF ST	BANNING	CA	92220
421-731-012	1438 FAIRCLIFF ST	BEAUMONT	CA	92223	LAWSON, WILLIAM EDWARD	1438 FAIRCLIFF ST	BEAUMONT	CA	92223
421-731-013	1442 FAIRCLIFF ST	BEAUMONT	CA	92223	WILLIAMS, RONALD LEE	1442 FAIRCLIFF ST	BEAUMONT	CA	92223
421-731-014	1446 FAIRCLIFF ST	BEAUMONT	CA	92223	KELLY, CHRISTOPHER	39497 CHERRY OAK RD	CHERRY VALLEY	CA	92223
421-731-015	1448 FAIRCLIFF ST	BEAUMONT	CA	92223	GODDARD, MARGARET J	1448 FAIRCLIFF ST	BEAUMONT	CA	92223
421-731-016	1452 FAIRCLIFF ST	BEAUMONT	CA	92223	AVELING, STACY	1452 FAIRCLIFF ST	BEAUMONT	CA	92223

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
421-741-017	1239 ESTANCIA ST	BEAUMONT	CA	92223	SIMMONS, FRANK J	1239 ESTANCIA ST	BEAUMONT	CA	92223
421-741-018	1244 OLYMPIC ST	BEAUMONT	CA	92223	FRAISE, KARAH	7211 HAVEN AVE #E379	RANCHO CUCAMONGA	CA	91701
421-741-019	1252 OLYMPIC ST	BEAUMONT	CA	92223	1252 OLYMPIC ST LLC	6601 CENTER DR W STE 500	LOS ANGELES	CA	90045
421-741-020	1256 OLYMPIC ST	BEAUMONT	CA	92223	JORN, JESSE S	1256 OLYMPIC ST	BEAUMONT	CA	92223
421-741-021	1260 OLYMPIC ST	BEAUMONT	CA	92223	BLACKBURN, JADE DUANGPORN	1260 OLYMPIC ST	BEAUMONT	CA	92223
421-741-022	1266 OLYMPIC ST	BEAUMONT	CA	92223	DALLIN LLC	5440 TRABULO RD H-200	IRVINE	CA	92620
421-741-023	1274 OLYMPIC ST	BEAUMONT	CA	92223	ORNELAS, CANDIE R	1274 OLYMPIC ST	BEAUMONT	CA	92223
421-741-024	1282 OLYMPIC ST	BEAUMONT	CA	92223	JONES, TAMELA	1282 OLYMPIC ST	BEAUMONT	CA	92223
421-741-025	1286 OLYMPIC ST	BEAUMONT	CA	92223	DALLIN LLC	5440 TRABUCO RD # H200	IRVINE	CA	92620
421-741-026	1292 OLYMPIC ST	BEAUMONT	CA	92223	ROSAS, HERIBERTO	1292 OLYMPIC ST	BEAUMONT	CA	92223
421-741-027	1294 OLYMPIC ST	BEAUMONT	CA	92223	HURST, TAYLOR SESSIONS	1294 OLYMPIC ST	BEAUMONT	CA	92223
421-741-028	1316 OLYMPIC ST	BEAUMONT	CA	92223	HILO, TAWFIG GEORGE	1316 OLYMPIC ST	BEAUMONT	CA	92223
421-741-029	1328 OLYMPIC ST	BEAUMONT	CA	92223	LEEVARINPANICH, VIROT	3710 TEMPLE CITY BLVD	ROSEMEAD	CA	91770
421-741-030	1334 OLYMPIC ST	BEAUMONT	CA	92223	SANDERS, KATE	1334 OLYMPIC ST	BEAUMONT	CA	92223
421-741-031	1342 OLYMPIC ST	BEAUMONT	CA	92223	EDWARDS, MICHAEL	1342 OLYMPIC ST	BEAUMONT	CA	92223
421-741-032	1354 OLYMPIC ST	BEAUMONT	CA	92223	MCCORMICK, MAX O	1354 OLYMPIC ST	BEAUMONT	CA	92223
421-741-033	1362 OLYMPIC ST	BEAUMONT	CA	92223	ZARAGOZA, FERNANDO	1362 OLYMPIC ST	BEAUMONT	CA	92223
421-741-034	1370 OLYMPIC ST	BEAUMONT	CA	92223	HUYNH, HIEP	1370 OLYMPIC ST	BEAUMONT	CA	92223
421-741-035		BEAUMONT	CA	92223	BEAZER HOMES HOLDINGS CORP	1800 E HWY N # 200	BREA	CA	92821
421-742-001	1375 OLYMPIC ST	BEAUMONT	CA	92223	GUTIERREZ, JOSE T	1375 OLYMPIC ST	BEAUMONT	CA	92223
421-742-002	1363 OLYMPIC ST	BEAUMONT	CA	92223	BRAMPTON, ALBERT D	1363 OLYMPIC ST	BEAUMONT	CA	92223
421-742-003	1357 OLYMPIC ST	BEAUMONT	CA	92223	WILSON, FELIPE A VALENZUELA	2700 SAN MARINO ST	LOS ANGELES	CA	90006
421-742-004	1345 OLYMPIC ST	BEAUMONT	CA	92223	AVERY, LYNN	1345 OLYMPIC ST	BEAUMONT	CA	92223
421-742-005	1337 OLYMPIC ST	BEAUMONT	CA	92223	TABEL, ANWAR	1337 OLYMPIC ST	BEAUMONT	CA	92223
421-742-006	1331 OLYMPIC ST	BEAUMONT	CA	92223	MOODY, ROEGRS L	1331 OLYMPIC ST	BEAUMONT	CA	92223
421-742-007	1325 OLYMPIC ST	BEAUMONT	CA	92223	HERNANDEZ, NARDA	1325 OLYMPIC ST	BEAUMONT	CA	92223
421-742-008	1315 OLYMPIC ST	BEAUMONT	CA	92223	APODACA, DANIEL	1315 OLYMPIC ST	BEAUMONT	CA	92223
421-742-009	1295 OLYMPIC ST	BEAUMONT	CA	92223	HICKMAN, KEITH	1295 OLYMPIC ST	BEAUMONT	CA	92223
421-742-010	1293 OLYMPIC ST	BEAUMONT	CA	92223	TUCKER, GRAYDON B	1293 OLYMPIC ST	BEAUMONT	CA	92223
421-742-011	1287 OLYMPIC ST	BEAUMONT	CA	92223	CHEGE, SAMUEL M	1287 OLYMPIC ST	BEAUMONT	CA	92223
421-742-012	1283 OLYMPIC ST	BEAUMONT	CA	92223	EDDY, MICHAEL G	1283 OLYMPIC ST	BEAUMONT	CA	92223

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
421-742-013	1275 OLYMPIC ST	BEAUMONT	CA	92223	WIEBELD, BRANDON	1275 OLYMPIC ST	BEAUMONT	CA	92223
421-742-014	1267 OLYMPIC ST	BEAUMONT	CA	92223	MORALES, DANIEL	1267 OLYMPIC ST	BEAUMONT	CA	92223
421-742-015	1261 OLYMPIC ST	BEAUMONT	CA	92223	SALAS, ALFONSO	1261 OLYMPIC ST	BEAUMONT	CA	92223
421-742-016	1257 OLYMPIC ST	BEAUMONT	CA	92223	DAVILA, CARLOS D	1257 OLYMPIC ST	BEAUMONT	CA	92223
421-742-017	1253 OLYMPIC ST	BEAUMONT	CA	92223	ALI, SARA	1253 OLYMPIC ST	BEAUMONT	CA	92223
421-742-018	1241 OLYMPIC ST	BEAUMONT	CA	92223	SCHWARTZ, MILAN	1241 OLYMPIC ST	BEAUMONT	CA	92223
421-742-019	1233 OLYMPIC ST	BEAUMONT	CA	92223	SICK, FRANCIS W	1233 OLYMPIC ST	BEAUMONT	CA	92223
421-742-020	239 LOGAN ST	BEAUMONT	CA	92223	QUINTERO, MARTIN	239 LOGAN ST	BEAUMONT	CA	92223
421-742-021	235 LOGAN ST	BEAUMONT	CA	92223	GUTIERREZ, FRANCISCO J	235 LOGAN ST	BEAUMONT	CA	92223
421-742-022	223 LOGAN ST	BEAUMONT	CA	92223	WRIGHT, MISTY A	511 MARTIN AVE	COLTON	CA	92324
421-742-023	217 LOGAN ST	BEAUMONT	CA	92223	LEE SR, RICKY A	217 LOGAN ST	BEAUMONT	CA	92223
421-742-024	211 LOGAN ST	BEAUMONT	CA	92223	KNIGHT, GEOFFREY	211 LOGAN ST	BEAUMONT	CA	92223
421-742-025	205 LOGAN ST	BEAUMONT	CA	92223	PARSONS, BRIAN K	205 LOGAN ST	BEAUMONT	CA	92223
421-742-026	201 LOGAN ST	BEAUMONT	CA	92223	HORD, PAUL	201 LOGAN ST	BEAUMONT	CA	92223
421-742-027	1232 ESTANCIA ST	BEAUMONT	CA	92223	KRUSE, KEVIN D	1232 ESTANCIA ST	BEAUMONT	CA	92223
421-742-028	1248 ESTANCIA ST	BEAUMONT	CA	92223	WATTS, RHONDA ALANA	1248 ESTANCIA ST	BEAUMONT	CA	92223
421-742-033		BEAUMONT	CA	92223	CITY OF BEAUMONT	550 E 6TH ST	BEAUMONT	CA	92223
421-771-025	189 LOMA ST	BEAUMONT	CA	92223	BELTRAN NUNEZ, RICARDO	189 LOMA ST	BEAUMONT	CA	92223
421-771-026	193 LOMA ST	BEAUMONT	CA	92223	GEORGE, VERNON A	193 LOMA ST	BEAUMONT	CA	92223
421-771-027	197 LOMA ST	BEAUMONT	CA	92223	VALDEZ, ELIZABETH C	197 LOMA ST	BEAUMONT	CA	92223
421-771-028	194 LOMA ST	BEAUMONT	CA	92223	CERVANTES, JOHNNY	194 LOMA ST	BEAUMONT	CA	92223
421-800-009	1584 GREEN CREEK TRL	BEAUMONT	CA	92223	JORDAN, FRANCES B	1584 GREEN CREEK TRL	BEAUMONT	CA	92223
421-800-010	1586 GREEN CREEK TRL	BEAUMONT	CA	92223	WALTER, JOHN C	1586 GREEN CREEK TRL	BEAUMONT	CA	92223
421-800-011	1591 GREEN CREEK TRL	BEAUMONT	CA	92223	RAGAN, ARLENE	1591 GREEN CREEK TRL	BEAUMONT	CA	92223
421-800-012	1587 GREEN CREEK TRL	BEAUMONT	CA	92223	TERRELL, ROCHELLE S	1587 GREEN CREEK TRL	BEAUMONT	CA	92223
421-800-013	280 BARTRAM TRL	BEAUMONT	CA	92223	TORDESILLAS, RONY T	280 BARTRAM TRL	BEAUMONT	CA	92223
421-800-014	288 BARTRAM TRL	BEAUMONT	CA	92223	ROBERSON, GARY R	288 BARTRAM TRL	BEAUMONT	CA	92223
421-800-015	292 BARTRAM TRL	BEAUMONT	CA	92223	CULTON, EDWIN D	292 BARTRAM TRL	BEAUMONT	CA	92223
421-800-016	293 BARTRAM TRL	BEAUMONT	CA	92223	GRIFFIN, CHARLESETTA	293 BARTRAM TRL	BEAUMONT	CA	92223
421-800-017	289 BARTRAM TRL	BEAUMONT	CA	92223	MOORE, MELMA JEAN	289 BARTRAM TRL	BEAUMONT	CA	92223
421-800-018	285 BARTRAM TRL	BEAUMONT	CA	92223	WILLIAMS, ROBERT G	285 BARTRAM TRL	BEAUMONT	CA	92223
421-800-019	279 BARTRAM TRL	BEAUMONT	CA	92223	DIXON, LEROY	279 BARTRAM TRL	BEAUMONT	CA	92223

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
421-800-020	284 CHIMNEY ROCK	BEAUMONT	CA	92223	MENCACCI, SHERRYL ANN	284 CHIMNEY ROCK	BEAUMONT	CA	92223
421-800-021	286 CHIMNEY ROCK	BEAUMONT	CA	92223	DAVITT, MICHAEL	286 CHIMNEY ROCK	BEAUMONT	CA	92223
421-800-022	290 CHIMNEY ROCK	BEAUMONT	CA	92223	WALKER, JERRY L	290 CHIMNEY ROCK	BEAUMONT	CA	92223
421-800-023	294 CHIMNEY ROCK	BEAUMONT	CA	92223	PLENGE, FRED	294 CHIMNEY ROCK	BEAUMONT	CA	92223
421-800-024	295 CHIMNEY ROCK	BEAUMONT	CA	92223	ORLAND, BURTON	295 CHIMNEY ROCK	BEAUMONT	CA	92223
421-800-025	293 CHIMNEY ROCK	BEAUMONT	CA	92223	NEELY, RICHARD B	293 CHIMNEY ROCK	BEAUMONT	CA	92223
421-800-026	289 CHIMNEY ROCK	BEAUMONT	CA	92223	OGLE, LARRY P	289 CHIMNEY ROCK	BEAUMONT	CA	92223
421-800-027	287 CHIMNEY ROCK	BEAUMONT	CA	92223	MELVILLE, ROBERT F	287 CHIMNEY ROCK	BEAUMONT	CA	92223
421-800-028	285 CHIMNEY ROCK	BEAUMONT	CA	92223	WECK, FRED H	285 CHIMNEY ROCK	BEAUMONT	CA	92223
421-800-035	270 KINGS CYN	BEAUMONT	CA	92223	WATERS, LYLE W	270 KINGS CYN	BEAUMONT	CA	92223
421-800-036	274 KINGS CYN	BEAUMONT	CA	92223	LAPOINTE, JOANNE J	274 KINGS CYN	BEAUMONT	CA	92223
421-800-037	278 KINGS CYN	BEAUMONT	CA	92223	BIESSENER, BRUCE	278 KINGS CYN	BEAUMONT	CA	92223
421-800-038	1555 BIG BND	BEAUMONT	CA	92223	PAYNE, KENNETH D	1555 BIG BEND	BEAUMONT	CA	92223
421-800-039	1553 BIG BND	BEAUMONT	CA	92223	RINKER, MARIA T	1553 BIG BEND	BEAUMONT	CA	92223
421-800-040	1551 BIG BND	BEAUMONT	CA	92223	CASTRO, HENRY	1551 BIG BEND	BEAUMONT	CA	92223
421-800-041	1549 BIG BND	BEAUMONT	CA	92223	MAXWELL, DAVID L	1549 BIG BEND	BEAUMONT	CA	92223
421-800-042	1548 BIG BND	BEAUMONT	CA	92223	ALLEN, ROBERT WILLIAM	1548 BIG BEND	BEAUMONT	CA	92223
421-800-043	1550 BIG BND	BEAUMONT	CA	92223	PARTIDA, RITA G	1550 BIG BEND	BEAUMONT	CA	92223
421-800-055		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-800-056		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-800-057		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-800-058		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-800-060		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-800-061		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT BEAUMONT, ASSN	800 N HAVEN AVE STE 300	ONTARIO	CA	91764
421-800-062		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT BEAUMONT, ASSN	800 N HAVEN AVE STE 300	ONTARIO	CA	91764
421-810-001	1547 BIG BND	BEAUMONT	CA	92223	RYAN, RICHARD M	1547 BIG BEND	BEAUMONT	CA	92223
421-810-002	1543 BIG BND	BEAUMONT	CA	92223	MYERS, DANIEL	1543 BIG BEND	BEAUMONT	CA	92223
421-810-003	1541 BIG BND	BEAUMONT	CA	92223	FLORES, MAGDALENO	1541 BIG BEND	BEAUMONT	CA	92223
421-810-004	1539 BIG BND	BEAUMONT	CA	92223	HOLT, KEVIN W	1539 BIG BND	BEAUMONT	CA	92223
421-810-005	1535 BIG BND	BEAUMONT	CA	92223	ADRIANO, FIDEL L	1535 BIG BEND	BEAUMONT	CA	92223
421-810-006	1533 BIG BND	BEAUMONT	CA	92223	HOFER, FRED	1533 BIG BEND	BEAUMONT	CA	92223

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
421-810-007	1531 BIG BND	BEAUMONT	CA	92223	YEE, THOMAS	999 E VALLEY BLVD	ALHAMBRA	CA	91801
421-810-008	1529 BIG BND	BEAUMONT	CA	92223	FILLMAN, JAMES R	25180 HUSTON ST	STEVENSON RANCH	CA	91381
421-810-009	1527 BIG BND	BEAUMONT	CA	92223	DENGER, RAYMOND	1527 BIG BEND	BEAUMONT	CA	92223
421-810-010	1525 BIG BND	BEAUMONT	CA	92223	DILLY, DONALD C	1525 BIG BEND	BEAUMONT	CA	92223
421-810-011	1523 BIG BND	BEAUMONT	CA	92223	REAGINS, LEONARD	1523 BIG BEND	BEAUMONT	CA	92223
421-810-012	1524 BIG BND	BEAUMONT	CA	92223	AYALA, JAIME R	1524 BIG BND	BEAUMONT	CA	92223
421-810-013	1526 BIG BND	BEAUMONT	CA	92223	CABRERA JR, MANUEL	1526 BIG BND	BEAUMONT	CA	92223
421-810-014	1528 BIG BND	BEAUMONT	CA	92223	VISCUSI FAMILY TRUST	1528 BIG BND	BEAUMONT	CA	92223
421-810-015	1530 BIG BND	BEAUMONT	CA	92223	MILLER, KATHLEEN A	1530 BIG BND	BEAUMONT	CA	92223
421-810-016	1532 BIG BND	BEAUMONT	CA	92223	ENSMINGER, MARIAN G	1532 BIG BEND	BEAUMONT	CA	92223
421-810-017	1534 BIG BND	BEAUMONT	CA	92223	MACIOGE, VERONICA	1534 BIG BEND	BEAUMONT	CA	92223
421-810-018	1536 BIG BND	BEAUMONT	CA	92223	WALLACE, RONALD E	1536 BIG BEND	BEAUMONT	CA	92223
421-810-019	1542 BIG BEND	BEAUMONT	CA	92223	PRICE, CHARLES E	1506 BIG BND	BEAUMONT	CA	92223
421-810-020	1544 BIG BEND	BEAUMONT	CA	92223	PRICE, CHARLES E	1506 BIG BND	BEAUMONT	CA	92223
421-810-021	1546 BIG BND	BEAUMONT	CA	92223	SUTER, CINDY R	1546 BIG BND	BEAUMONT	CA	92223
421-810-044	1515 BIG BND	BEAUMONT	CA	92223	MARING, RUSSELL GERALD	282 BUCK SPGS	BEAUMONT	CA	92223
421-810-046		BEAUMONT	CA	92223	MARING, RUSSELL GERALD	282 BUCK SPGS	BEAUMONT	CA	92223
421-810-047		BEAUMONT	CA	92223	MARING, RUSSELL GERALD	282 BUCK SPGS	BEAUMONT	CA	92223
421-810-048		BEAUMONT	CA	92223	MARING, RUSSELL GERALD	282 BUCK SPGS	BEAUMONT	CA	92223
421-810-050		BEAUMONT	CA	92223	K HOVNIANS FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-810-051		BEAUMONT	CA	92223	K HOVNIANS FOUR SEASONS AT BEAMONT, ASSN	800 N HAVEN AVE STE 300	ONTARIO	CA	91764
421-810-052		BEAUMONT	CA	92223	K HOVNIANS FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-820-002	311 SPANOS PARK	BEAUMONT	CA	92223	CHILDRESS, CLORINDA	311 SPANOS PARK	BEAUMONT	CA	92223
421-820-003	309 SPANOS PARK	BEAUMONT	CA	92223	SMITH, MARILYN E	309 SPANOS PARK	BEAUMONT	CA	92223
421-820-004	305 SPANOS PARK	BEAUMONT	CA	92223	ASHCRAFT, GLEN M	305 SPANOS PARK	BEAUMONT	CA	92223
421-820-005	1506 BLOOMINGTON PARK	BEAUMONT	CA	92223	JAHNKE, RICHARD A	1506 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-820-008	1518 BLOOMINGTON PARK	BEAUMONT	CA	92223	ACUNZO, JACK	1518 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-820-009	1522 BLOOMINGTON PARK	BEAUMONT	CA	92223	JENNINGS, CHARLES ALBERT	1522 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-820-010	1526 BLOOMINGTON PARK	BEAUMONT	CA	92223	DYAL CHAND, ANAND KUMAR	1526 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-820-011	1530 BLOOMINGTON PARK	BEAUMONT	CA	92223	IRVING, PHILIP L	80470 MUIRFIELD DR	INDIO	CA	92201
421-820-012	1534 BLOOMINGTON PARK	BEAUMONT	CA	92223	BUSCHMANN, CARL C	1534 BLOOMINGTON PARK	BEAUMONT	CA	92223

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
421-820-013	1536 BLOOMINGTON PARK	BEAUMONT	CA	92223	DAY LEDESMA, DORIS	1536 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-820-014	1542 BLOOMINGTON PARK	BEAUMONT	CA	92223	WERTZ, CLARENCE L	1542 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-820-015	1544 BLOOMINGTON PARK	BEAUMONT	CA	92223	WILLIAMS, RICHARD	1544 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-820-016	1546 BLOOMINGTON PARK	BEAUMONT	CA	92223	SMITH, DOUGLAS L	1546 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-820-017	1548 BLOOMINGTON PARK	BEAUMONT	CA	92223	ELLIOTT, MARK N	1548 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-820-018	1552 BLOOMINGTON PARK	BEAUMONT	CA	92223	SANCHEZ, FRANK M	1552 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-820-019	1556 BLOOMINGTON PARK	BEAUMONT	CA	92223	PETERSON, JAMES WAYNE	1556 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-820-020	1558 BLOOMINGTON PARK	BEAUMONT	CA	92223	GEISER JR, RAYMOND WAGNER	1558 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-820-021	1560 BLOOMINGTON PARK	BEAUMONT	CA	92223	ROLDAN, DAVID JOSEPH	1560 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-820-022	1562 BLOOMINGTON PARK	BEAUMONT	CA	92223	RICO, MANUEL	1562 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-820-023	1566 BLOOMINGTON PARK	BEAUMONT	CA	92223	KOLODGE, MATTHEW W	1566 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-820-024	1568 BLOOMINGTON PARK	BEAUMONT	CA	92223	FORSYTH, JOHN	1568 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-820-025	1570 BLOOMINGTON PARK	BEAUMONT	CA	92223	THE AVIHU GREENE & CINDY H GREENE FAMILY	1570 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-820-026	1567 BLOOMINGTON PARK	BEAUMONT	CA	92223	OLSTEN, JOHN L	1567 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-820-027	1565 BLOOMINGTON PARK	BEAUMONT	CA	92223	MURRAY, PATRICIA	1565 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-820-028	1561 BLOOMINGTON PARK	BEAUMONT	CA	92223	MYERS, BETTYE J	1561 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-820-029	308 PIPE SPGS	BEAUMONT	CA	92223	MENDOZA, MICHAEL A	308 PIPE SPRINGS	BEAUMONT	CA	92223
421-820-030	312 PIPE SPGS	BEAUMONT	CA	92223	NADOLNY, HENRY	312 PIPE SPGS	BEAUMONT	CA	92223
421-820-035	1549 BLOOMINGTON PARK	BEAUMONT	CA	92223	MILLER, BARBARA LEE	1549 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-820-036	1547 BLOOMINGTON PARK	BEAUMONT	CA	92223	GRIMES, KENNETH A	1547 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-820-037	1543 BLOOMINGTON PARK	BEAUMONT	CA	92223	POSKEVICH, SYLVIA	1543 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-820-038	314 CALVERT PARK	BEAUMONT	CA	92223	BENO, CRAIG T	314 CALVERT PARK	BEAUMONT	CA	92223
421-820-050	317 CALVERT PARK	BEAUMONT	CA	92223	DOMINGUEZ, ROMAN	317 CALVERT PARK	BEAUMONT	CA	92223
421-820-051	309 CALVERT PARK	BEAUMONT	CA	92223	MARTINEZ, TYRONE ROMAN	309 CALVERT PARK	BEAUMONT	CA	92223
421-820-052	310 SPANOS PARK	BEAUMONT	CA	92223	BORKAR, GURUDATT	310 SPANOS PARK	BEAUMONT	CA	92223
421-820-060		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-820-062		BEAUMONT	CA	92223	K HOVNIANIAN FOUR SEASONS AT BEAUMONT, ASSN	800 N HAVEN AVE STE 300	ONTARIO	CA	91764
421-820-063		BEAUMONT	CA	92223	K HOVNIANIAN FOUR SEASONS AT BEAUMONT, ASSN	800 N HAVEN AVE STE 300	ONTARIO	CA	91764
421-820-064		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS BEAUMONT COM, ASSN	800 N HAVEN AVE STE 300	ONTARIO	CA	91764
421-820-065	1510 BLOOMINGTON PARK	BEAUMONT	CA	92223	BRENDEL, LYNN	1510 BLOOMINGTON PARK	BEAUMONT	CA	92223

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
421-820-066	1514 BLOOMINGTON PARK	BEAUMONT	CA	92223	ROMBOUGH, EDWARD	1514 BLOOMINGTON PARK	BEAUMONT	CA	92223
421-820-067		BEAUMONT	CA	92223	K HOVNANIAN FOUR SEASONS AT BEAUMONT, ASSN	800 N HAVEN AVE STE 300	ONTARIO	CA	91764
421-870-028	307 SHINING ROCK	BEAUMONT	CA	92223	FUKASAWA, TAMIO	20743 E ALPINE MEADOWS CIR	WALNUT	CA	91789
421-870-029	305 SHINING ROCK	BEAUMONT	CA	92223	DENNIS, IRENE	305 SHINING ROCK	BEAUMONT	CA	92223
421-870-030	306 SHINING ROCK	BEAUMONT	CA	92223	MITCHELL, ROBERT H	306 SHINING ROCK	BEAUMONT	CA	92223
421-870-031	308 SHINING ROCK	BEAUMONT	CA	92223	LAU, ALFRED LIAT KHOON	308 SHINING ROCK	BEAUMONT	CA	92223
421-870-088		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT BEAUMONT LL	2525 CAMPUS DR	IRVINE	CA	92612
421-870-091		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-900-001		BEAUMONT	CA	92223	K HOVNANIAN FOUR SEASONS BEAUMONT COMM, ASSN	2525 CAMPUS DR	IRVINE	CA	92612
421-900-005	1420 ARCHES PARK	BEAUMONT	CA	92223	ADAMS, BROOKS J	1420 ARCHES PARK	BEAUMONT	CA	92223
421-900-006	1424 ARCHES PARK	BEAUMONT	CA	92223	MARTIN, LARRY ROY	1424 ARCHES PARK	BEAUMONT	CA	92223
421-900-007	1428 ARCHES PARK	BEAUMONT	CA	92223	OSBORNE, JOYCE D	1428 ARCHES PARK	BEAUMONT	CA	92223
421-900-008	1430 ARCHES PARK	BEAUMONT	CA	92223	ST JOHN, RODNEY A	1430 ARCHES PARK	BEAUMONT	CA	92223
421-900-009	1432 ARCHES PARK	BEAUMONT	CA	92223	CAMPBELL, JOHN L	1432 ARCHES PARK	BEAUMONT	CA	92223
421-900-010	1436 ARCHES PARK	BEAUMONT	CA	92223	HANZICH, DARLENE ANN	1436 ARCHES PARK	BEAUMONT	CA	92223
421-900-011	1440 ARCHES PARK	BEAUMONT	CA	92223	HOUSTON, WILLIE R	1440 ARCHES PARK	BEAUMONT	CA	92223
421-900-012	1442 ARCHES PARK	BEAUMONT	CA	92223	GARCIA, RODOLFO F	1442 ARCHES PARK	BEAUMONT	CA	92223
421-900-013	1444 ARCHES PARK	BEAUMONT	CA	92223	HANZICH, MARTY WILLIAM	1444 ARCHES PARK	BEAUMONT	CA	92223
421-900-014	1446 ARCHES PARK	BEAUMONT	CA	92223	ZAVALA, LEONARD R	1446 ARCHES PARK	BEAUMONT	CA	92223
421-900-015	1448 ARCHES PARK	BEAUMONT	CA	92223	TAUTRIM, JOYCE E	1448 ARCHES PARK	BEAUMONT	CA	92223
421-900-016	304 BLOWING ROCK	BEAUMONT	CA	92223	GRILLO, NATALE	304 BLOWING ROCK	BEAUMONT	CA	92223
421-900-017	308 BLOWING ROCK	BEAUMONT	CA	92223	KEY, MARTHA L	308 BLOWING ROCK	BEAUMONT	CA	92223
421-900-039	309 BLOWING ROCK	BEAUMONT	CA	92223	BAKER, WILLIAM J	309 BLOWING ROCK	BEAUMONT	CA	92223
421-900-040	307 BLOWING ROCK	BEAUMONT	CA	92223	WEINSTEIN, LISA	307 BLOWING ROCK	BEAUMONT	CA	92223
421-900-041		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS COMMUNITY ASSN	2525 CAMPUS DR	IRVINE	CA	92612
421-900-042		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS COMMUNITY ASSN	2525 CAMPUS DR	IRVINE	CA	92612
421-900-047		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS COMMUNITY ASSN	2525 CAMPUS DR	IRVINE	CA	92612
421-910-016		BEAUMONT	CA	92223	MARTINICH, MATTHEW	313 SANTIAGO OAKS PARK	BEAUMONT	CA	92223
421-910-017		BEAUMONT	CA	92223	ROCK, M GAR	311 SANTIAGO OAKS PARK	BEAUMONT	CA	92223
421-910-024		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT BEAUMONT LL	2525 CAMPUS DR	IRVINE	CA	92612

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
421-910-025		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT BEAUMONT LL	2525 CAMPUS DR	IRVINE	CA	92612
421-910-026		BEAUMONT	CA	92223	LYON, WARREN W	1467 TINKERS CREEK PARK	BEAUMONT	CA	92223
421-910-027		BEAUMONT	CA	92223	KERRY, EDGAR A	1475 TINKERS CREEK PARK	BEAUMONT	CA	92223
421-910-028		BEAUMONT	CA	92223	LEE, MICHAEL S	1475 RANCHO HILLS DR	CHINO HILLS	CA	91709
421-910-029		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-910-031		BEAUMONT	CA	92223	OLIVAS, FRANK R	1452 TINKERS CREEK PARK	BEAUMONT	CA	92223
421-910-032		BEAUMONT	CA	92223	NOCK, JOHN A	1456 TINKERS CREEK PARK	BEAUMONT	CA	92223
421-910-033		BEAUMONT	CA	92223	BAKER, WILLIAM J	1460 TINKERS CREEK PARK	BEAUMONT	CA	92223
421-910-034		BEAUMONT	CA	92223	MILLER, WAYNE HIGGINS	1464 TINKERS CREEK PARK	BEAUMONT	CA	92223
421-910-035		BEAUMONT	CA	92223	WEIR, ARTHUR MITCHELL	1468 TINKERS CREEK PARK	BEAUMONT	CA	92223
421-910-036		BEAUMONT	CA	92223	ROMAN, JOHN A	1472 TINKERS CREEK PARK	BEAUMONT	CA	92223
421-910-037		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-910-038		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-910-039		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-910-040		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-910-041		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-910-042		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-910-043		BEAUMONT	CA	92223	NETREIT DUBOSE MODEL HOME REIT LP	14405 WALTERS RD STE 310	HOUSTON	TX	77014
421-910-062		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT BEAUMONT CO	2525 CAMPUS DR	IRVINE	CA	92612
421-910-063		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT BEAUMONT CO	2525 CAMPUS DR	IRVINE	CA	92612
421-910-064		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-910-066		BEAUMONT	CA	92223	K HOVNANIANS FOUR SEASONS AT, BEAUMONT	2525 CAMPUS DR	IRVINE	CA	92612
421-910-067		BEAUMONT	CA	92223	KEENE, TODD R	1450 TINKERS CREEK PARK	BEAUMONT	CA	92223
422-220-002		BEAUMONT	CA	92223	GREER, JOETTA	28445 N OAK SPRINGS CYN	CANYON COUNTRY	CA	91351
519-170-001		CABAZON	CA	92230	R R M PROP LTD	PO BOX 3600	CORONA	CA	92878
519-170-004		CABAZON	CA	92230	R R M PROP LTD	PO BOX 3600	CORONA	CA	92878
519-170-005		CABAZON	CA	92230	R R M PROP LTD	PO BOX 3600	CORONA	CA	92878
519-170-006		CABAZON	CA	92230	R R M PROP LTD	PO BOX 3600	CORONA	CA	92878
519-170-007	13984 APACHE TRL	CABAZON	CA	92230	R R M PROP LTD	PO BOX 3600	CORONA	CA	92878
519-170-009		CABAZON	CA	92230	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
519-180-007		CABAZON	CA	92230	USA MORONGO BAND CAHUILLA MISSION, INDIANS	11581 POTRERO RD	BANNING	CA	92220

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
519-180-011		CABAZON	CA	92230	SOUTHERN PACIFIC TRANSPORTATION	1400 DOUGLAS ST	OMAHA	NE	68179
519-180-025		CABAZON	CA	92230	USA MORONGO BAND CAHUILLA MISSION, INDIANS	11581 POTRERO RD	BANNING	CA	92220
519-190-009		CABAZON	CA	92230	DESERT VIEW FINANCIAL LLC	160 GREENTREE DR STE 101	DOVER	DE	19904
519-190-012		CABAZON	CA	92230	BURK, JACK DEMPSEY	PO BOX 519	TEMPLE CITY	CA	91780
519-190-013		CABAZON	CA	92230	BURK, JACK DEMPSEY	PO BOX 519	TEMPLE CITY	CA	91780
519-190-023		CABAZON	CA	92230	RIVERSIDE COUNTY FLOOD CONT	1995 MARKET ST	RIVERSIDE	CA	92501
519-190-025		CABAZON	CA	92230	PACIFIC TELEPHONE & TELEGRAPH CO	140 NEW MONTGOMERY ST	SAN FRANCISCO	CA	94105
519-190-026		CABAZON	CA	92230	AT & T COMMUNICATIONS CALIF INC	340 MOUNT KEMBLE AVE	MORRISTOWN	NJ	7960
519-190-040		CABAZON	CA	92230	DESERT VIEW FINANCIAL LLC	160 GREENTREE DR STE 101	DOVER	DE	19904
519-190-041		CABAZON	CA	92230	DESERT VIEW FINANCIAL LLC	160 GREENTREE DR STE 101	DOVER	DE	19904
519-190-042		CABAZON	CA	92230	DESERT VIEW FINANCIAL LLC	160 GREENTREE DR STE 101	DOVER	DE	19904
519-200-004		CABAZON	CA	92230	PROP, RRM	200 S MAIN ST STE 200	CORONA	CA	92882
519-200-005		CABAZON	CA	92230	R R M PROP LTD	PO BOX 3600	CORONA	CA	92878
519-200-006		CABAZON	CA	92230	BAILIFF RANCH INC	2441 FAIRVIEW AVE	RIVERSIDE	CA	92506
519-200-007	13990 APACHE TRL	CABAZON	CA	92230	R R M PROP LTD	PO BOX 3600	CORONA	CA	92878
519-200-009		CABAZON	CA	92230	R R M PROP LTD	PO BOX 3600	CORONA	CA	92878
519-200-011		CABAZON	CA	92230	PROP, RRM	PO BOX 3600	CORONA	CA	92878
519-220-001		CABAZON	CA	92230	R R M PROP LTD	PO BOX 3600	CORONA	CA	92878
519-220-002		CABAZON	CA	92230	R R M PROP LTD	PO BOX 3600	CORONA	CA	92878
519-220-003		CABAZON	CA	92230	R R M PROP LTD	PO BOX 3600	CORONA	CA	92878
519-220-004		CABAZON	CA	92230	R R M PROP LTD	PO BOX 3600	CORONA	CA	92878
519-220-005		CABAZON	CA	92230	PROP, RRM	PO BOX 3600	CORONA	CA	92878
519-220-006		CABAZON	CA	92230	R R M PROP LTD	PO BOX 3600	CORONA	CA	92878
519-220-011		CABAZON	CA	92230	R R M PROP LTD	PO BOX 3600	CORONA	CA	92878
519-220-012		CABAZON	CA	92230	R R M PROP LTD	PO BOX 3600	CORONA	CA	92878
519-240-005	249 S APACHE TRL	CABAZON	CA	92230	MATTOX, STANLEY E	49 LINCOLN PL	RANCHO MIRAGE	CA	92270
519-240-009		CABAZON	CA	92230	BEAUMONT CONCRETE CO	PO BOX 216	BEAUMONT	CA	92223
519-240-010	14136 APACHE TRL	CABAZON	CA	92230	CROSSAN, THOMAS L	PO BOX 269	CABAZON	CA	92230
519-240-011		CABAZON	CA	92230	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
519-250-002		CABAZON	CA	92230	KUNZ, GREGORY W	PO BOX 16627	BOISE	ID	83715
519-250-003		CABAZON	CA	92230	KUNZ, GREGORY W	77583 EL DUNA CT STE J	PALM DESERT	CA	92211
519-250-006		CABAZON	CA	92230	SANCHEZ, MANUEL	1517 DURFEE AVE	EL MONTE	CA	91733

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
519-250-007	14121 MAGNOLIA ST	CABAZON	CA	92230	GARCIA, AURORA E	23756 OAKFIELD RD	HIDDEN HILLS	CA	91302
519-250-008		CABAZON	CA	92230	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
519-250-009		CABAZON	CA	92230	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
519-260-003		CABAZON	CA	92230	SELVERA, LOUIS	37180 WILDWOOD CANYON RD	YUCAIPA	CA	92399
519-260-004		CABAZON	CA	92230	SELVERA, LOUIS	37180 WILDWOOD CANYON RD	YUCAIPA	CA	92399
519-260-005	49070 BONITA AVE	CABAZON	CA	92230	DOLENC, LUIS ALBERTO	BUENOS AIRES C P 1103 ARGENTINA			
519-260-006		CABAZON	CA	92230	FIESTA GROUP	2540 ONYX DR	LOS ANGELES	CA	90032
519-260-007	49144 BONITA AVE	CABAZON	CA	92230	DANIEL, THOMAS L	36854 OAK VIEW RD	YUCAIPA	CA	92399
519-260-013	49220 BONITA AVE	CABAZON	CA	92230	TRAK TRANSPORTATION & CONST CO	36854 OAK VIEW RD	YUCAIPA	CA	92399
519-260-014	49240 BONITA AVE	CABAZON	CA	92230	TRAK TRANSPORTATION & CONST CO	36854 OAK VIEW RD	YUCAIPA	CA	92399
519-270-001	49340 BONITA AVE	CABAZON	CA	92230	NICOLLE, JEAN	26231 FIR AVE	MORENO VALLEY	CA	92555
519-270-002	49346 BONITA AVE	CABAZON	CA	92230	VALENZUELA, STEVEN	49346 BONITA AVE	CABAZON	CA	92230
519-270-003	14230 MAGNOLIA ST	CABAZON	CA	92230	HOWELL, RONALD WARREN	PO BOX 706	CANYONVILLE	OR	97417
519-270-004	14210 MAGNOLIA ST	CABAZON	CA	92230	CONDE, CONCEPTION N	PO BOX 137	CABAZON	CA	92230
519-270-005		CABAZON	CA	92230	CARDENAS, FRANK ROBERT	720 PEARL ST	SAN GABRIEL	CA	91776
519-270-006	49394 BONITA AVE	CABAZON	CA	92230	YSIANO, ERNIE	PO BOX 803	CABAZON	CA	92230
519-270-007	49420 BONITA AVE	CABAZON	CA	92230	IPARAGUIRRE, BOB	775 N SANDERSON AVE	SAN JACINTO	CA	92582
519-270-008		CABAZON	CA	92230	WALKER, RODNEY L	2575 WILT RD	FALLBROOK	CA	92028
519-270-009	14170 MAGNOLIA ST	CABAZON	CA	92230	SANCHEZ, MELECIO	PO BOX 144	CABAZON	CA	92230
519-270-010	49270 BONITA AVE	CABAZON	CA	92230	SOREANO, ISIDRO	PO BOX 364	CABAZON	CA	92230
519-280-001	49111 BONITA AVE	CABAZON	CA	92230	R R M PROP	PO BOX 3600	CORONA	CA	92878
519-280-003	49111 BONITA AVE	CABAZON	CA	92230	ROSSETTI, ANTHONY F	635 AMERICAN AVE	BEAUMONT	CA	92223
519-280-004		CABAZON	CA	92230	QAZI, AHSAN	9361 BEAUVIEW DR	CHERRY VALLEY	CA	92223
519-280-005		CABAZON	CA	92230	MEDINA, LUIS ADOLFO	1211 GULF AVE	WILMINGTON	CA	90744
519-291-001		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-291-002		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-291-003		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-291-004		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-291-005		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-291-006		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
519-291-007		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-291-008		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-291-009		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-291-010		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-291-011		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-291-012		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-291-013		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-291-014		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-291-015		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-291-016		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-291-017		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-291-018		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-291-019		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-291-020		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-292-001		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-292-002		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-292-003		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-292-004		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-292-005		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-292-006		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-292-007		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-292-008		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-292-009		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-292-010		CABAZON	CA	92230	HOOK, JOHN D	105 S EL CAMINO REAL	SAN CLEMENTE	CA	92672
519-294-001	49395 BONITA AVE	CABAZON	CA	92230	YSIANO JR, ERNIE	49395 BONITA AVE	CABAZON	CA	92230
519-320-012		CABAZON	CA	92230	THOMAS, JOE R	PO BOX 866	CABAZON	CA	92230
519-320-016		CABAZON	CA	92230	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
519-330-008		CABAZON	CA	92230	MORONGO BAND OF, MISSION INDIANS	11581 POTRERO RD	BANNING	CA	92220
519-330-009	49980 MAIN ST	CABAZON	CA	92230	LUCA, DE THOMAS	PO BOX 727	CABAZON	CA	92230
519-340-001	49610 BONITA AVE	CABAZON	CA	92230	THOMAS, JOE R	PO BOX 866	CABAZON	CA	92230
519-340-002	49710 BONITA AVE	CABAZON	CA	92230	TCU COMMUNITY PTP	1040 S MT	COLTON	CA	92324
519-350-001		CABAZON	CA	92230	SLAYBACK, JOHN B	512 E WILSON AVE STE 302	GLENDALE	CA	91206

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
519-350-003		CABAZON	CA	92230	TINSTON, BARBARA	200 CARROLL ST APT 25	SUSANVILLE	CA	96130
519-350-004	49834 BONITA AVE	CABAZON	CA	92230	CAMBRIA MINERALS INC	508 CLEARVIEW DR	HOLLIDAYSBURG	PA	16648
519-350-007	49880 BONITA AVE	CABAZON	CA	92230	CRITTENDEN, CHARLES R	49880 BONITA AVE	CABAZON	CA	92230
519-350-008	49856 BONITA AVE	CABAZON	CA	92230	FEDERAL NATIONAL MORTGAGE ASSOCIATION	1 BANTING	IRVINE	CA	92618
519-350-009		CABAZON	CA	92230	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
519-350-010	49800 BONITA AVE	CABAZON	CA	92230	MEDORE, ARTHUR S	26350 RIO VISTA DR	HEMET	CA	92544
519-360-001	49521 BONITA AVE	CABAZON	CA	92230	THOMAS, STEVEN J	PO BOX 866	CABAZON	CA	92230
519-360-004	49791 BONITA AVE	CABAZON	CA	92230	ADAMS, ROGER R	49791 BONITA AVE	CABAZON	CA	92230
519-360-010	14280 ORANGE ST	CABAZON	CA	92230	HOWSER, PAUL E	14280 ORANGE ST	CABAZON	CA	92230
519-360-024	49734 ALOMA DR	CABAZON	CA	92230	PORTER, JOHN R	PO BOX 768	CABAZON	CA	92230
523-140-005		CABAZON	CA	92230	USA MORONGO BAND CAHUILLA MISSION, INDIANS	11581 POTRERO RD	BANNING	CA	92220
523-140-006		CABAZON	CA	92230	USA MORONGO BAND CAHUILLA MISSION, INDIANS	11581 POTRERO RD	BANNING	CA	92220
523-140-008		CABAZON	CA	92230	METROPOLITAN WATER DIST OF, SO CALIF	PO BOX 54153	LOS ANGELES	CA	90054
523-140-009		CABAZON	CA	92230	METROPOLITAN WATER DIST OF, SO CALIF	PO BOX 54153	LOS ANGELES	CA	90054
523-140-011		CABAZON	CA	92230	USA MORONGO BAND CAHUILLA MISSION, INDIANS	11581 POTRERO RD	BANNING	CA	92220
523-140-012		CABAZON	CA	92230	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
523-140-014		CABAZON	CA	92230	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
523-160-005		CABAZON	CA	92230	USA MORONGO BAND CAHUILLA MISSION, INDIANS	11581 POTRERO RD	BANNING	CA	92220
523-160-006		CABAZON	CA	92230	USA MORONGO BAND CAHUILLA MISSION, INDIANS	11581 POTRERO RD	BANNING	CA	92220
523-160-007		CABAZON	CA	92230	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
523-160-008		CABAZON	CA	92230	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
525-020-001		CABAZON	CA	92230	CAPITAL, PECUNIARY	171 S ANITA DR STE 100	ORANGE	CA	92868
525-020-002		CABAZON	CA	92230	ESPOSITO, FRANK	3960 S HIGUERA ST SPC 158	SAN LUIS OBISPO	CA	93401
525-020-003		CABAZON	CA	92230	ESPOSITO, FRANK P	3960 S HIGUERA ST SPC 158	SAN LUIS OBISPO	CA	93401
525-020-007		CABAZON	CA	92230	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
525-031-016		CABAZON	CA	92230	O HARE, ANTHONY	2679 DAISY AVE	LONG BEACH	CA	90806
525-031-017		CABAZON	CA	92230	KLEINE, CHRISTIAN E	PO BOX 674	LYONS	OR	97358
525-031-018		CABAZON	CA	92230	KLEINE, CHRISTIAN E	PO BOX 674	LYONS	OR	97358
526-022-009	50100 MAIN ST	CABAZON	CA	92230	HADLEYS INC	83555 AIRPORT BLVD	THERMAL	CA	92274
526-022-010	50054 MAIN ST	CABAZON	CA	92230	CABAZON INN	50100 MAIN ST	CABAZON	CA	92230
526-022-011	50044 MAIN ST	CABAZON	CA	92230	LUIS, JESSE M	50044 MAIN ST	CABAZON	CA	92230
526-022-012	50030 MAIN ST	CABAZON	CA	92230	LUCA, DE THOMAS	PO BOX 727	CABAZON	CA	92230

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
526-022-013	50010 MAIN ST	CABAZON	CA	92230	LUCA, DE THOMAS	PO BOX 727	CABAZON	CA	92230
526-023-016	50130 MAIN ST	CABAZON	CA	92230	COUNTY OF RIVERSIDE	PO BOX 1180	RIVERSIDE	CA	92502
526-040-001		CABAZON	CA	92230	DYNES, CHARLES COLIN	PO BOX 3418	DANA POINT	CA	92629
526-040-002		CABAZON	CA	92230	DYNES, CHARLES COLIN	PO BOX 3418	DANA POINT	CA	92629
526-040-003		CABAZON	CA	92230	RITCHIE, THOMAS	32876 MARIE DR	LAKE ELSINORE	CA	92530
526-040-004		CABAZON	CA	92230	RITCHIE, THOMAS	32876 MARIE DR	LAKE ELSINORE	CA	92530
526-040-005	50074 BONITA AVE	CABAZON	CA	92230	LEE, YUN CHUAN	PO BOX 468	CABAZON	CA	92230
526-040-006	50090 BONITA AVE	CABAZON	CA	92230	TOBIAS, JOSEPH	50090 BONITA AVE	CABAZON	CA	92230
526-040-007		CABAZON	CA	92230	TOBIAS, JOSEPH	50090 BONITA AVE	CABAZON	CA	92230
526-040-008		CABAZON	CA	92230	PLYE, JOSEPH P	33600 CALIMESA BLVD	YUCAIPA	CA	92399
526-040-009		CABAZON	CA	92230	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
526-040-010		CABAZON	CA	92230	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
526-040-011		CABAZON	CA	92230	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
526-040-012		CABAZON	CA	92230	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
526-050-001	50360 BONITA AVE	CABAZON	CA	92230	SUN SHELTER	PO BOX 226	BLOOMER	WI	54724
526-050-002		CABAZON	CA	92230	TASABIA, TIMOTHY	9218 VICTORIA AVE	RIVERSIDE	CA	92503
526-050-005		CABAZON	CA	92230	HAGHANI, HOUSHIAR	16246 SKYWOOD CT	MORENO VALLEY	CA	92551
526-050-006	14166 BROADWAY ST	CABAZON	CA	92230	VEGA, CHRISTOPHER A	5636 OLIVE AVE	RIALTO	CA	92377
526-050-007	14150 BROADWAY ST	CABAZON	CA	92230	LYONS, MARK	16246 SKYWOOD CT	MORENO VALLEY	CA	92551
526-050-009	14160 BROADWAY ST	CABAZON	CA	92230	LYONS, MARK	16400 STARVIEW ST	MORENO VALLEY	CA	92551
526-050-010		CABAZON	CA	92230	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
526-050-011		CABAZON	CA	92230	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
526-050-012		CABAZON	CA	92230	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
526-050-013	50440 BONITA	CABAZON	CA	92230	TRUSS CO INC	17595 100TH ST	BLOOMER	WI	54724
526-060-005		CABAZON	CA	92230	TRUSS CO INC	17595 100TH ST	BLOOMER	WI	54724
526-060-006		CABAZON	CA	92230	TRUSS CO INC	17595 100TH ST	BLOOMER	WI	54724
526-060-008		CABAZON	CA	92230	SANTIAGO, ELEANOR	13595 COLUMBUS CT	FONTANA	CA	92336
526-060-009		CABAZON	CA	92230	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
526-060-010		CABAZON	CA	92230	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
526-060-011		CABAZON	CA	92230	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
526-060-012		CABAZON	CA	92230	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
526-070-001		CABAZON	CA	92230	TRUSS CO	17595 100TH ST	BLOOMER	WI	54724

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
526-070-002	14089 ALMOND ST	CABAZON	CA	92230	MCGLYNN, LORELIE	14089 ALMOND ST	CABAZON	CA	92230
526-070-003		CABAZON	CA	92230	VARELA, MONICA NICOLE	637 MICHIGAN AVE	BEAUMONT	CA	92223
526-070-004		CABAZON	CA	92230	RIVERSIDE COUNTY FLOOD CONT	1995 MARKET ST	RIVERSIDE	CA	92501
526-070-006		CABAZON	CA	92230	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
526-080-001		CABAZON	CA	92230	TRUSS CO INC	17595 100TH ST	BLOOMER	WI	54724
526-080-002		CABAZON	CA	92230	TRUSS CO INC	494 S 4TH ST	BANNING	CA	92220
526-090-001	50850 BONITA AVE	CABAZON	CA	92230	TRUSS CO INC	494 S 4TH ST	BANNING	CA	92220
526-090-002		CABAZON	CA	92230	TRUSS CO INC	494 S 4TH ST	BANNING	CA	92220
526-090-003	50950 BONITA AVE	CABAZON	CA	92230	RIVAS, ANNETTE	79321 PORT ROYAL AVE	BERMUDA DUNES	CA	92203
526-090-004		CABAZON	CA	92230	RIVERSIDE COUNTY FLOOD CONT	1995 MARKET ST	RIVERSIDE	CA	92501
526-090-005		CABAZON	CA	92230	RIVERSIDE COUNTY FLOOD CONT	1995 MARKET ST	RIVERSIDE	CA	92501
526-101-002		CABAZON	CA	92230	WOODROW, BENTON	2766 ANZA TRL	PALM SPRINGS	CA	92264
526-101-003	50105 BONITA AVE	CABAZON	CA	92230	EVERSON, LAWRENCE D	50105 BONITA AVE	CABAZON	CA	92230
526-101-004	50135 BONITA AVE	CABAZON	CA	92230	STRAND, NANCY R	PO BOX 496	CABAZON	CA	92230
526-101-005	50165 BONITA AVE	CABAZON	CA	92230	BONITA AVE TRUST #1268	1379 W PARK WESTERN DR # 300	SAN PEDRO	CA	90732
526-101-006	50165 BONITA AVE	CABAZON	CA	92230	BONITA AVE TRUST #1268	1379 W PARK WESTERN DR # 300	SAN PEDRO	CA	90732
526-101-007	50169 BONITA AVE	CABAZON	CA	92230	RUNZ, GERALDINE L	1014 HOPPER AVE # 435	SANTA ROSA	CA	95403
526-101-008		CABAZON	CA	92230	ARGUELLES, MARIBEL	9747 POPLAR AVE	FONTANA	CA	92335
526-101-009	50205 BONITA AVE	CABAZON	CA	92230	VILLALOBOS, OLIVER	50205 BONITA AVE	CABAZON	CA	92230
526-101-010	50235 ALOMA DR	CABAZON	CA	92230	GOMEZ, JAVIER M	632 W GUAVA ST	OXNARD	CA	93033
526-101-011	50217 BONITA AVE	CABAZON	CA	92230	GLASER, RUSSELL	PO BOX 797	CABAZON	CA	92230
526-101-012		CABAZON	CA	92230	GLASER, RUSSELL	PO BOX 797	CABAZON	CA	92230
526-101-013		CABAZON	CA	92230	SIMON, MAGHIE	68271 GRANDVIEW AVE	CATHEDRAL CITY	CA	92234
526-101-014	50246 ALOMA DR	CABAZON	CA	92230	CHEN, HUNG YEH	50246 ALOMA DR	CABAZON	CA	92230
526-101-015	50240 ALOMA DR	CABAZON	CA	92230	SAUER, CHARLES	PO BOX 534	CABAZON	CA	92230
526-101-016	50222 ALOMA DR	CABAZON	CA	92230	QUANTEX GROUP INC	50222 ALOMA DR	CABAZON	CA	92230
526-101-017	50212 ALOMA DR	CABAZON	CA	92230	MARCH REAL ESTATE INC	4523 ADAMS ST	CARLSBAD	CA	92008
526-101-018	50200 ALOMA DR	CABAZON	CA	92230	KARPELES, DAVID	465 HOT SPRINGS RD	SANTA BARBARA	CA	93108
526-101-019	50188 ALOMA DR	CABAZON	CA	92230	ARGUELLES, MARIBEL	50188 ALOMA DR	CABAZON	CA	92230
526-101-020	50176 ALOMA DR	CABAZON	CA	92230	ADAMS, JOHN W	411 BRENTWOOD CIR	HEMET	CA	92543
526-101-021	50164 ALOMA DR	CABAZON	CA	92230	JARACZ, DAVID	PO BOX 537	MENTONE	CA	92359

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
526-101-022		CABAZON	CA	92230	CHEVERE, OCTAVIO	8444 MORRILL AVE	WHITTIER	CA	90606
526-101-023		CABAZON	CA	92230	MACDONALD, VINCENT GEORGE	594 W 7TH ST	SAN JACINTO	CA	92583
526-101-026	50085 BONITA AVE	CABAZON	CA	92230	LEAL, GILBERT ANTHONY	5805 WHITE OAK AVE UNIT 17288	ENCINO	CA	91416
526-101-027		CABAZON	CA	92230	MENDEZ, JESUSITA P	PO BOX 1728	ENCINO	CA	91416
526-101-028	50155 BONITA AVE	CABAZON	CA	92230	WALLS, DOLORES T	676 E BARBOUR ST	BANNING	CA	92220
526-101-029		CABAZON	CA	92230	WALLS, DOLORES T	676 E BARBOUR ST	BANNING	CA	92220
526-101-030	50085 BONITA AVE	CABAZON	CA	92230	BARKER, GREGORY D	202 MYRL DR	BEAUMONT	CA	92223
526-101-031	50100 ALOMA DR	CABAZON	CA	92230	KARAWIA, FATIMA I	182 W RAMSEY ST	BANNING	CA	92220
526-121-001	50344 ALOMA DR	CABAZON	CA	92230	SCOTT, RUTH L	PO BOX 243	CABAZON	CA	92230
526-121-002	14301 BROADWAY ST	CABAZON	CA	92230	SANTACRUZ, SYLVIA A	14301 BROADWAY ST	CABAZON	CA	92230
526-121-003	14291 BROADWAY ST	CABAZON	CA	92230	HORTON, BILLY JOE	14291 BROADWAY ST	CABAZON	CA	92230
526-121-004		CABAZON	CA	92230	MURILLO, DAVID	PO BOX 111	CABAZON	CA	92230
526-121-005		CABAZON	CA	92230	MURILLO, DAVID	PO BOX 111	CABAZON	CA	92230
526-121-006	14261 BROADWAY ST	CABAZON	CA	92230	FORD JR, JAMES E	14261 BROADWAY ST	CABAZON	CA	92230
526-121-007	50331 BONITA AVE	CABAZON	CA	92230	SOUTHERN CALIFORNIA EDISON CO	PO BOX 800	ROSEMEAD	CA	91770
526-121-008	50327 BONITA AVE	CABAZON	CA	92230	DELEON, JOSE A	1498 MARINA DR	THERMAL	CA	92274
526-121-009	50303 BONITA AVE	CABAZON	CA	92230	LEIGH, FRANK	110 TRADEWINDS LN	SAN JACINTO	CA	92583
526-121-010	50291 BONITA AVE	CABAZON	CA	92230	RAMIREZ, FRANK	PO BOX 1054	BANNING	CA	92220
526-121-011	50279 BONITA AVE	CABAZON	CA	92230	CRITTENDEN, CHARLES R	49880 BONITA AVE	CABAZON	CA	92230
526-121-012		CABAZON	CA	92230	DIAZ, MARIA H	708 S WESTBORO AVE	ALHAMBRA	CA	91803
526-121-013		CABAZON	CA	92230	GEARING, TERESA M	10009 GRAFTON RD	RALEIGH	NC	27615
526-121-014	50262 ALOMA DR	CABAZON	CA	92230	SEMF, BO	1135 MOUNTAIN GATE RD	UPLAND	CA	91786
526-121-015	50270 ALOMA DR	CABAZON	CA	92230	SIMPKINS, DOUGLAS LYNN	PO BOX 643	CABAZON	CA	92230
526-121-016	50278 ALOMA DR	CABAZON	CA	92230	ALEXANDER, WILLIAM	10947 CASIMIR AVE	INGLEWOOD	CA	90303
526-121-017	50290 ALOMA DR	CABAZON	CA	92230	DRISKILL, DAVID	50290 ALOMA DR	CABAZON	CA	92230
526-121-018	50302 ALOMA DR	CABAZON	CA	92230	PENNIMAN, HELEN LORETTA	1629 BERKLEY CIR	CHATTANOOGA	TN	37405
526-121-019	50336 ALOMA DR	CABAZON	CA	92230	SZYNKOWSKI, MICHAEL	48515 CHELTHAM DR	NEWBERRY SPRINGS	CA	92365
526-121-020	50316 ALOMA DR	CABAZON	CA	92230	MCMILLAN, RICHARD S	8350 JOSARD RD	SAN GABRIEL	CA	91775
526-121-021	50330 ALOMA DR	CABAZON	CA	92230	SZYNKOWSKI, RUTH J	48525 CHELTHAM DR	NEWBERRY SPRINGS	CA	92365
526-121-022		CABAZON	CA	92230	SOUTHERN CALIFORNIA EDISON CO	PO BOX 800	ROSEMEAD	CA	91770

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
526-123-001	14252 BROADWAY ST	CABAZON	CA	92230	TRUSS CO INC	494 S 4TH ST	BANNING	CA	92220
526-141-001	14254 ANA MARIA ST	CABAZON	CA	92230	SRISOOPAN, POTCHANAI	10225 FRONTIER TRL	CHERRY VALLEY	CA	92223
526-141-002	14266 ANA MARIA ST	CABAZON	CA	92230	LOVE, SAMANTHA	14266 ANA MARIA ST	CABAZON	CA	92230
526-141-003	14278 ANA MARIA ST	CABAZON	CA	92230	EVANS, GRAINNE I	PO BOX 3055	BEAUMONT	CA	92223
526-141-004	14290 ANA MARIA ST	CABAZON	CA	92230	SANCHEZ, ELVIRA	PO BOX 314	CABAZON	CA	92230
526-141-005		CABAZON	CA	92230	ARISS, RAFIK R	1833 CORONA AVE	NORCO	CA	92860
526-142-001	14255 ANA MARIA ST	CABAZON	CA	92230	DELGADO, MARIA SUSANA	PO BOX 113	CABAZON	CA	92230
526-142-002	14267 ANA MARIA ST	CABAZON	CA	92230	PARLET, BRIAN	1801 W RAMSEY ST	BANNING	CA	92220
526-142-003		CABAZON	CA	92230	DARNELL, TIMOTHY JAMES	PO BOX 481	CABAZON	CA	92230
526-142-004	14325 ANA MARIA ST	CABAZON	CA	92230	TOLENTINO, LORENZA P	1142 S NORTON AVE	LOS ANGELES	CA	90019
526-142-005		CABAZON	CA	92230	ROGERS, ALICE	5705 RIDGEBROOK DR	AGOURA HILLS	CA	91301
526-142-038		CABAZON	CA	92230	TOLENTINO, PEDRO D	1142 S NORTON AVE	LOS ANGELES	CA	90019
526-142-039	14290 RAFAEL ST	CABAZON	CA	92230	VELAZQUEZ, CONSUELO	PO BOX 408	CABAZON	CA	92230
526-142-040		CABAZON	CA	92230	REYES, JAIME JIMENEZ	25870 STANFORD ST APT 7A	HEMET	CA	92544
526-142-041	14270 RAFAEL ST	CABAZON	CA	92230	PEREZ, HILARIO CISNEROS	14270 RAFAEL ST	CABAZON	CA	92230
526-142-042	14252 RAFAEL ST	CABAZON	CA	92230	HAS INVESTMENTS LLC	1647 JUNIPER RIDGE ST	POMONA	CA	91766
526-143-001		CABAZON	CA	92230	CERVANTES, ERNIE	4507 YELLOWSTONE ST	LOS ANGELES	CA	90032
526-143-002	14263 RAFAEL ST	CABAZON	CA	92230	OSORNIO, CRISTOBAL	14263 RAFAEL ST	CABAZON	CA	92230
526-143-003	14275 RAFAEL ST	CABAZON	CA	92230	TAYLOR, THOMAS	14275 RAFAEL ST	CABAZON	CA	92230
526-143-004	14287 RAFAEL ST	CABAZON	CA	92230	MFI MANAGEMENT CORPORATION	PO BOX 2768	LOS ALAMITOS	CA	90720
526-143-005		CABAZON	CA	92230	TOLENTINO, LORENZA P	1142 S NORTON AVE	LOS ANGELES	CA	90019
526-143-023		CABAZON	CA	92230	VALLES, MARIA A	PO BOX 75	CABAZON	CA	92230
526-150-001		CABAZON	CA	92230	GM GABRYCH FAMILY LIMITED PARTNERSHIP	2006 OLD HIGHWAY 395	FALLBROOK	CA	92028
526-150-002	50765 BONITA AVE	CABAZON	CA	92230	VINEYARD ESTATES	THE STREET CO	IRVINE	CA	92612
526-150-003	14252 ALMOND ST	CABAZON	CA	92230	LYNK, ROBERT R	14252 ALMOND ST	CABAZON	CA	92230
526-150-004		CABAZON	CA	92230	VOLK PROPERTIES LLC	25727 SIMPSON PL	CALABASAS	CA	91302
526-150-013		CABAZON	CA	92230	RIVERSIDE COUNTY FLOOD CONT	1995 MARKET ST	RIVERSIDE	CA	92501
668-300-008		DESERT HOT SPRINGS	CA	92240	HURSTON, OSBORN	3616 SUMMERSET PL	INGLEWOOD	CA	90305
668-300-009		DESERT HOT SPRINGS	CA	92240	MAGIO INC	PO BOX 2487	PALM SPRINGS	CA	92263
668-300-010		DESERT HOT SPRINGS	CA	92240	POTESTAS, FRANCISCO F	8040 E SNOWBERRY LN	ANAHEIM	CA	92808

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
668-300-011		DESERT HOT SPRINGS	CA	92240	PROP, SEAWEST	4542 RUFFNER ST STE 200	SAN DIEGO	CA	92111
668-300-015		DESERT HOT SPRINGS	CA	92240	USA, BLM	22835 CLL SAN JUAN DLAGOS	MORENO VALLEY	CA	92553
668-310-025		DESERT HOT SPRINGS	CA	92240	PROP, SEAWEST	4542 RUFFNER ST STE 200	SAN DIEGO	CA	92111
668-310-027		DESERT HOT SPRINGS	CA	92240	PROP, SEAWEST	4542 RUFFNER ST STE 200	SAN DIEGO	CA	92111
668-310-029		DESERT HOT SPRINGS	CA	92240	PROP, SEAWEST	4542 RUFFNER ST STE 200	SAN DIEGO	CA	92111
668-310-039		DESERT HOT SPRINGS	CA	92240	PROP, SEAWEST	4542 RUFFNER ST STE 200	SAN DIEGO	CA	92111
668-310-044		DESERT HOT SPRINGS	CA	92240	SOUTHERN CALIFORNIA EDISON CO	PO BOX 800	ROSEMEAD	CA	91770
668-310-045		DESERT HOT SPRINGS	CA	92240	VENTURE PACIFIC INC	4542 RUFFNER ST STE 200	SAN DIEGO	CA	92111
516-060-012		WHITE WATER	CA	92282	AMES, JEANNE T	1333 JONES ST UNIT 407	SAN FRANCISCO	CA	94109
516-060-013		WHITE WATER	CA	92282	FUJIMOTO, YUKIO	11515 SEGRELL WAY	CULVER CITY	CA	90230
516-060-023		WHITE WATER	CA	92282	JJL, CABAZON PROP	9833 N HIGHLAND PL	KANSAS CITY	MO	64155
516-060-024		WHITE WATER	CA	92282	JJL, CABAZON PROP	9833 N HIGHLAND PL	KANSAS CITY	MO	64155
516-060-046		WHITE WATER	CA	92282	GRAYBURN PROP INC	PO BOX 6019	NORCO	CA	92860
516-070-001		WHITE WATER	CA	92282	GRAYBURN PROP INC	PO BOX 6019	NORCO	CA	92860
516-070-003		WHITE WATER	CA	92282	HOLCHAK, VICTOR J	PO BOX 46039	LOS ANGELES	CA	90046
516-070-004		WHITE WATER	CA	92282	GRAYBURN PROP INC	PO BOX 6019	NORCO	CA	92860
516-070-005		WHITE WATER	CA	92282	GRAYBURN PROP INC	PO BOX 6019	NORCO	CA	92860
516-070-006		WHITE WATER	CA	92282	GRAYBURN PROP INC	PO BOX 6019	NORCO	CA	92860
516-070-007		WHITE WATER	CA	92282	WHITewater PALM PARTNERSHIP	201 OCEAN AVE UNIT 1009B	SANTA MONICA	CA	90402
516-070-008		WHITE WATER	CA	92282	WHITewater PALM PARTNERSHIP	201 OCEAN AVE UNIT 1009B	SANTA MONICA	CA	90402
516-070-009		WHITE WATER	CA	92282	WHITewater PALM PARTNERSHIP	201 OCEAN AVE UNIT 1009B	SANTA MONICA	CA	90402
516-070-010		WHITE WATER	CA	92282	WHITewater PALM PARTNERSHIP	201 OCEAN AVE UNIT 1009B	SANTA MONICA	CA	90402
516-070-011		WHITE WATER	CA	92282	WHITewater PALM PARTNERSHIP	201 OCEAN AVE UNIT 1009B	SANTA MONICA	CA	90402
516-070-012		WHITE WATER	CA	92282	WHITewater PALM PARTNERSHIP	201 OCEAN AVE UNIT 1009B	SANTA MONICA	CA	90402
516-070-024		WHITE WATER	CA	92282	HOLCHAK, VICTOR J	PO BOX 46039	LOS ANGELES	CA	90046
516-070-025		WHITE WATER	CA	92282	FISHERMANS WHARF	848 N LA CIENEGA BLVD STE	LOS ANGELES	CA	90069

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
						207			
516-080-001		WHITE WATER	CA	92282	LOGAN, MARK C	30015 AVENIDA LOS NINOS	CATHEDRAL CITY	CA	92234
516-090-003		WHITE WATER	CA	92282	VILLARI, ANTHONY J	2520 JOHNSON AVE	LA HABRA	CA	90631
516-090-004		WHITE WATER	CA	92282	VILLARI, ANTHONY J	2520 JOHNSON AVE	LA HABRA	CA	90631
516-090-005		WHITE WATER	CA	92282	WHITEWATER PALM PARTNERSHIP	201 OCEAN AVE UNIT 1009B	SANTA MONICA	CA	90402
516-090-008		WHITE WATER	CA	92282	FISHERMANS WHARF	848 N LA CIENEGA BLVD STE 207	LOS ANGELES	CA	90069
516-090-010	13941 TIPTON RD	WHITEWATER	CA	92282	AGUA CALIENTE BAND OF CAHUILLA INDIANS	5401 DINAH SHORE DR	PALM SPRINGS	CA	92264
517-180-004		WHITE WATER	CA	92282	THE COACHELLA VALLEY CONSERVATION COMMIS	73710 FRED WARING DR STE 200	PALM DESERT	CA	92260
517-281-005		WHITE WATER	CA	92282	SADI, AHMED	2332 E 21ST ST	SIGNAL HILL	CA	90755
517-281-006		WHITE WATER	CA	92282	VIOLA, F A	109 RIMINI WAY	NORTH VENICE	FL	34275
517-281-007		WHITE WATER	CA	92282	WEST PALM SPRINGS RO CLUB	PO BOX 439060	SAN YSIDRO	CA	92143
517-281-008		WHITE WATER	CA	92282	DIAZ, WAN M SOTOMAYOR	PO BOX 461787	LOS ANGELES	CA	90046
517-281-009	13463 JOSHUA RD	WHITEWATER	CA	92282	THE DORTHY HERBERT LIVING TRUST	1346 JOSHUA RD	WHITE WATER	CA	92282
517-281-010	13437 JOSHUA RD	WHITEWATER	CA	92282	FIDELITY NATIONAL TITLE INSURANCE COMPAN	6601 FRANCES ST	OMAHA	NE	68106
517-282-005	13468 JOSHUA RD	WHITEWATER	CA	92282	DAVILA, DAVID W	13445 CHOLLA RD	WHITEWATER	CA	92282
517-282-006		WHITE WATER	CA	92282	MASSIE, MARIE	PO BOX 5772	LA QUINTA	CA	92248
517-282-007		WHITE WATER	CA	92282	DESERT HOT SPRINGS CALIF CONGR, OF JEHOVAHS	PO BOX 111	DSRT HOT SPGS	CA	92240
517-282-008		WHITE WATER	CA	92282	ALLEN, DARRELL	9635 LA ALBA DR	WHITTIER	CA	90603
517-282-009	13459 CHOLLA RD	WHITEWATER	CA	92282	DEXTER, WADE	13459 CHOLLA RD	WHITEWATER	CA	92282
517-282-010	13445 CHOLLA RD	WHITEWATER	CA	92282	DAVILA, DAVID M	13445 CHOLLA RD	WHITEWATER	CA	92282
517-283-005		WHITE WATER	CA	92282	EDDY, GEORGE G	PO BOX 1278	PALM SPRINGS	CA	92263
517-283-006		WHITE WATER	CA	92282	WEST PALM SPRINGS RO CLUB	PO BOX 439060	SAN YSIDRO	CA	92143
517-283-007		WHITE WATER	CA	92282	KOSOWICZ, FRANK	6530 SAN VICENTE BLVD	LOS ANGELES	CA	90048
517-283-008		WHITE WATER	CA	92282	SANCHEZ, MARTHA	14208 EASTRIDGE DR	WHITTIER	CA	90602
517-283-009		WHITE WATER	CA	92282	S E L & E CENTRAL LOGIC MANAGEMENT SYS CO	11678 INWOOD DR	RIVERSIDE	CA	92503
517-283-010		WHITE WATER	CA	92282	S E L & E CENTRAL LOGIC MANAGEMENT SYS CO	11678 INWOOD DR	RIVERSIDE	CA	92503
517-284-005	13442 OCOTILLO RD	WHITEWATER	CA	92282	BONNEY, RICHARD E	13442 OCOTILLO RD	WHITEWATER	CA	92282
517-284-006	13464 OCOTILLO RD	WHITEWATER	CA	92282	MARRUFFO, ELAINE	27395 MONROE ST 215	INDIO	CA	92201
517-284-007	13480 OCOTILLO RD	WHITEWATER	CA	92282	HENDRICKS, BARBARA	13480 OCOTILLO RD	WHITEWATER	CA	92282
517-284-008		WHITE WATER	CA	92282	SELECT VENTURES INC	636 S 2ND AVE	COVINA	CA	91723

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
517-284-009	13375 MESQUITE RD	WHITEWATER	CA	92282	SELECT VENTURES INC	636 S 2ND AVE	COVINA	CA	91723
517-284-010		WHITE WATER	CA	92282	SELECT VENTURES INC	636 S 2ND AVE	COVINA	CA	91723
517-285-006	13444 MESQUITE RD	WHITEWATER	CA	92282	WALTON, ERIC G	13444 MESQUITE RD	WHITEWATER	CA	92282
517-285-007	13456 MESQUITE RD	WHITEWATER	CA	92282	SIMS, VERNESSA U	13456 MESQUITE RD	WHITEWATER	CA	92282
517-285-008	13468 MESQUITE RD	WHITEWATER	CA	92282	MORONGO V I K LTD PARTNERSHIP	PO BOX 1078	BLOOMINGTON	CA	92316
517-285-009	13480 MESQUITE RD	WHITEWATER	CA	92282	SMITH, SHIRLEY	PO BOX 520	CABAZON	CA	92230
517-290-006	13410 CHAPARRAL RD	WHITEWATER	CA	92282	ADAMS, GEORGE	13410 CHAPARRAL RD	WHITEWATER	CA	92282
517-290-007	13420 CHAPARRAL RD	WHITEWATER	CA	92282	CASTORENA, CHRISTOPHER	13420 CHAPARRAL RD	WHITEWATER	CA	92282
517-290-008		WHITEWATER	CA	92282	ALL AMERICAN INVESTMENT CORP	1612 VIA BARCELONA	PALOS VERDES ESTATES	CA	90274
517-290-009	13440 CHAPARRAL RD	WHITEWATER	CA	92282	SELECT VENTURES INC	1375 RANGETON DR	WALNUT	CA	91789
517-290-010		WHITE WATER	CA	92282	SIKORA, JOSEF	5233 EL RIO AVE	LOS ANGELES	CA	90041
517-290-011		WHITE WATER	CA	92282	HAKE, NORMA	3036 CAMINITO ARENOSO	SAN DIEGO	CA	92117
517-290-012	55977 HAUGEN LEHMAN WAY	WHITEWATER	CA	92282	HEYDEN, JOHN	55977 HAUGEN LEHMAN WAY	WHITEWATER	CA	92282
517-290-016		WHITE WATER	CA	92282	JOY WAY CAPITAL TRUST	PO BOX 7000	ROLLING HILLS	CA	90274
517-300-006		WHITE WATER	CA	92282	SELECT VENTURES INC	1375 RANGETON DR	WALNUT	CA	91789
517-300-007		WHITE WATER	CA	92282	LEGG MARGARET L LIVING TRUST	316 E GLENOAKS BLVD	GLENDALE	CA	91207
517-300-008		WHITE WATER	CA	92282	LEGG MARGARET LIVING TRUST	316 E GLENOAKS BLVD	GLENDALE	CA	91207
517-300-009		WHITE WATER	CA	92282	KOSOWICZ, FRANK	6530 SAN VICENTE BLVD	LOS ANGELES	CA	90048
517-300-010	13495 CHAPARRAL RD	WHITEWATER	CA	92282	PERKINS, JOHN	13495 CHAPARRAL RD	WHITEWATER	CA	92282
517-300-011	13481 CHAPARRAL RD	WHITEWATER	CA	92282	JOHNSEN, JERRY J	PO BOX 580411	NORTH PALM SPRINGS	CA	92258
517-300-012		WHITEWATER	CA	92282	CHAPIN, STEVEN B	PO BOX 251588	LOS ANGELES	CA	90025
517-300-013		WHITEWATER	CA	92282	ALL AMERICAN INV CORP	1612 VIA BARCELONA	PALOS VERDES ESTATES	CA	90274
517-300-019		WHITE WATER	CA	92282	SABO, MIHAIL B	2448 E RIVIERA DR	TEMPE	AZ	85282
517-310-006		WHITE WATER	CA	92282	DETENTE ESCROW PROFIT SHARING PLAN	325 E ROWLAND ST	COVINA	CA	91723
517-310-007		WHITE WATER	CA	92282	HILBURN, JAMES ROBERT	950 BANYAN DR	LEMOORE	CA	93245
517-310-008		WHITE WATER	CA	92282	ALL AMERICAN INVESTMENT CORP	1612 VIA BARCELONA	PALOS VERDES ESTATES	CA	90274
517-310-009		WHITE WATER	CA	92282	VO, HENRY	5318 PERIDOT AVE	ALTA LOMA	CA	91701
517-310-010	13437 COTTONWOOD RD	WHITEWATER	CA	92282	ALEXANDER, ROBERT F	2847 CLUB HOUSE RD	COSTA MESA	CA	92626

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
517-310-016		WHITE WATER	CA	92282	COUNSEL CORP	PO BOX 10915	FORT MOHAVE	AZ	86427
517-320-001		WHITE WATER	CA	92282	THE COACHELLA VALLEY CONSERVATION COMMIS	73710 FRED WARING DR STE 200	PALM DESERT	CA	92260
517-320-002		WHITE WATER	CA	92282	SELECT VENTURES INC	1375 RANGETON DR	WALNUT	CA	91789
517-320-007		WHITE WATER	CA	92282	SPRINGS, MISSION DIST	66575 2ND ST	DESERT HOT SPRINGS	CA	92240
517-320-008		WHITE WATER	CA	92282	USA, BLM	22835 CLL SAN JUAN DLAGOS	MORENO VALLEY	CA	92553
517-320-009		WHITE WATER	CA	92282	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
517-330-001		WHITE WATER	CA	92282	JOHNSON, STEVEN S	33392 WOLFE ST	TEMECULA	CA	92592
517-330-002		WHITE WATER	CA	92282	MORRIS COMMUNICATIONS CO	699 BROAD ST STE 800	AUGUSTA	GA	30901
517-330-003		WHITE WATER	CA	92282	MORRIS COMMUNICATIONS CORP	1321 N GENE AUTRY TRL	PALM SPRINGS	CA	92262
517-330-004		WHITE WATER	CA	92282	MILLWOOD CONSTR CO INC	30550 SEMINOLE CT	CATHEDRAL CITY	CA	92234
517-330-005	55551 TAMARACK RD	WHITEWATER	CA	92282	CAMBEROS, PEDRO	55551 TAMARACK RD	WHITEWATER	CA	92282
517-330-006		WHITE WATER	CA	92282	OLATUNBOSUN, KOLA	73290 CATALINA WAY	PALM DESERT	CA	92260
517-330-007		WHITE WATER	CA	92282	OLAT GENERAL BUILDING CO	73290 CATALINA WAY	PALM DESERT	CA	92260
517-330-008		WHITE WATER	CA	92282	SELECT VENTURES INC	1375 RANGETON DR	WALNUT	CA	91789
517-330-010	55617 TAMARACK RD	WHITEWATER	CA	92282	SELECT VENTURES INC	23457 GOLDEN SPRINGS DR	DIAMOND BAR	CA	91765
517-330-011		WHITEWATER	CA	92282	MORRIS COMMUNICATIONS CORP	1321 N GENE AUTRY TRL	PALM SPRINGS	CA	92262
517-330-012		WHITEWATER	CA	92282	MORRIS COMMUNICATIONS CORP	1321 N GENE AUTRY TRL	PALM SPRINGS	CA	92262
517-330-013		WHITEWATER	CA	92282	ARRELLANES, CESAR	400 E 4TH ST	SANTA ANA	CA	92701
517-330-014		WHITEWATER	CA	92282	ALL AMERICAN INVESTMENT CORP	1612 VIA BARCELONA	PALOS VERDES ESTATES	CA	90274
517-330-015		WHITEWATER	CA	92282	ALL AMERICAN INVESTMENT CORP	1612 VIA BARCELONA	PALOS VERDES ESTATES	CA	90274
517-330-016	55615 TAMARACK RD	WHITEWATER	CA	92282	FORGUES, PAUL A	PO BOX624	KALAHEO	HI	96741
517-330-017		WHITE WATER	CA	92282	MORRIS COMMUNICATIONS CORP	1321 N GENE AUTRY TRL	PALM SPRINGS	CA	92262
517-330-019		WHITE WATER	CA	92282	MORRIS COMMUNICATIONS CORP	1321 N GENE AUTRY TRL	PALM SPRINGS	CA	92262
517-330-020		WHITE WATER	CA	92282	CO VX LLC	20165 N 67TH AVE STE 122A	GLENDALE	AZ	85308
517-340-003		WHITE WATER	CA	92282	AROCHO, LUIS D	PO BOX 4484	GARDEN GROVE	CA	92842
517-340-006	55860 HAUGEN LEHMAN WAY	WHITEWATER	CA	92282	TRINITY YOUTH SERVICES	PO BOX 848	COLTON	CA	92324

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
517-340-008	55860 HAUGEN LEHMAN WAY	WHITEWATER	CA	92282	TRINITY YOUTH SERVICES	PO BOX 848	COLTON	CA	92324
520-140-002		WHITE WATER	CA	92282	WIND ENERGY PARTNERSHIP	707 ESPLANADE UNT C	REDONDO BEACH	CA	90277
520-140-003		WHITE WATER	CA	92282	WIND ENERGY PARTNERSHIP	707 ESPLANADE UNT C	REDONDO BEACH	CA	90277
520-140-004		WHITE WATER	CA	92282	WIND ENERGY PARTNERSHIP	707 ESPLANADE UNT C	REDONDO BEACH	CA	90277
520-140-005		WHITE WATER	CA	92282	WIND ENERGY PARTNERSHIP	707 ESPLANADE UNT C	REDONDO BEACH	CA	90277
520-140-006		WHITE WATER	CA	92282	WIND ENERGY PARTNERSHIP	707 ESPLANADE UNT C	REDONDO BEACH	CA	90277
520-140-007		WHITE WATER	CA	92282	MAEVA RESORT PROPERTIES & DEV CO	1477 GLEN AVON DR	SAN MARCOS	CA	92069
520-140-008		WHITE WATER	CA	92282	MAEVA RESORT PROPERTIES & DEV CO	1477 GLEN AVON DR	SAN MARCOS	CA	92069
520-140-009		WHITE WATER	CA	92282	WIND ENERGY PARTNERSHIP	707 ESPLANADE UNT C	REDONDO BEACH	CA	90277
520-140-010		WHITE WATER	CA	92282	WIND ENERGY PARTNERSHIP	707 ESPLANADE UNT C	REDONDO BEACH	CA	90277
520-140-011		WHITE WATER	CA	92282	WIND ENERGY PARTNERSHIP	707 ESPLANADE UNT C	REDONDO BEACH	CA	90277
520-140-012		WHITE WATER	CA	92282	WIND ENERGY PARTNERSHIP	707 ESPLANADE UNT C	REDONDO BEACH	CA	90277
520-140-017		WHITE WATER	CA	92282	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
520-140-018		WHITE WATER	CA	92282	WIND ENERGY PARTNERSHIP	707 ESPLANADE UNT C	REDONDO BEACH	CA	90277
520-160-001		WHITE WATER	CA	92282	JYEMURA, WAYNE Y	2901 PEBBLE DR	CORONA DEL MAR	CA	92625
520-160-002		WHITE WATER	CA	92282	SOUTHERN PACIFIC TRANSPORTATION CO	1400 DOUGLAS ST	OMAHA	NE	68179
522-040-009		WHITE WATER	CA	92282	INV, VC	5225 VIA BRUMOSA	YORBA LINDA	CA	92886
522-040-010		WHITE WATER	CA	92282	INV, VC	5225 VIA BRUMOSA	YORBA LINDA	CA	92886
522-070-004		WHITE WATER	CA	92282	CVWD	PO BOX 1058	COACHELLA	CA	92236
522-070-015		WHITE WATER	CA	92282	FRIENDS OF THE DESERT MOUNTAIN S	PO BOX 1281	PALM DESERT	CA	92261
522-070-016		WHITE WATER	CA	92282	EISENBERGER, MARTHA LYNNE	11579 INGLEWOOD CT	RIVERSIDE	CA	92503
522-070-019		WHITE WATER	CA	92282	SUITT, CLAYTON A	PO BOX 4891	HORSESHOE BAY	TX	78657
522-070-022		WHITE WATER	CA	92282	USA, BLM	22835 CLL SAN JUAN DLAGOS	MORENO VALLEY	CA	92553
522-070-027		WHITE WATER	CA	92282	GM GABRYCH FAMILY LIMITED PARTNERSHIP	2006 OLD HIGHWAY 395	FALLBROOK	CA	92028
522-080-005		WHITE WATER	CA	92282	BELLANCA, STEPHEN M	5154 ARBOR WAY	SYLVANIA	OH	43560
522-080-006		WHITE WATER	CA	92282	LE, CHRISTINE NGOC	1704 S 6TH ST APT 1	ALHAMBRA	CA	91803
522-080-007		WHITE WATER	CA	92282	KANG, SHIN E	25585 EL TORO RD	LAKE ELSINORE	CA	92532
522-080-008		WHITE WATER	CA	92282	STONER, LAWRENCE A	9413 EXETER AVE	MONTCLAIR	CA	91763
522-080-009		WHITE WATER	CA	92282	FRIENDS OF THE DESERT MOUNTAINS	PO BOX 1281	PALM DESERT	CA	92261
522-080-010		WHITE WATER	CA	92282	HIETZKE, WOLFGANG	406 CORONA DEL MAR APT 6	SANTA BARBARA	CA	93103
522-080-011		WHITE WATER	CA	92282	PERIJA, ALETA R	2737 E ROBERTA DR	ORANGE	CA	92869

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
522-080-012		WHITE WATER	CA	92282	HILBON, STEVEN	24241 RHONA DR	LAGUNA NIGUEL	CA	92677
522-080-015		WHITE WATER	CA	92282	ARENDT, DIETER HUGO	43155 PORTOLA AVE SPC 61	PALM DESERT	CA	92260
522-080-016		WHITE WATER	CA	92282	HUBER, ROBERT	6860 VIA MEDIA CIR	BUENA PARK	CA	90620
522-080-043		WHITE WATER	CA	92282	FORTY FIVE PALM PARTNERSHIP	219 AVENIDA BARCELONA	SAN CLEMENTE	CA	92672
522-080-062		WHITE WATER	CA	92282	PACIFIC LIGHTING SERVICE CO	720 W 8TH ST	LOS ANGELES	CA	90017
522-080-063		WHITE WATER	CA	92282	SOUTHERN CALIFORNIA EDISON CO	PO BOX 800	ROSEMEAD	CA	91770
522-080-065		WHITE WATER	CA	92282	COULTER, RAY R	PO BOX 3065	PALM SPRINGS	CA	92263
3102-271-09		ADELANTO	CA	92301	KOALA PARTNERS LLC	1767 S WOOSTER ST	LOS ANGELES	CA	90035
3102-281-09		ADELANTO	CA	92301	LARSON, LINDA J	23530 NE 78TH WAY	REDMOND	WA	98053
3102-281-10		ADELANTO	CA	92301	CHEA, PHILLIP J	3317 ISABEL AVE	ROSEMEAD	CA	91770
3102-281-27		ADELANTO	CA	92301	CAPITAL HOLDINGS INC	3595 INLAND EMPIRE BLVD STE 3	ONTARIO	CA	91764
3102-281-28		ADELANTO	CA	92301	SENG, JOHN	3765 GAVIOTA AVE	LONG BEACH	CA	90807
3102-291-08		ADELANTO	CA	92301	SISON, CORNELIO L	3595 INLAND EMPIRE BLVD STE 3	ONTARIO	CA	91764
3102-291-09	KOALA RD	ADELANTO	CA	92301	QUACH, PAUL	5347 ENCINITA AVE	TEMPLE CITY	CA	91780
3102-291-24		ADELANTO	CA	92301	SOCAL MANAGEMENT CO	30001 CROWN VALLEY PKWY STE P	LAGUNA NIGUEL	CA	92677
3102-291-25		ADELANTO	CA	92301	SOCAL MANAGEMENT CO	30001 CROWN VALLEY PKWY STE P	LAGUNA NIGUEL	CA	92677
3102-301-08		ADELANTO	CA	92301	KIM, MICHAEL	616 N FLORES ST APT 206	WEST HOLLYWOOD	CA	90048
3102-301-09		ADELANTO	CA	92301	MOYERS, MARTHA H	PO BOX 165006	IRVING	TX	75016
3102-561-01		ADELANTO	CA	92301	1992 HASEGAWA REVOCABLE LIVING TRUST	13 PRINCETON	IRVINE	CA	92620
3103-321-01		ADELANTO	CA	92301	CI VICTOR VALLEY LLC	PO BOX 1549	NEWPORT BEACH	CA	92659
3103-321-05		ADELANTO	CA	92301	CI VICTOR VALLEY LLC	PO BOX 1549	NEWPORT BEACH	CA	92659
3103-321-06		ADELANTO	CA	92301	CI VICTOR VALLEY LLC	PO BOX 1549	NEWPORT BEACH	CA	92659
3103-321-07		ADELANTO	CA	92301	CRUZ, JOHN B	11233 WESTONHILL DR	SAN DIEGO	CA	92126
3103-321-08	PALMDALE RD	ADELANTO	CA	92301	KOREAN MYUNG SUNG PRESBYTERIAN, CHURC	476 W 43RD ST APT 206	LOS ANGELES	CA	90037
3128-011-01		ADELANTO	CA	92301	SOUTHERN CALIFORNIA GAS CO	555 W 5TH ST	LOS ANGELES	CA	90013
3128-011-05	LADWP	ADELANTO	CA	92301	CITY OF LOS ANGELES	PO BOX 51111	LOS ANGELES	CA	90051
3128-021-01		ADELANTO	CA	92301	WEN, JUNG FU	18933 BRAMHALL LN	ROWLAND HEIGHTS	CA	91748

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
3128-031-01		ADELANTO	CA	92301	THE FLAVOR HOUSE INC	PO BOX 997	ADELANTO	CA	92301
3128-041-01		ADELANTO	CA	92301	HOMOX CORP RETIREMENT PLAN	PO BOX 1265	WEST COVINA	CA	91793
3128-331-01	KOALA RD	ADELANTO	CA	92301	JONES, ROBERT E	2148 SILVER VALE CT	SAN JOSE	CA	95138
3128-331-02	KOALA RD	ADELANTO	CA	92301	JONES, ROBERT E	2148 SILVER VALE CT	SAN JOSE	CA	95138
3128-331-04	KOALA RD	ADELANTO	CA	92301	JONES, ROBERT E	2148 SILVER VALE CT	SAN JOSE	CA	95138
3128-331-07	15929 KOALA RD	ADELANTO	CA	92301	JONES, ROBERT E	2148 SILVER VALE CT	SAN JOSE	CA	95138
3128-331-08		ADELANTO	CA	92301	TAN, FELICISIMO C	2130 TERN BAY LN	LAKEWOOD	CA	90712
3128-331-10		ADELANTO	CA	92301	LEE, CHARLES K	5132 MAPLEWOOD AVE APT 307	LOS ANGELES	CA	90004
3128-351-02	LADWP	ADELANTO	CA	92301	CITY OF LOS ANGELES	PO BOX 51111	LOS ANGELES	CA	90051
3128-351-03	MOJAVE DR	ADELANTO	CA	92301	RICHARDSON PROPERTIES LLC	34 EXECUTIVE PARK STE 210	IRVINE	CA	92614
3128-351-04	KOALA RD	ADELANTO	CA	92301	RICHARDSON PROPERTIES LLC	34 EXECUTIVE PARK STE 210	IRVINE	CA	92614
3129-261-09	LADWP	ADELANTO	CA	92301	CITY OF LOS ANGELES	PO BOX 51111	LOS ANGELES	CA	90051
3129-261-11	KOALA RD	ADELANTO	CA	92301	GEO GROUP INC	621 NW 53RD ST STE 600	BOCA RATON	FL	33487
3129-261-12		ADELANTO	CA	92301	GEO GROUP INC	621 NW 53RD ST STE 700	BOCA RATON	FL	33487
3129-261-14		ADELANTO	CA	92301	U S PROPERTIES INC	7135 DORSEY RUN RD	ELKRIDGE	MD	21075
3129-261-15		ADELANTO	CA	92301	CATALPA INDUSTRIAL PARK INC	9424 CASSIA RD	ADELANTO	CA	92301
3129-261-17		ADELANTO	CA	92301	DEVOLLS RUBBER PRODUCTS INC	PO BOX 367	ADELANTO	CA	92301
3129-261-59	16655 KOALA RD	ADELANTO	CA	92301	TRANSITION PROPERTIES LP	PO BOX 1010	BLUE JAY	CA	92317
3129-261-60	16605 KOALA RD	ADELANTO	CA	92301	CATALPA INDUSTRIAL PARKS INC	9424 CASSIA RD	ADELANTO	CA	92301
3129-261-69	KOALA	ADELANTO	CA	92301	U S PROPERTIES INC	7135 DORSEY RUN RD	ELKRIDGE	MD	21075
3129-261-70	KOALA	ADELANTO	CA	92301	U S PROPERTIES INC	7135 DORSEY RUN RD	ELKRIDGE	MD	21075
3129-541-01		ADELANTO	CA	92301	CLARK PACIFIC PRECAST LLC	1980 S RIVER RD	WEST SACRAMENTO	CA	95691
3129-551-04		ADELANTO	CA	92301	MAYEDA, JUNICHI	22815 PENNSYLVANIA AVE	TORRANCE	CA	90501
3129-551-08		ADELANTO	CA	92301	NGUYEN, DUNG QUOC	5025 WHISPER WIND DR	WICHITA FALLS	TX	76310
3129-571-01		ADELANTO	CA	92301	CHHOR, BILL	2103 E 14TH ST	LONG BEACH	CA	90804
3129-571-02		ADELANTO	CA	92301	JOHNSTON, LAWRENCE W	PO BOX 401472	HESPERIA	CA	92340
3129-571-03		ADELANTO	CA	92301	LOS RANCHITOS ESTATES LLC	12671 HIGH BLUFF DR STE 150	SAN DIEGO	CA	92130
3129-571-04		ADELANTO	CA	92301	LOS RANCHITOS ESTATES LLC	12671 HIGH BLUFF DR STE 150	SAN DIEGO	CA	92130
3129-571-06		ADELANTO	CA	92301	DANG, LE MY	14822 ALCESTER ST	WESTMINSTER	CA	92683

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
3129-571-07	LADWP	ADELANTO	CA	92301	CITY OF LOS ANGELES	PO BOX 51111	LOS ANGELES	CA	90051
3129-591-21		ADELANTO	CA	92301	STATE OF CALIFORNIA	PO BOX 231	SAN BERNARDINO	CA	92402
3129-591-22		ADELANTO	CA	92301	STATE OF CALIFORNIA	PO BOX 231	SAN BERNARDINO	CA	92402
3129-591-23		ADELANTO	CA	92301	STATE OF CALIFORNIA	PO BOX 231	SAN BERNARDINO	CA	92402
3129-591-24		ADELANTO	CA	92301	STATE OF CALIFORNIA	PO BOX 231	SAN BERNARDINO	CA	92402
3132-011-01		ADELANTO	CA	92301	HSU, CHANG TING	12237 SAXON DR	RANCHO CUCAMONGA	CA	91739
3132-011-02		ADELANTO	CA	92301	HSU, CHANG TING	12237 SAXON DR	RANCHO CUCAMONGA	CA	91739
3132-011-05		ADELANTO	CA	92301	HSU, CHANG TING	12237 SAXON DR	RANCHO CUCAMONGA	CA	91739
3132-011-06		ADELANTO	CA	92301	HSU, CHANG TING	12237 SAXON DR	RANCHO CUCAMONGA	CA	91739
3132-011-07		ADELANTO	CA	92301	HSU, CHANG TING	12237 SAXON DR	RANCHO CUCAMONGA	CA	91739
3132-031-01		ADELANTO	CA	92301	LOPEZ, LUISA A	74100 CANDLEWOOD ST	PALM DESERT	CA	92260
3132-031-08		ADELANTO	CA	92301	SISON, CORNELIO L	3595 INLAND EMPIRE BLVD STE 3	ONTARIO	CA	91764
3132-031-09		ADELANTO	CA	92301	LEE, YUH B	11584 NITTA	TUSTIN	CA	92782
3132-041-01		ADELANTO	CA	92301	CI VICTOR VALLEY LLC	PO BOX 1549	NEWPORT BEACH	CA	92659
3132-041-02		ADELANTO	CA	92301	ANDRAZA, GARY	10953 LUNA POINT RD	TALLAHASSEE	FL	32312
3132-041-05		ADELANTO	CA	92301	MCFARLAND, WILLIAM H	506 MYSTIC WAY	LAGUNA BEACH	CA	92651
3133-201-02	12181 BALDY MESA RD	ADELANTO	CA	92301	BIRKENBACH, ADAM S	PO BOX 532	SAN PEDRO	CA	90733
3133-201-15	12281 BALDY MESA RD	ADELANTO	CA	92301	CULLEY, CONNIE	5739 MALACHITE AVE	ALTA LOMA	CA	91737
0280-251-57	1310 RIVERSIDE DR	BARSTOW	CA	92311	ROGINA, RICHARD	11098 DEER CANYON DR	RANCHO CUCAMONGA	CA	91737
519-320-013	49710 BONITA AVE	CALIMESA	CA	92320	TCU COMMUNITY PTP	1040 S MT	COLTON	CA	92324
532-160-008	461 W AVENUE L	CALIMESA	CA	92320	ANDERSEN, ANDY B	36050 ELAINE WAY	YUCAIPA	CA	92399
0164-231-18		COLTON	CA	92324	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0164-231-24		COLTON	CA	92324	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0164-231-32		COLTON	CA	92324	TRANSPACIFIC LAND AND DEVELOPMENT CO	2020 JOHN ST	RIVERSIDE	CA	92503
0164-231-39	2265 CAHUILLA ST	COLTON	CA	92324	HOUSING AUTHORITY COUNTY OF SAN BDNO	715 E BRIER DR	SAN BERNARDINO	CA	92408
0164-231-46		COLTON	CA	92324	CITY OF RIVERSIDE	3900 MAIN ST	RIVERSIDE	CA	92522

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0164-231-49	1333 RECHE CANYON RD	COLTON	CA	92324	J H RECHE RIDGE, LLC	341 BAYSIDE DR STE 7	NEWPORT BEACH	CA	92660
0164-231-50	RECHE CANYON RD	COLTON	CA	92324	J H RECHE RIDGE, LLC	341 BAYSIDE DR STE 7	NEWPORT BEACH	CA	92660
0164-232-06	1350 RECHE CANYON RD	COLTON	CA	92324	RC REAL ESTATE INVESTMENTS INC	2829 TOWNSGATE RD STE 350	WESTLAKE VILLAGE	CA	91361
0164-232-21		COLTON	CA	92324	DIOCESE OF SAN BERNARDINO CEMETERY C	1201 E HIGHLAND AVE	SAN BERNARDINO	CA	92404
0164-232-22		COLTON	CA	92324	DIOCESE OF SAN BERNARDINO CEMETERY C	1201 E HIGHLAND AVE	SAN BERNARDINO	CA	92404
0164-232-23		COLTON	CA	92324	DIOCESE OF SAN BERNARDINO CEMETERY C	1201 E HIGHLAND AVE	SAN BERNARDINO	CA	92404
0164-232-25		COLTON	CA	92324	SCI CALIFORNIA FUNERAL SERVICES INC	1929 ALLEN PKWY	HOUSTON	TX	77019
0164-252-06		COLTON	CA	92324	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0164-252-18	2099 E WASHINGTON ST	COLTON	CA	92324	RAHMAN, ABDUL	770 W ORANGE GROVE AVE	ARCADIA	CA	91006
0164-252-20	2053 E WASHINGTON ST	COLTON	CA	92324	FRANKLIN FAMILY PARTNERSHIP	559 S PALM CANYON DR STE B212	PALM SPRINGS	CA	92264
0164-253-07	MONTECITO MEM PARK	COLTON	CA	92324	MONTECITO MEMORIAL PARK CORP	PO BOX 130548	HOUSTON	TX	77219
0164-253-15		COLTON	CA	92324	DIOCESE OF SAN BDNO CEMETERY CORP IN	1201 E HIGHLAND AVE	SAN BERNARDINO	CA	92404
0164-253-17		COLTON	CA	92324	SCI CALIFORNIA FUNERAL SERVICES INC	1929 ALLEN PKWY	HOUSTON	TX	77019
0164-253-18		COLTON	CA	92324	DIOCESE OF SAN BERNARDINO CEMETERY C	1201 E HIGHLAND AVE	SAN BERNARDINO	CA	92404
0164-253-19		COLTON	CA	92324	SCI CALIFORNIA FUNERAL SERVICES INC	1929 ALLEN PKWY	HOUSTON	TX	77019
0164-253-20		COLTON	CA	92324	SCI CALIFORNIA FUNERAL SERVICES INC	1929 ALLEN PKWY	HOUSTON	TX	77019
0164-253-21		COLTON	CA	92324	SCI CALIFORNIA FUNERAL SERVICES INC	1929 ALLEN PKWY	HOUSTON	TX	77019
0164-293-40	1238 MOHAVE DR	COLTON	CA	92324	KERR, JAIME DIANE	10938 PLUM VIEW LN	YUCAIPA	CA	92399
0164-293-41	1228 MOHAVE DR	COLTON	CA	92324	PHAN, KIEU UYEN	1228 MOHAVE DR	COLTON	CA	92324
0164-293-42	1226 MOHAVE DR	COLTON	CA	92324	ELOI, DANIELLE	1226 MOHAVE DR	COLTON	CA	92324
0164-293-43	1224 MOHAVE DR	COLTON	CA	92324	ZHANG, JOHN	24630 KEISSEL RD	COLTON	CA	92324
0164-293-44	1222 MOHAVE DR	COLTON	CA	92324	OAK TREE APARTMENTS	110 N LINCOLN AVE STE 100	CORONA	CA	92882
0164-293-46	1214 MOHAVE DR	COLTON	CA	92324	UNDERWOOD, MICHELE	1214 MOHAVE DR	COLTON	CA	92324
0164-293-47	1216 MOHAVE DR	COLTON	CA	92324	FRANCIS, JANETTE	1216 MOHAVE DR	COLTON	CA	92324
0164-293-48	1218 MOHAVE DR	COLTON	CA	92324	TAYLOR, MILES A	1218 MOHAVE DR	COLTON	CA	92324
0164-293-49	1220 MOHAVE DR	COLTON	CA	92324	LEIS, AMBER R	1220 MOHAVE DR	COLTON	CA	92324
0164-293-50	1210 MOHAVE DR	COLTON	CA	92324	FAYARD, CARLOS	23023 MERLE CT	GRAND TERRACE	CA	92313
0164-293-51	1208 MOHAVE DR	COLTON	CA	92324	VALVERDE, OSCAR H	620 S EUREKA ST	REDLANDS	CA	92373
0164-293-52	1206 MOHAVE DR	COLTON	CA	92324	RANEY, EVA M	17757 CITRON AVE	FONTANA	CA	92335
0164-293-55	1186 MOHAVE DR	COLTON	CA	92324	DAHLAN PROPERTIES LLC	26574 EVERGREEN AVE	MURRIETA	CA	92563
0164-293-56	1184 MOHAVE DR	COLTON	CA	92324	PEARSON, SHARON E	1184 MOHAVE DR	COLTON	CA	92324

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0164-293-57	1182 MOHAVE DR	COLTON	CA	92324	IBSEN, JANIS	1182 MOHAVE DR	COLTON	CA	92324
0164-293-58	1180 MOHAVE DR	COLTON	CA	92324	WALDRON, RICHARD	1180 MOHAVE DR	COLTON	CA	92324
0164-293-59	1178 MOHAVE DR	COLTON	CA	92324	LEE, ARLENE M	2190 MINTZER ST	COLTON	CA	92324
0164-511-01	2255 CAHUILLA ST APT 93	COLTON	CA	92324	CHANG, YU TAI	9 GLENOAKS	IRVINE	CA	92618
0164-511-02	2255 CAHUILLA ST APT 94	COLTON	CA	92324	ZHANG, JOHN	24630 KEISSEL RD	COLTON	CA	92324
0164-511-03	2255 CAHUILLA ST APT 95	COLTON	CA	92324	CLARKSON, STEPHEN P	PO BOX 4866	HOUSTON	TX	77210
0164-511-04	2255 CAHUILLA ST APT 96	COLTON	CA	92324	CHANG, YU TAI	9 GLENOAKS	IRVINE	CA	92618
0164-511-05	2255 CAHUILLA ST APT 97	COLTON	CA	92324	SCHLEICHER JACK E TR	34 BRANDING IRON LN	THOUSAND PALMS	CA	92276
0164-511-06	2255 CAHUILLA ST APT 98	COLTON	CA	92324	LANAS, AUDREY J	1123 W KING ST	SAN BERNARDINO	CA	92410
0164-511-07	2255 CAHUILLA ST APT 99	COLTON	CA	92324	RICE, NANCY J	2795 SHEPHERD LN	SAN BERNARDINO	CA	92407
0164-511-08	2255 CAHUILLA ST APT 100	COLTON	CA	92324	KMA VENTURES INC	18340 YORBA LINDA BLVD STE 107-330	YORBA LINDA	CA	92886
0164-511-09	2255 CAHUILLA ST APT 101	COLTON	CA	92324	TABUENCA, ARNOLD	6152 HAWARDEN DR	RIVERSIDE	CA	92506
0164-511-10	2255 CAHUILLA ST APT 102	COLTON	CA	92324	ANDERSON, BRIAN J	2255 CAHUILLA ST APT 102	COLTON	CA	92324
0164-511-11	2255 CAHUILLA ST APT 103	COLTON	CA	92324	KUDSSI, SAHER	1705 E WASHINGTON ST STE 201	COLTON	CA	92324
0164-511-12	2255 CAHUILLA ST APT 104	COLTON	CA	92324	ESTEPA, DEO B	2255 CAHUILLA ST APT 104	COLTON	CA	92324
0164-511-13	2255 CAHUILLA ST APT 105	COLTON	CA	92324	ZHANG, JOHN	24630 KEISSEL RD	COLTON	CA	92324
0164-511-14	2255 CAHUILLA ST APT 106	COLTON	CA	92324	CHERRY, CAROLYN	2255 CAHUILLA ST APT 106	COLTON	CA	92324
0164-511-15	2255 CAHUILLA ST APT 107	COLTON	CA	92324	ZARRAGA, MARCONI M	2215 PEACH TREE DR APT 33	FAIRFIELD	CA	94533
0164-511-16	2255 CAHUILLA ST APT 108	COLTON	CA	92324	VANDEVILLE, REBECCA L	PO BOX 2724	HELENDALE	CA	92342
0164-511-17	2255 CAHUILLA ST APT 109	COLTON	CA	92324	BAKER, CINDY	2255 CAHUILLA ST APT 109	COLTON	CA	92324
0164-511-18	2255 CAHUILLA ST APT 110	COLTON	CA	92324	VALDEVERONA, ESTRELLA C	2255 CAHUILLA ST APT 110	COLTON	CA	92324
0164-511-19	2255 CAHUILLA ST APT 111	COLTON	CA	92324	REY, ROBERT R	2255 CAHUILLA ST APT 111	COLTON	CA	92324
0164-511-20	2255 CAHUILLA ST APT 112	COLTON	CA	92324	EQUITY TRUST COMPANY	PO BOX 512	LAWRENCEBURG	TN	38464
0164-511-21	2255 CAHUILLA ST APT 113	COLTON	CA	92324	WALTERS, PRISCILLA P	4053 OLIVE POINT PL	CLAREMONT	CA	91711
0164-511-22	2255 CAHUILLA ST APT 114	COLTON	CA	92324	EVICH, SANDRA L	2255 CAHUILLA ST APT 114	COLTON	CA	92324
0164-511-23	2255 CAHUILLA ST APT 115	COLTON	CA	92324	HADDAD, ADHAM FOUAD	2255 CAHUILLA ST APT 115	COLTON	CA	92324
0164-511-24	2255 CAHUILLA ST APT 116	COLTON	CA	92324	BRADLEY, LAROSA	2255 CAHUILLA ST	COLTON	CA	92324
0164-511-25	2255 CAHUILLA ST APT 117	COLTON	CA	92324	KOLE, HARRY	2255 CAHUILLA ST APT 117	COLTON	CA	92324
0164-511-26	2255 CAHUILLA ST APT 118	COLTON	CA	92324	LIU, DANIEL H	620 SINCLAIR AVE	GLENDAL	CA	91206
0164-511-45	2255 CAHUILLA ST APT 55	COLTON	CA	92324	SAMOJLUK, MARTA	24673 BARTON RD	LOMA LINDA	CA	92354

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0164-511-46	2255 CAHUILLA ST APT 56	COLTON	CA	92324	ZHANG, JOHN	24630 KEISSEL RD	COLTON	CA	92324
0164-511-47	2255 CAHUILLA ST APT 59	COLTON	CA	92324	WASEF, MEDHAT	1351 AJUGA ST	UPLAND	CA	91784
0164-511-48	2255 CAHUILLA ST APT 60	COLTON	CA	92324	WASEF, MEDHAT	1351 AJUGA ST	UPLAND	CA	91784
0164-511-66	2255 CAHUILLA ST APT 61	COLTON	CA	92324	GIANG, SYLVIA	7802 GARLAND AVE	TAKOMA PARK	MD	20912
0164-511-67	2255 CAHUILLA ST APT 90	COLTON	CA	92324	RANDOLPH, DAVID A	25542 PACIFIC ST	SAN BERNARDINO	CA	92404
0164-511-78	2255 CAHUILLA ST	COLTON	CA	92324	CANYON BLUFFS HOMES INC	20 AND BROADWAY # 1200	OAKLAND	CA	94612
0164-512-01	2255 CAHUILLA ST APT 119	COLTON	CA	92324	WARD, LAURA	2255 CAHUILLA ST APT 119	COLTON	CA	92324
0164-512-02	2255 CAHUILLA ST APT 120	COLTON	CA	92324	REGAL ENDEAVORS INC	18032 LEMON DR # C182	YORBA LINDA	CA	92886
0164-512-03	2255 CAHUILLA ST APT 121	COLTON	CA	92324	JONES, ERIC L	1833 S VICTORIA AVE	LOS ANGELES	CA	90019
0164-512-04	2255 CAHUILLA ST APT 122	COLTON	CA	92324	STITZINGER, MARK A	2255 CAHUILLA ST APT 122	COLTON	CA	92324
0164-512-60	2255 CAHUILLA ST APT 76	COLTON	CA	92324	BENZATYAN, MANUK	411 IRIS ST	REDLANDS	CA	92373
0164-512-61	2255 CAHUILLA ST APT 77	COLTON	CA	92324	KUO, GREGORY D	2277 CAHUILLA 77	COLTON	CA	92324
0164-512-62	2255 CAHUILLA ST APT 78	COLTON	CA	92324	LIM, EDMUND MENG HONG	2404 FALLING OAK DR	RIVERSIDE	CA	92506
0164-512-63	2255 CAHUILLA ST APT 79	COLTON	CA	92324	GERMINE, PHUOC T	13741 THUNDERBIRD DR APT 49E	SEAL BEACH	CA	90740
0164-512-64	2255 CAHUILLA ST APT 80	COLTON	CA	92324	SEWELL, STANLEY R	2255 CAHUILLA ST APT 80	COLTON	CA	92324
0164-512-65	2255 CAHUILLA ST APT 81	COLTON	CA	92324	BERKEBILE, SHERIE	2255 CAHUILLA ST APT 81	COLTON	CA	92324
0164-512-66	2255 CAHUILLA ST APT 82	COLTON	CA	92324	KIM, SUNG WON	4688 GOLDEN RIDGE DR	CORONA	CA	92880
0164-512-67	2255 CAHUILLA ST APT 83	COLTON	CA	92324	KAM, GEORGE	2255 CAHUILLA ST APT 83	COLTON	CA	92324
0164-512-68	2255 CAHUILLA ST APT 84	COLTON	CA	92324	DICKERSON, JAMES L	605 VIA VISTA DR	REDLANDS	CA	92373
0164-512-69	2255 CAHUILLA ST APT 85	COLTON	CA	92324	ESTADILLA, RONIE B	930 S JACOBS ST	COLTON	CA	92324
0164-512-70	2255 CAHUILLA ST APT 86	COLTON	CA	92324	JAURIGUE, ANNA MARIE	2255 CAHUILLA ST APT 86	COLTON	CA	92324
0164-512-71	2255 CAHUILLA ST APT 87	COLTON	CA	92324	DANIEL, SONIA O	2255 CAHUILLA ST APT 87	COLTON	CA	92324
0164-512-72	2255 CAHUILLA ST APT 88	COLTON	CA	92324	MOLLENAUER, DAVID W	3945 SAN ANTONIO RD	YORBA LINDA	CA	92886
0164-512-73	2255 CAHUILLA ST APT 89	COLTON	CA	92324	HERNANDEZ, RICHARD REY	2915 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92405
0164-512-85	2255 CAHUILLA ST APT 139	COLTON	CA	92324	COWDEN, GARY L	2255 CAHUILLA ST	COLTON	CA	92324
0164-512-87	2255 CAHUILLA ST APT 140	COLTON	CA	92324	EQUITY TRUST COMPANY	PO BOX 1716	LOMA LINDA	CA	92354
0164-551-11	1072 S HELENA ST	COLTON	CA	92324	OBENAU, SUSANNE	915 W FOOTHILL BLVD # 564	CLAREMONT	CA	91711
0164-551-12	1078 S HELENA ST	COLTON	CA	92324	WEST, EUDENA	1078 S HELENA ST	COLTON	CA	92324
0164-551-13	1084 S HELENA ST	COLTON	CA	92324	VO, KELLY H	1084 S HELENA ST	COLTON	CA	92324
0164-551-14	2190 MINTZER ST	COLTON	CA	92324	LEE, ARLENE M	2190 MINTZER ST	COLTON	CA	92324
0164-551-15	2180 MINTZER ST	COLTON	CA	92324	REYNA, JOSE A	2180 MINTZER ST	COLTON	CA	92324

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0164-551-16	2170 MINTZER ST	COLTON	CA	92324	SELLS, JOE ALFRED	2170 MINTZER ST	COLTON	CA	92324
0164-551-17	2160 MINTZER ST	COLTON	CA	92324	BENEDICTO, DONALD	2160 MINTZER ST	COLTON	CA	92324
0164-551-18	2150 MINTZER ST	COLTON	CA	92324	HUTAGAOL, MANGASI	2150 MINTZER ST	COLTON	CA	92324
0164-551-19	2140 MINTZER ST	COLTON	CA	92324	WILKS, MONIQUE M	2140 MINTZER ST	COLTON	CA	92324
0164-551-20	2130 MINTZER ST	COLTON	CA	92324	LEDEZMA, ABEL	2130 MINTZER ST	COLTON	CA	92324
0164-551-21	2120 MINTZER ST	COLTON	CA	92324	FLORES, CLAUDINA M	2120 MINTZER ST	COLTON	CA	92324
0164-551-22	2110 MINTZER ST	COLTON	CA	92324	ZARAGOZA, JUAN M	2110 MINTZER ST	COLTON	CA	92324
0164-551-23	2100 MINTZER ST	COLTON	CA	92324	BOURDON, JEROME A	2100 MINTZER ST	COLTON	CA	92324
0164-551-24	1089 RAYNOR ST	COLTON	CA	92324	LUNA, ANDRES II	1089 RAYNOR ST	COLTON	CA	92324
0164-551-25	1077 RAYNOR ST	COLTON	CA	92324	CHOW, STEPHANIE LAI FONG	1077 RAYNOR ST	COLTON	CA	92324
0164-551-26	1065 RAYNOR ST	COLTON	CA	92324	HUNG, DON NAM	1065 RAYNOR ST	COLTON	CA	92324
0164-551-40	1077 S HELENA ST	COLTON	CA	92324	LOPEZ, FRANK	1077 S HELENA ST	COLTON	CA	92324
0164-551-41	1083 S HELENA ST	COLTON	CA	92324	LUCRIDA, EVELYN L	1083 S HELENA ST	COLTON	CA	92324
0164-551-42	2165 MINTZER ST	COLTON	CA	92324	MC CANDLESS, BRUCE O	2165 MINTZER ST	COLTON	CA	92324
0164-551-43	2153 MINTZER ST	COLTON	CA	92324	PANGKEY, STEVENSON	2153 MINTZER ST	COLTON	CA	92324
0164-551-44	2141 MINTZER ST	COLTON	CA	92324	MONTANA, JOY S	2141 MINTZER ST	COLTON	CA	92324
0164-551-45	2129 MINTZER ST	COLTON	CA	92324	SINGH, GURMUKH	2129 MINTZER ST	COLTON	CA	92324
0164-551-46	2117 MINTZER ST	COLTON	CA	92324	WALTON, ROBBIE L	2117 MINTZER ST	COLTON	CA	92324
0164-551-47	2105 MINTZER ST	COLTON	CA	92324	MEJIA, MICHAEL L	2105 MINTZER ST	COLTON	CA	92324
0282-251-02	23850 PLACID LN	COLTON	CA	92324	COPELAND, BILL L	23850 PLACID LN	COLTON	CA	92324
0282-251-03	23832 PLACID LN	COLTON	CA	92324	CALLES, ROBERT M	23832 PLACID LN	COLTON	CA	92324
0282-251-04	23814 PLACID LN	COLTON	CA	92324	HOON, DONALD REED	23814 PLACID LN	COLTON	CA	92324
0282-252-03	23886 PRADO LN	COLTON	CA	92324	REDFIELD JAMES W TR	23886 PRADO LN	COLTON	CA	92324
0282-252-04	23854 PRADO LN	COLTON	CA	92324	BARLOW, LELAND W	23854 PRADO LN	COLTON	CA	92324
0282-252-05	23830 PRADO LN	COLTON	CA	92324	VILLARREAL, HUMBERTO	23830 PRADO LN	COLTON	CA	92324
0282-252-06	11618 PLACID CT	COLTON	CA	92324	REED, DAVEY	11618 PLACID CT	COLTON	CA	92324
0282-252-07	11610 PLACID CT	COLTON	CA	92324	HOLDEN, DAVID L	555 W REDLANDS BLVD	REDLANDS	CA	92373
0282-252-08	11608 PLACID CT	COLTON	CA	92324	ASK, MICKEY N	11608 PLACID CT	COLTON	CA	92324
0282-252-09	11637 PLACID CT	COLTON	CA	92324	DALLIN LLC	5440 TRABUCO RD # H200	IRVINE	CA	92620
0282-252-10	11615 PLACID CT	COLTON	CA	92324	BACKY, BASIL R	11615 PLACID CT	COLTON	CA	92324
0282-311-02	11548 RECHE CANYON RD	COLTON	CA	92324	WINSTEAD, GEORGE E	11548 RECHE CANYON RD	COLTON	CA	92324
0282-311-12		COLTON	CA	92324	CLELAND, SHANE R	11528 RECHE CANYON RD	COLTON	CA	92324

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0282-311-15		COLTON	CA	92324	ROHAL, BART WILLIAM	4307 LIMESTONE LN	JOHNSTOWN	CO	80534
0282-311-17	11528 RECHE CANYON RD	COLTON	CA	92324	CLELAND, SHANE R	11528 RECHE CANYON RD	COLTON	CA	92324
0282-311-19	11622 RECHE CANYON RD	COLTON	CA	92324	HUBBARD, MARK W	11622 RECHE CANYON RD	COLTON	CA	92324
0282-311-28		COLTON	CA	92324	SHAFFER, MICHAEL	11606 RECHE CANYON RD	COLTON	CA	92324
0282-311-29		COLTON	CA	92324	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0282-311-30	11686 RECHE CANYON RD	COLTON	CA	92324	STAPLES, DAVID R	11686 RECHE CANYON RD	COLTON	CA	92324
0282-311-31		COLTON	CA	92324	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0282-311-35	11552 RECHE CANYON RD	COLTON	CA	92324	IDSTEN FAMILY TRUST	11893 MOUNT VERNON AVE	GRAND TERRACE	CA	92313
0282-311-36	11574 RECHE CANYON RD	COLTON	CA	92324	KYLE, JOSE L	11574 RECHE CANYON RD	COLTON	CA	92324
0282-311-37	11580 RECHE CANYON RD	COLTON	CA	92324	HUBBARD, MARK W	11580 RECHE CANYON RD	COLTON	CA	92324
0282-312-01	11527 RECHE CANYON RD	COLTON	CA	92324	RAZO, JENESSA M	11527 RECHE CANYON RD	COLTON	CA	92324
0282-312-02	11531 RECHE CANYON RD	COLTON	CA	92324	MESSINGER, JEAN MARIE	11531 RECHE CANYON RD	COLTON	CA	92324
0282-312-07	11541 RECHE CANYON RD	COLTON	CA	92324	ONEILL, MICHAEL J	1134 CLUB CT	RIVERSIDE	CA	92506
0282-312-08	11545 RECHE CANYON RD	COLTON	CA	92324	WILSON, MATTHEW J	14156 PADEN ST	RIVERSIDE	CA	92504
0282-312-11	11553 RECHE CANYON RD	COLTON	CA	92324	ARTEAGA, ALBERT H	1720 CAMELOT DR	REDLANDS	CA	92374
0282-312-12	11575 RECHE CANYON RD	COLTON	CA	92324	GOMEZ, MIGUEL A	11575 RECHE CANYON RD	COLTON	CA	92324
0282-312-13	11565 RECHE CANYON RD	COLTON	CA	92324	MITCHELL, MARY ANN	591 GABRIEL AVE	YUBA CITY	CA	95993
0282-321-01		COLTON	CA	92324	SOUTHERN CALIFORNIA EDISON COMPANY	14803 CHESTNUT ST	WESTMINSTER	CA	92683
0282-321-02		COLTON	CA	92324	SOUTHERN CALIFORNIA EDISON COMPANY	14803 CHESTNUT ST	WESTMINSTER	CA	92683
0282-322-02	11862 RECHE CANYON RD	COLTON	CA	92324	FREGOSO, ANGEL	2250 CORDILLERA AVE	COLTON	CA	92324
0282-322-07	11910 RECHE CANYON RD	COLTON	CA	92324	ALBERRY, TRACY L	11910 RECHE CANYON RD	COLTON	CA	92324
0282-322-08	11920 RECHE CANYON RD	COLTON	CA	92324	CADE, MARILYN J	11920 RECHE CANYON RD	COLTON	CA	92324
0282-322-09		COLTON	CA	92324	CADE, MARILYN J	11920 RECHE CANYON RD	COLTON	CA	92324
0282-322-25		COLTON	CA	92324	CADE, MARILYN J	11920 RECHE CANYON RD	COLTON	CA	92324
0282-322-30	23831 PEPPER TREE LN	COLTON	CA	92324	PEREZ, ALBERT	23830 PEPPER TREE LN	COLTON	CA	92324
0282-322-34		COLTON	CA	92324	FREGOSO, ANGEL	2250 CORDILLERA AVE	COLTON	CA	92324
0282-322-35		COLTON	CA	92324	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0282-322-37	11794 RECHE CANYON RD	COLTON	CA	92324	MOORE, ALICE C	11825 RECHE CANYON RD	COLTON	CA	92324
0282-322-47	23837 BANAS DR	COLTON	CA	92324	TRUJILLO, JUAN P	23837 BANAS DR	COLTON	CA	92324
0282-322-48	23859 BANAS DR	COLTON	CA	92324	MOSES, DEVADAS S	23859 BANAS DR	COLTON	CA	92324
0282-331-09		COLTON	CA	92324	MOORE, ALICE C	11825 RECHE CANYON RD	COLTON	CA	92324
0282-331-10	11825 RECHE CANYON RD	COLTON	CA	92324	MOORE, ALICE C	11825 RECHE CANYON RD	COLTON	CA	92324

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0282-331-11	RECHE CYN	COLTON	CA	92324	HERRMANN, E CLIFFORD	PO BOX 437	LOMA LINDA	CA	92354
0282-331-15	11878 RECHE CANYON RD	COLTON	CA	92324	HERRMANN, E CLIFFORD	PO BOX 437	LOMA LINDA	CA	92354
0282-331-16	11873 RECHE CANYON RD	COLTON	CA	92324	LAMPKIN, DIANA L	11873 RECHE CANYON RD	COLTON	CA	92324
0282-331-17	11897 RECHE CANYON RD	COLTON	CA	92324	ARELLIANO, BRYCE	11897 RECHE CANYON RD	COLTON	CA	92324
0282-331-20	12011 RECHE CANYON RD	COLTON	CA	92324	WALKER, STEPHEN W	12011 RECHE CANYON RD	COLTON	CA	92324
0282-331-21	12003 RECHE CANYON RD	COLTON	CA	92324	MESSNER, ADRIAN M	12003 RECHE CANYON RD	COLTON	CA	92324
0282-331-22		COLTON	CA	92324	MESSNER ADRIAN M TR	12003 RECHE CANYON RD	COLTON	CA	92324
0282-331-44	11884 RECHE CANYON RD	COLTON	CA	92324	BURRIS BUSTER L TR	11884 RECHE CANYON RD	COLTON	CA	92324
0282-331-45	23913 PRADO LN	COLTON	CA	92324	MARTINEZ, JAVIER P	23913 PRADO LN	COLTON	CA	92324
0282-411-01	2030 HIDDEN COVE CT	COLTON	CA	92324	BAWA, GURPAL	2030 HIDDEN COVE CT	COLTON	CA	92324
0282-411-02	2040 HIDDEN COVE CT	COLTON	CA	92324	WHITE, TODD R	2040 HIDDEN COVE CT	COLTON	CA	92324
0282-411-03	2050 HIDDEN COVE CT	COLTON	CA	92324	WISSA, SARA	2050 HIDDEN COVE CT	COLTON	CA	92324
0282-411-04	2060 HIDDEN COVE CT	COLTON	CA	92324	PRECIE, HELEN L	2060 HIDDEN COVE CT	COLTON	CA	92324
0282-411-05	2070 HIDDEN COVE CT	COLTON	CA	92324	SANCHEZ, ANALECTO	2070 HIDDEN COVE CT	COLTON	CA	92324
0282-411-06	2571 MALIBU CT	COLTON	CA	92324	MILLER, STEVEN	2571 MALIBU CT	COLTON	CA	92324
0282-411-07	2569 MALIBU CT	COLTON	CA	92324	POSSINGER, RANDAL E	2569 MALIBU CT	COLTON	CA	92324
0282-411-08	2567 MALIBU CT	COLTON	CA	92324	VASQUEZ, ARTHUR	2567 MALIBU CT	COLTON	CA	92324
0282-411-09	HIDDEN CV	COLTON	CA	92324	GONZALEZ, RICHARD A	1588 CROWN ST	REDLANDS	CA	92373
0282-411-10	2095 HIDDEN COVE CT	COLTON	CA	92324	LEE, JOHN B	3926 EDENS EDGE DR	LAKE OSWEGO	OR	97034
0282-411-11	HIDDEN CV	COLTON	CA	92324	PETERSON, JEFF	1180 MOUNTAIN VIEW LN	COLTON	CA	92324
0282-411-12	HIDDEN CV	COLTON	CA	92324	PETERSON, JEFF	1180 MOUNTAIN VIEW LN	COLTON	CA	92324
0282-411-13	2065 HIDDEN COVE CT	COLTON	CA	92324	AVILA, RENE A	2065 HIDDEN COVE CT	COLTON	CA	92324
0282-411-14	2055 HIDDEN COVE CT	COLTON	CA	92324	AVILA, RUBEN	PO BOX 587	ONTARIO	CA	91762
0282-411-15		COLTON	CA	92324	MAIER, PRINCESS E	23830 PEPPER TREE LN	COLTON	CA	92324
0284-211-31		COLTON	CA	92324	STALLBERG, LEE HOWARD	4839 LINKS AVE	BANNING	CA	92220
0284-211-36	12738 RECHE CANYON RD	COLTON	CA	92324	ESPINO, TRINIDAD	12738 RECHE CANYON RD	COLTON	CA	92324
0284-211-38		COLTON	CA	92324	BARKER, KENNETH L	6655 OAK HILL RD	OAK HILLS	CA	92344
0284-211-41	12640 RECHE CANYON RD # A	COLTON	CA	92324	BRAUN, EDWIN J	12640 RECHE CANYON RD	COLTON	CA	92324
0284-211-42	12787 RECHE CANYON RD	COLTON	CA	92324	MILAM, SIDNEY H	12787 RECHE CANYON RD	COLTON	CA	92324
0284-211-43	24434 SCOTCH LN	COLTON	CA	92324	GOMEZ, MARTHA	24434 SCOTCH LN	COLTON	CA	92324
0284-211-44		COLTON	CA	92324	LENAKER, DAVID MATTHEW	24444 SCOTCH LN	COLTON	CA	92324

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0284-211-49	3012 SHADID DR	COLTON	CA	92324	VAZQUEZ, JOSE E	3012 SHADID DR	COLTON	CA	92324
0284-211-50	3014 SHADID DR	COLTON	CA	92324	HARDING, KAREN	14256 PARKSIDE CT	CHINO HILLS	CA	91709
0284-211-54	3009 SHADID DR	COLTON	CA	92324	ROY, MICHAEL EDWARD	3009 SHADID DR	COLTON	CA	92324
0284-211-63	3008 SHADID DR	COLTON	CA	92324	KARR, RICHARD J	3008 SHADID DR	COLTON	CA	92324
0284-211-64	3010 SHADID DR	COLTON	CA	92324	DELGADILLO, RAMIRO	3010 SHADID DR	COLTON	CA	92324
0284-211-67	3007 SHADID DR	COLTON	CA	92324	HALL, SHIRLEY	3007 SHADID DR	COLTON	CA	92324
0284-211-68	3003 SHADID DR	COLTON	CA	92324	POLANSKY, ART S	28063 ATLANTIC AVE	HIGHLAND	CA	92346
0284-211-69	2594 RECHE CANYON RD	COLTON	CA	92324	DELGADILLO, JAVIER	2297 CRESCENT CIR	COLTON	CA	92324
0284-211-70	RECHE CANYON RD	COLTON	CA	92324	ESKANDER, ADEL	19210 CHESTRIDGE CIR	WALNUT	CA	91789
0284-211-71	RECHE CANYON RD	COLTON	CA	92324	ESKANDER, ADEL	19210 CHESTRIDGE CIR	WALNUT	CA	91789
0284-211-72	RECHE CANYON RD	COLTON	CA	92324	ESKANDER, ADEL	19210 CHESTRIDGE CIR	WALNUT	CA	91789
0284-212-19		COLTON	CA	92324	MASSEY, ROSS E	12446 RECHE CANYON RD	COLTON	CA	92324
0284-212-23	2751 RECHE CANYON RD	COLTON	CA	92324	RECHE LLC	268 BEL AIR RD	LOS ANGELES	CA	90077
0284-212-24	12446 RECHE CANYON RD	COLTON	CA	92324	MASSEY, HELEN R	4540 KEARNEY VILLA RD # 118	SAN DIEGO	CA	92124
0284-212-43	2671 RECHE CANYON RD	COLTON	CA	92324	MOORE, ROBERT CHARLES	2671 RECHE CANYON RD	COLTON	CA	92324
0284-212-44	2651 RECHE CANYON RD	COLTON	CA	92324	STOUT, MARVEEN FRANCES	500 COUNTRY CLUB RD	SAN BERNARDINO	CA	92404
0284-212-46	12744 RECHE CANYON RD	COLTON	CA	92324	ROBERTS, JOHNNY D	12744 RECHE CANYON RD	COLTON	CA	92324
0284-212-55	12430 RECHE CANYON RD	COLTON	CA	92324	MERIN, JUAN	PO BOX 387	LOMA LINDA	CA	92354
0284-212-58	2820 RECHE CANYON RD	COLTON	CA	92324	PETROV, ALFRED	13480 TRAM VIEW RD	DESERT HOT SPRINGS	CA	92240
0284-212-66	12834 RECHE CYN RD	LOMA LINDA	CA	92324	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0284-212-67	12834 RECHE CANYON RD	COLTON	CA	92324	CARDENAS, JESUS CHAVEZ	871 N 2ND ST	COLTON	CA	92324
0284-212-69	2751 RECHE CANYON RD	COLTON	CA	92324	RECHE LLC	268 BEL AIR RD	LOS ANGELES	CA	90077
0284-212-71	2800 RECHE CANYON RD	COLTON	CA	92324	MORGAN, CLIFFORD L	2800 RECHE CANYON RD	COLTON	CA	92324
0284-212-72	2751 RECHE CANYON RD	COLTON	CA	92324	RECHE LLC	268 BEL AIR RD	LOS ANGELES	CA	90077
0284-212-89	12798 RECHE CANYON RD	COLTON	CA	92324	VOS ROGER L TR	12840 RECHE CANYON RD	COLTON	CA	92324
0284-212-90	12840 RECHE CANYON RD	COLTON	CA	92324	VOS, CAROL	12840 RECHE CANYON RD	COLTON	CA	92324
0284-351-06	24506 SCOTCH LN	COLTON	CA	92324	STATEN, GREGORY A	24506 SCOTCH LN	COLTON	CA	92324
0284-611-01	3016 SHANE DR	COLTON	CA	92324	POWELL, ELIZABETH C	3016 SHANE DR	COLTON	CA	92324
0284-611-02	3024 PARVIN DR	COLTON	CA	92324	MCGINNIS, THOMAS	3024 PARVIN DR	COLTON	CA	92324
0284-611-03	3026 PARVIN DR	COLTON	CA	92324	THAW, MAUNG MAUNG	3026 PARVIN DR	COLTON	CA	92324
0284-611-07	3017 MICHELLE DR	COLTON	CA	92324	SKATES, RANDALE R	3017 MICHELLE DR	COLTON	CA	92324

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0284-611-08	3011 MICHELLE DR	COLTON	CA	92324	SEELEY, BRADLEY D	3205 DOS PALOS DR	LOS ANGELES	CA	90068
0284-611-09	3005 MICHELLE DR	COLTON	CA	92324	ACOSTA, MANUEL	3005 MICHELLE DR	COLTON	CA	92324
0284-611-10	3016 MICHELLE DR	COLTON	CA	92324	BRAY, WILLIAM H	3016 MICHELLE DR	COLTON	CA	92324
0284-611-11	PARVIN DR	COLTON	CA	92324	TONGPO, PEDRITO B	11861 KNIGHTSBRIDGE PL	LOMA LINDA	CA	92354
0284-611-12	3012 MICHELLE DR	COLTON	CA	92324	MICHAEL, RANDY	3012 MICHELLE DR	COLTON	CA	92324
0284-611-13	3014 MICHELLE DR	COLTON	CA	92324	BROWER, KEITH	3014 MICHELLE DR	COLTON	CA	92324
0284-611-14	3017 SHANE DR	COLTON	CA	92324	BAUMANN, JAMES E	3017 SHANE DR	COLTON	CA	92324
0284-621-01	3028 PARVIN DR	COLTON	CA	92324	MARVASTI, FRANK FARZIN	3028 PARVIN DR	COLTON	CA	92324
0284-621-02	3030 PARVIN DR	COLTON	CA	92324	KING, TOMMY	3030 PARVIN DR	COLTON	CA	92324
0284-631-13	2505 S MCCARTY DR	COLTON	CA	92324	CHRISTOPHERSON, THOMAS WALTER	2505 S MCCARTY DR	COLTON	CA	92324
0284-631-14	2507 S MCCARTY DR	COLTON	CA	92324	PATEL, KANAK D	2507 S MCCARTY DR	COLTON	CA	92324
0284-671-47	CRYSTAL RIDGE LN	COLTON	CA	92324	CITY OF COLTON	655 N LA CADENA DR	COLTON	CA	92324
0284-671-49	CRYSTAL RIDGE LN	COLTON	CA	92324	CITY OF COLTON	655 N LA CADENA DR	COLTON	CA	92324
1178-331-01	2574 MALIBU CT	COLTON	CA	92324	LIM, MONG	2574 MALIBU CT	COLTON	CA	92324
1178-331-02		COLTON	CA	92324	LIM, MONG	2574 MALIBU CT	COLTON	CA	92324
1178-331-03	2572 MALIBU CT	COLTON	CA	92324	ONEILL, MICHAEL PATRICK	2572 MALIBU CT	COLTON	CA	92324
1178-331-04	2570 MALIBU CT	COLTON	CA	92324	VALENZUELA, GLENN	2570 MALIBU CT	COLTON	CA	92324
1178-331-05	2568 MALIBU CT	COLTON	CA	92324	BONANNO, SAM	2568 MALIBU CT	COLTON	CA	92324
1178-331-06	2565 CANYON DR	RECHE CANYON	CA	92324	THEODOROU, GEORGE PAUL	2565 TOPANGA CT	COLTON	CA	92324
1178-331-07	2567 TOPANGA CT	COLTON	CA	92324	SUWITONO, MARILIN S	2567 TOPANGA CT	COLTON	CA	92324
1178-331-08	2569 TOPANGA CT	COLTON	CA	92324	DUNBAR, STEPHEN G	2569 TOPANGA CT	COLTON	CA	92324
1178-331-09	2571 TOPANGA CT	COLTON	CA	92324	GULTOM, ELISTON	2571 TOPANGA CT	COLTON	CA	92324
1178-331-10	2573 TOPANGA CT	COLTON	CA	92324	LAVERS, ALBERT J	2573 TOPANGA CT	COLTON	CA	92324
1178-331-11	2578 TOPANGA CT	COLTON	CA	92324	SUTTON, JOHN C	2578 TOPANGA CT	COLTON	CA	92324
1178-331-12	2576 TOPANGA CT	COLTON	CA	92324	LEWIS, ROBERT R	2576 TOPANGA CT	COLTON	CA	92324
1178-331-13	2574 TOPANGA CT	COLTON	CA	92324	PITT, NICOLLE	2574 TOPANGA CT	COLTON	CA	92324
1178-331-14	2572 TOPANGA CT	COLTON	CA	92324	FRIESEN, DALE HENRY JAMES	2572 TOPANGA CT	COLTON	CA	92324
1178-331-15	2570 TOPANGA CT	COLTON	CA	92324	YOUNG, FUMIKO	2570 TOPANGA CT	COLTON	CA	92324
1178-331-25	2183 CANYON DR	COLTON	CA	92324	HATZIDAKIS, MIKE	2183 CANYON DR	COLTON	CA	92324
1178-341-01		COLTON	CA	92324	VANGARI, ANAND	13638 FELSON ST	CERRITOS	CA	90703
1178-341-02	2296 RECHE CANYON RD	COLTON	CA	92324	VARGAS, FRANCISCO M	2296 RECHE CANYON RD	COLTON	CA	92324
1178-341-03	RECHE CANYON RD	COLTON	CA	92324	COLLINGS, JAMES E	17942 SKY PARK CIR STE A	IRVINE	CA	92614

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
1178-341-04	RECHE CANYON RD	COLTON	CA	92324	COLLINGS, JAMES E	17942 SKY PARK CIR STE A	IRVINE	CA	92614
1178-341-05	RECHE CANYON RD	COLTON	CA	92324	COLLINGS, JAMES E	17942 SKY PARK CIR STE A	IRVINE	CA	92614
1178-341-06	2200 RECHE CANYON RD	COLTON	CA	92324	DANCEL, VERN BROTHERS	PO BOX 673	COLTON	CA	92324
1178-341-08	RECHE CYN	COLTON	CA	92324	GOMER, PERIN	2210 RECHE CANYON RD	COLTON	CA	92324
1178-341-09	RECHE CYN	COLTON	CA	92324	FIRST STEP PLUS	195 S HEATH TER	ANAHEIM	CA	92807
1178-341-10	2100 RECHE CANYON RD	COLTON	CA	92324	LAO, WILSON	2100 RECHE CANYON RD	COLTON	CA	92324
1178-341-11		COLTON	CA	92324	CNC INVESTMENTS	250 RUSSETT WAY	CARSON CITY	NV	89703
1178-341-12	2130 RECHE CANYON RD	COLTON	CA	92324	AUGUSTINE, STACY	2097 E WASHINGTON ST # 338	COLTON	CA	92324
1178-341-13	2170 RECHE CANYON RD	COLTON	CA	92324	PCPG INC	PO BOX 675	CARDIFF	CA	92007
1178-341-14	2100 RECHE CANYON RD	COLTON	CA	92324	LAO, WILSON	2100 RECHE CANYON RD	COLTON	CA	92324
1178-351-02	2569 CARBON CT	COLTON	CA	92324	VASQUEZ, ARTHUR J	2569 CARBON CT	COLTON	CA	92324
1178-351-03	2571 CARBON CT	COLTON	CA	92324	BRIMDAL, ROBERT	2571 CARBON CT	COLTON	CA	92324
1178-351-04	2573 CARBON CT	COLTON	CA	92324	CHRISPENS JR, DEMONLE DEE	2573 CARBON CT	COLTON	CA	92324
1178-351-05	2575 CARBON CT	COLTON	CA	92324	ALBISO, MELVIN A	2575 CARBON CT	COLTON	CA	92324
1178-351-06	2577 CARBON CT	COLTON	CA	92324	CALDERON, ELIZABETH J	2577 CARBON CT	COLTON	CA	92324
1178-351-07	2579 CARBON CT	COLTON	CA	92324	RODOCKER, JAMES J	2579 CARBON CT	COLTON	CA	92324
1178-351-08	2584 CARBON CT	COLTON	CA	92324	ARECHIGA, RAMON	2584 CARBON CT	COLTON	CA	92324
1178-351-09	2582 CARBON CT	COLTON	CA	92324	WOOTERS, DUANE A	2582 CARBON CT	COLTON	CA	92324
1178-351-10	2580 CARBON CT	COLTON	CA	92324	COONCE, PHILIP L	2580 CARBON CT	COLTON	CA	92324
1178-351-11	2578 CARBON CT	COLTON	CA	92324	SINGH, MANJINDER	2578 CARBON CT	COLTON	CA	92324
1178-351-12	2576 CARBON CT	COLTON	CA	92324	CRAWFORD, JONATHAN J	2576 CARBON CT	COLTON	CA	92324
1178-351-13	2574 CARBON CT	COLTON	CA	92324	BEST, ERNEST MOODY	2574 CARBON CT	COLTON	CA	92324
1178-351-22	2573 BRYCE CT	COLTON	CA	92324	ADAME, ARTHUR	2573 BRYCE CT	COLTON	CA	92324
1178-351-23	2575 BRYCE CT	COLTON	CA	92324	CUNNINGHAM, TED EUGENE	2575 BRYCE CT	COLTON	CA	92324
1178-351-24	2577 BRYCE CT # 24	COLTON	CA	92324	SEOL, RICHARD W	2577 BRYCE CT	COLTON	CA	92324
1178-351-25	2579 BRYCE CT	COLTON	CA	92324	GURROLA, RICHARD	2579 BRYCE CT	COLTON	CA	92324
1178-351-26	2581 BRYCE CT	COLTON	CA	92324	MARTIN JR, SAMUEL	2581 BRYCE CT	COLTON	CA	92324
1178-351-27	2583 BRYCE CT	COLTON	CA	92324	NICHOLSON, MERRYN A	2583 BRYCE CT	COLTON	CA	92324
1178-361-02	2590 BRYCE CT	COLTON	CA	92324	GEORGE, MICAH A	2590 BRYCE CT	COLTON	CA	92324
1178-361-03	2588 BRYCE CT	COLTON	CA	92324	AGUIRRE, DAVID RAMOS	2588 BRYCE CT	COLTON	CA	92324
1178-361-04	2586 BRYCE CT	COLTON	CA	92324	GAUSE, WILLIAM R	2586 BRYCE CT	COLTON	CA	92324

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
1178-361-05	2584 BRYCE CT	COLTON	CA	92324	JORDAN, MICHAEL J	2584 BRYCE CT	COLTON	CA	92324
1178-361-06	2582 BRYCE CT	COLTON	CA	92324	SALAS, DAVID	2582 BRYCE CT	COLTON	CA	92324
1178-361-07	2580 BRYCE CT	COLTON	CA	92324	SC 1308 9TH STREET LLC	1309 PICO BLVD STE C	SANTA MONICA	CA	90405
1178-361-18	2581 GUNNISON WAY	COLTON	CA	92324	VILLAREAL, LAURA GONZALES	2581 GUNNISON WAY	COLTON	CA	92324
1178-361-19	2583 GUNNISON WAY	COLTON	CA	92324	SAAD, MOHSEN T	2583 GUNNISON WAY	COLTON	CA	92324
1178-361-20	2585 GUNNISON WAY	COLTON	CA	92324	CLOSAS, DINAH MARI P	2585 GUNNISON WAY	COLTON	CA	92324
1178-361-21	2587 GUNNISON WAY	COLTON	CA	92324	HERRERA, MARIO A	2587 GUNNISON WAY	COLTON	CA	92324
1178-361-22	2589 GUNNISON WAY	COLTON	CA	92324	BONNER, EARL J	2589 GUNNISON WAY	COLTON	CA	92324
1178-361-23	2591 GUNNISON WAY	COLTON	CA	92324	AVILA, SILVIA L	2591 GUNNISON WAY	COLTON	CA	92324
1178-361-24	2598 GUNNISON WAY	COLTON	CA	92324	DELGADO, JOHN M	2598 GUNNISON WAY	COLTON	CA	92324
1178-361-25	2596 GUNNISON WAY	COLTON	CA	92324	PHAM, PAUL M	2596 GUNNISON WAY	COLTON	CA	92324
1178-361-26	2594 GUNNISON WAY	COLTON	CA	92324	MARTIN, GLENN	2594 GUNNISON WAY	COLTON	CA	92324
1178-361-27	2592 GUNNISON WAY	COLTON	CA	92324	MANCHA, MARLENE	2592 GUNNISON WAY	COLTON	CA	92324
1178-361-28	2590 GUNNISON WAY	COLTON	CA	92324	HERNANDEZ, BERENICE A	2590 GUNNISON WAY	GRAND TERRACE	CA	92324
1178-361-29	2588 GUNNISON WAY	COLTON	CA	92324	MOOR, JOHN W	2588 GUNNISON WAY	COLTON	CA	92324
1178-371-03	2299 RECHE CANYON RD	COLTON	CA	92324	MOORSHEAD, KAREN	PO BOX 1576	REDLANDS	CA	92373
1178-371-08	23912 FERN LN	COLTON	CA	92324	FURR, DORSEY L	27381 HWY 74	PERRIS	CA	92570
1178-371-09		RECHE CANYON	CA	92324	FURR, DORSEY L	27381 HWY 74	PERRIS	CA	92570
1178-371-12	12376 RECHE CANYON RD	COLTON	CA	92324	TREFZ, GARY J	18491 S FRANCIS FAIRE RD	WORLEY	ID	83876
1178-371-13	12400 RECHE CANYON RD	COLTON	CA	92324	WALLS, ARTHUR M	12400 RECHE CANYON RD	COLTON	CA	92324
1178-371-14	12480 RECHE CANYON RD	COLTON	CA	92324	BANASIAK, LISA	41528 CONNER PL	INDIO	CA	92203
1178-371-15		COLTON	CA	92324	TREFZ, GARY	18491 S FRANCIS FAIRE RD	WORLEY	ID	83876
1178-371-16		COLTON	CA	92324	TREFZ, GARY J	12400 RECHE CANYON RD	COLTON	CA	92324
1178-371-23	12490 RECHE CANYON RD	COLTON	CA	92324	VAN AKEN, MAJELLA S	12490 RECHE CANYON RD	COLTON	CA	92324
1178-371-25		COLTON	CA	92324	CITY OF COLTON	655 N LA CADENA DR	COLTON	CA	92324
1178-371-26		COLTON	CA	92324	CITY OF COLTON	655 N LA CADENA DR	COLTON	CA	92324
1178-371-27		COLTON	CA	92324	ADMAR MANAGEMENT CORP	1678 W ARROW RTE APT 141	UPLAND	CA	91786
1178-371-28		COLTON	CA	92324	ADMAR MANAGEMENT CORP	1678 W ARROW RTE APT 141	UPLAND	CA	91786
1178-371-29		COLTON	CA	92324	ADMAR MANAGEMENT CORP	1678 W ARROW RTE APT 141	UPLAND	CA	91786
1178-371-30	RECHE CANYON RD	COLTON	CA	92324	MORENO, JUAN	8097 RECHE CANYON RD	COLTON	CA	92324
1178-371-31	12280 RECHE CANYON RD	COLTON	CA	92324	MADRIZ, CESIA S	1937 UNION ST	COLTON	CA	92324
259-030-006	7049 ADAMS AVE	COLTON	CA	92324	ARAIZA, GABRIELA A	7049 ADAMS AVE	COLTON	CA	92324

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
259-030-007	7067 ADAMS AVE	COLTON	CA	92324	COX, NOAH T	7067 ADAMS AVE	COLTON	CA	92324
259-030-008		COLTON	CA	92324	BOWKER, CARLOS	7110 RECHE CANYON RD	COLTON	CA	92324
259-030-009	7110 RECHE CANYON RD	COLTON	CA	92324	BOWKER, CARLOS	7110 RECHE CANYON RD	COLTON	CA	92324
259-030-010	7080 RECHE CANYON RD	COLTON	CA	92324	REED, THOMAS G	7080 RECHE CANYON RD	COLTON	CA	92324
259-030-011	7060 RECHE CANYON RD	COLTON	CA	92324	HUBBS, HAROLD E	7060 RECHE CANYON RD	COLTON	CA	92324
259-030-012	7040 RECHE CANYON RD	COLTON	CA	92324	WARD, GORDON N	7040 RECHE CANYON RD	COLTON	CA	92324
259-030-013		COLTON	CA	92324	SCOTT, SHARON L	7020 RECHE CANYON RD	COLTON	CA	92324
259-030-014	7020 RECHE CANYON RD	COLTON	CA	92324	SCOTT, SHARON L	7020 RECHE CANYON RD	COLTON	CA	92324
259-030-016	7120 RECHE CANYON RD	COLTON	CA	92324	DEMERS, BRET S	7120 RECHE CANYON RD	COLTON	CA	92324
259-030-018	7081 ADAMS AVE	COLTON	CA	92324	KEENY, PHILIP E	7081 ADAMS AVE	COLTON	CA	92324
259-030-021	7138 RECHE CANYON RD	COLTON	CA	92324	WILLIAMS, CHARLES VALMORE	7138 RECHE CANYON RD	COLTON	CA	92324
259-040-001	7394 RECHE CANYON RD	COLTON	CA	92324	PARTIDA, JOHN RUIZ	7394 RECHE CANYON RD	COLTON	CA	92324
259-040-002	7382 RECHE CANYON RD	COLTON	CA	92324	PLOURDE, JOHN GORDON	7382 RECHE CANYON RD	COLTON	CA	92324
259-040-003	7370 RECHE CANYON RD	COLTON	CA	92324	GONZALEZ, EBERILDA MARCELLINA	7370 RECHE CANYON RD	COLTON	CA	92324
259-040-004	7364 RECHE CANYON RD	COLTON	CA	92324	RODRIGUEZ, MARYANN M	7364 RECHE CANYON RD	COLTON	CA	92324
259-040-005	7350 RECHE CANYON RD	COLTON	CA	92324	PATEL, RAJESHKUMAR K	25300 3RD ST	SAN BERNARDINO	CA	92410
259-050-011	22738 SCOTT ST	COLTON	CA	92324	SWITZER, LARRY E	22738 SCOTT ST	COLTON	CA	92324
259-050-012	7201 ADAMS AVE	COLTON	CA	92324	ROSS, DAVID	7201 ADAMS AVE	COLTON	CA	92324
259-050-013	7179 ADAMS AVE	COLTON	CA	92324	VALENZUELA, FIDEL	7179 ADAMS AVE	COLTON	CA	92324
259-050-015	22611 WHITTIER ST	COLTON	CA	92324	ANDERSEN, MICHAEL A	22611 WHITTIER ST	COLTON	CA	92324
259-050-016	22601 WHITTIER ST	COLTON	CA	92324	THE FAMILY TRUST OF MICHAEL A IKEZAWA	17050 ARNOLD DR APT F213	RIVERSIDE	CA	92518
259-050-017	22595 WHITTIER ST	COLTON	CA	92324	GUTIERREZ FINK, MARTHA E	22595 WHITTIER ST	COLTON	CA	92324
259-050-018	7180 RECHE CANYON RD	COLTON	CA	92324	LOPEZ, JESUS	7180 RECHE CANYON RD	COLTON	CA	92324
259-050-019	7200 RECHE CANYON RD	COLTON	CA	92324	GARCIA GHARGHAEI, MARIA E	7200 RECHE CANYON RD	COLTON	CA	92324
259-050-020	7220 RECHE CANYON RD	COLTON	CA	92324	ARGUETA, MARLIN E	7220 RECHE CANYON RD	COLTON	CA	92324
259-050-021		COLTON	CA	92324	CRANE, ROBERT S	7316 RECHE CANYON RD	COLTON	CA	92324
259-050-022		COLTON	CA	92324	CRANE, ROBERT S	7316 RECHE CANYON RD	COLTON	CA	92324
259-050-023		COLTON	CA	92324	CRANE, ROBERT S	7316 RECHE CANYON RD	COLTON	CA	92324
259-050-024		COLTON	CA	92324	WOLFE, CLIFORD DEAN	7342 RECHE CANYON RD	COLTON	CA	92324
259-050-027	7316 RECHE CANYON RD	COLTON	CA	92324	CRANE, ROBERT S	7316 RECHE CANYON RD	COLTON	CA	92324
259-050-028		COLTON	CA	92324	CRANE, ROBERT S	7316 RECHE CANYON RD	COLTON	CA	92324
259-050-030	7342 RECHE CANYON RD	COLTON	CA	92324	WOLFE, CLIFORD DEAN	7342 RECHE CANYON RD	COLTON	CA	92324

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
259-060-001		COLTON	CA	92324	BRUNO, KAY L	7530 RECHE CANYON RD	COLTON	CA	92324
259-060-002		COLTON	CA	92324	VICTORY OUTREACH LA PUENTE	PO BOX 210068	CHULA VISTA	CA	91921
259-060-003	7520 RECHE CANYON RD	COLTON	CA	92324	THOMPSON, DUANE	7520 RECHE CANYON RD	COLTON	CA	92324
259-060-004		COLTON	CA	92324	KRUGER, KENNETH K	7510 RECHE CANYON RD	COLTON	CA	92324
259-060-005		COLTON	CA	92324	REEVE, NANCY REINHART	5231 SENFORD AVE	LOS ANGELES	CA	90056
259-060-007	7456 RECHE CANYON RD	COLTON	CA	92324	HOUSE, JASON	3721 HEMLOCK DR	SAN BERNARDINO	CA	92404
259-060-008	7436 RECHE CANYON RD	COLTON	CA	92324	DAY, JOHN T	7436 RECHE CANYON RD	COLTON	CA	92324
259-060-009	7406 RECHE CANYON RD	COLTON	CA	92324	LILLARD, STAN	7406 RECHE CANYON RD	COLTON	CA	92324
259-060-010	7510 RECHE CANYON RD	COLTON	CA	92324	KRUGER, KENNETH K	7510 RECHE CANYON RD	COLTON	CA	92324
259-060-011		COLTON	CA	92324	REEVE, NANCY REINHART	5231 SENFORD AVE	LOS ANGELES	CA	90056
259-060-012	7470 RECHE CANYON RD	COLTON	CA	92324	GRANADOS, BERTHA	7470 RECHE CANYON RD	COLTON	CA	92324
259-080-006		COLTON	CA	92324	VICTORY OUTREACH LA PUENTE	PO BOX 210068	CHULA VISTA	CA	91921
259-090-001		COLTON	CA	92324	QUAID, KEVIN LEE	806 WHITEWATER DR	FULLERTON	CA	92833
259-090-002	7530 RECHE CANYON RD	COLTON	CA	92324	BRUNO, KAY L	7530 RECHE CANYON RD	COLTON	CA	92324
259-090-003	7580 RECHE CANYON RD	COLTON	CA	92324	BEESE, THOMAS H	7580 RECHE CANYON RD	COLTON	CA	92324
259-090-005		COLTON	CA	92324	VICTORY OUTREACH LA PUENTE	PO BOX 210068	CHULA VISTA	CA	91921
259-090-010	7575 RECHE CANYON RD	COLTON	CA	92324	RANK, HAROLD G	2651 RECHE CANYON RD # 5002	COLTON	CA	92324
259-090-011		COLTON	CA	92324	FARRIS, GARY L	2303 S ARTESIA ST	SAN BERNARDINO	CA	92408
259-090-013	7825 RECHE CANYON RD	COLTON	CA	92324	LAGARDE, GUY R	7825 RECHE CANYON RD	COLTON	CA	92324
259-090-014	7600 RECHE CANYON RD	COLTON	CA	92324	COUNTY OF RIVERSIDE	7600 RECHE CANYON RD	COLTON	CA	92324
259-090-018	7841 RECHE CANYON RD	COLTON	CA	92324	JOSEPHSON, MARK L	7841 RECHE CANYON RD	COLTON	CA	92324
259-090-019	7595 RECHE CANYON RD	COLTON	CA	92324	TEEL, DOYAL G	7595 RECHE CANYON RD	COLTON	CA	92324
259-100-004		COLTON	CA	92324	BREWER, LESLIE R	12336 CIRCULA PANORAMA	SANTA ANA	CA	92705
259-100-006	7895 RECHE CANYON RD	COLTON	CA	92324	MENDIETA, ROBERT ROMO	7895 RECHE CANYON RD	COLTON	CA	92324
259-100-013		COLTON	CA	92324	RAMIREZ, ANTONIO	3027 PRADO LN	COLTON	CA	92324
259-100-014	7871 RECHE CANYON RD	COLTON	CA	92324	JARAMILLO, KASSANDRA	7871 RECHE CANYON RD	COLTON	CA	92324
259-100-023		COLTON	CA	92324	BITTNER, JESSE J	13008 BURNS LN	REDLANDS	CA	92373
259-100-025	7845 RECHE CANYON RD	COLTON	CA	92324	LARSEN, KENNETH S	7845 RECHE CANYON RD	COLTON	CA	92324
259-100-026		COLTON	CA	92324	GILCHRIST, KRISTEN	PO BOX 1742	CARLSBAD	CA	92018
259-100-027	399 RECHE CANYON RD	COLTON	CA	92324	GILCHRIST, KRISTEN	PO BOX 1742	CARLSBAD	CA	92018
259-100-028	7917 RECHE CANYON RD	COLTON	CA	92324	BROMLEY, CAROL	7917 RECHE CANYON RD	COLTON	CA	92324

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
259-100-029		COLTON	CA	92324	RECHE CANYON ESTATES	3333 W COAST HWY STE 400	NEWPORT BEACH	CA	92663
259-100-030		COLTON	CA	92324	RECHE CANYON ESTATES	3333 W COAST HWY STE 400	NEWPORT BEACH	CA	92663
259-100-031		COLTON	CA	92324	RECHE CANYON ESTATES	3333 W COAST HWY STE 400	NEWPORT BEACH	CA	92663
259-100-032		COLTON	CA	92324	VICTORY OUTREACH LA PUENTE	PO BOX 210068	CHULA VISTA	CA	91921
259-100-033		COLTON	CA	92324	VICTORY OUTREACH LA PUENTE	PO BOX 210068	CHULA VISTA	CA	91921
259-100-034		COLTON	CA	92324	VICTORY OUTREACH LA PUENTE	PO BOX 210068	CHULA VISTA	CA	91921
259-270-005		COLTON	CA	92324	HASSO, DANIEL B	1 NAPOLI	NEWPORT BEACH	CA	92660
259-270-006		COLTON	CA	92324	HASSO, DANIEL B	1 NAPOLI	NEWPORT BEACH	CA	92660
259-280-021	7255 RECHE CANYON RD	COLTON	CA	92324	RECHE CANYON INVESTORS LLC	PO BOX 1070	CALIMESA	CA	92320
259-290-006		COLTON	CA	92324	BROWN, ELLEN M	2496 KNOB HILL DR	RIVERSIDE	CA	92506
259-290-007		COLTON	CA	92324	DY, JUSTINO	180 FLAT SLATE AVE	HENDERSON	NV	89011
259-290-013		COLTON	CA	92324	UJKIC, MARKO	7405 RECHE CANYON RD	COLTON	CA	92324
259-300-001	7511 RECHE CANYON RD	COLTON	CA	92324	GONZALES, MARCO A	17511 WABASH AVE	FONTANA	CA	92336
259-350-004		COLTON	CA	92324	ELLSTROM, PROP	26830 CHARLEY CT	MORENO VALLEY	CA	92555
471-030-005	7900 RECHE CANYON RD	COLTON	CA	92324	VIERA, ADALBERTO H	3441 S LA BREA AVE APT 104	LOS ANGELES	CA	90016
471-030-006		COLTON	CA	92324	PENNINGTON, AUBREY K	519 E BLACKWELL AVE	BLACKWELL	OK	74631
471-030-009	7995 STEWART ST	COLTON	CA	92324	GOINGS, GREGORY S	1810 CATALINA AVE	SANTA ANA	CA	92705
471-030-010	7926 RECHE CANYON RD	COLTON	CA	92324	ALVILLAR, EDWARD P	7926 RECHE CANYON RD	COLTON	CA	92324
471-030-011		COLTON	CA	92324	BROMLEY, CAROL	7917 RECHE CANYON RD	COLTON	CA	92324
471-030-013	24160 WOODSON RD	COLTON	CA	92324	THE ANTHONY R & RITA LORD LIVING TRUST	826 W MOHAWK LN	PHOENIX	AZ	85027
471-030-014	24186 WOODSON RD	COLTON	CA	92324	SOTO, FRANCISCO	24186 WOODSON RD	COLTON	CA	92324
471-030-031	7980 RECHE CANYON RD	COLTON	CA	92324	BENNETT, CHRIS A	7980 RECHE CANYON RD	COLTON	CA	92324
471-030-036		COLTON	CA	92324	BROMLEY, CAROL	7917 RECHE CANYON RD	COLTON	CA	92324
471-070-001		COLTON	CA	92324	BRASSFIELD HELEN R ESTATE OF	9266 SVL BOX	VICTORVILLE	CA	92395
471-070-002		COLTON	CA	92324	BRASSFIELD HELEN R ESTATE OF	9266 SVL BOX	VICTORVILLE	CA	92395
471-070-004		COLTON	CA	92324	FIRST, STEP PLUS	195 S HEATH TER	ANAHEIM	CA	92807
471-070-005	8081 RECHE CANYON RD	COLTON	CA	92324	COOPER, JOHN E	8840 RECHE CANYON RD	COLTON	CA	92324
471-070-006		COLTON	CA	92324	TOUGAS, JAMES	PO BOX 5007	COLTON	CA	92324
471-070-007	8090 RECHE CANYON RD	COLTON	CA	92324	MILLER, JOSEPH A	8090 RECHE CANYON RD	COLTON	CA	92324
471-070-013		COLTON	CA	92324	RESHESKE, JAMES T	8355 RECHE CANYON RD	COLTON	CA	92324
471-070-026	8080 RECHE CANYON RD	COLTON	CA	92324	LUCKEN, JOHN R	8080 RECHE CANYON RD	COLTON	CA	92324
471-070-027	8040 RECHE CANYON RD	COLTON	CA	92324	CABRERA, MORIS A	8040 RECHE CANYON RD	COLTON	CA	92324

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
471-070-033	8094 RECHE CANYON RD	COLTON	CA	92324	MARTINEZ, ANDY	8094 RECHE CANYON RD	COLTON	CA	92324
471-070-034		COLTON	CA	92324	COUNTY OF RIVERSIDE	PO BOX 1180	RIVERSIDE	CA	92502
471-070-035		COLTON	CA	92324	RANCH, SKY RIVERSIDE	620 ALAMEDA BLVD	CORONADO	CA	92118
471-070-040	8098 RECHE CANYON RD	COLTON	CA	92324	DELGADO, REYMUNDO	8098 RECHE CANYON RD	COLTON	CA	92324
471-070-041	8020 RECHE CANYON RD	COLTON	CA	92324	LAMBETH, DOROTHY I	2410 ROUTE 52	HOPEWELL JUNCTION	NY	12533
471-070-042		COLTON	CA	92324	SILVA, EDWARD R	10342 WEAVER ST	SOUTH EL MONTE	CA	91733
471-070-043	392 RECHE CANYON RD	COLTON	CA	92324	LORENZ, JOHN D	8460 RECHE CANYON RD	COLTON	CA	92324
471-070-044	8355 RECHE CANYON RD	COLTON	CA	92324	RESHESKE, JAMES T	8355 RECHE CANYON RD	COLTON	CA	92324
471-070-046	8411 RECHE CANYON RD	COLTON	CA	92324	POPOFF, NICKOLAS P	8411 RECHE CANYON RD	COLTON	CA	92324
471-070-047	8035 RECHE CANYON RD	COLTON	CA	92324	COUNTY OF RIVERSIDE	PO BOX 1180	RIVERSIDE	CA	92502
471-070-048	8088 RECHE CANYON RD	COLTON	CA	92324	COLE, FRED L	8088 RECHE CANYON RD	COLTON	CA	92324
471-070-049	8097 RECHE CANYON RD	COLTON	CA	92324	MORENO, JUAN	8097 RECHE CANYON RD	COLTON	CA	92324
471-080-013		COLTON	CA	92324	MERCADANTE, THOMAS P	29132 MAPLEWOOD PL	HIGHLAND	CA	92346
471-080-014	8777 MERCADANTE LN	COLTON	CA	92324	MEDINA, MIGUEL	8777 MERCADANTE LN	COLTON	CA	92324
471-090-002		COLTON	CA	92324	PEREZ, MARCUS A	8520 RECHE CANYON RD	COLTON	CA	92324
471-090-003	8580 RECHE CANYON RD	COLTON	CA	92324	CHUCHUA, GARAN M	8580 RECHE CANYON RD	COLTON	CA	92324
471-090-012	24800 MANTON RD	COLTON	CA	92324	LIU, CHUN HSIN	24800 MANTON RD	COLTON	CA	92324
471-090-017	8700 RECHE CANYON RD	COLTON	CA	92324	CROSSAN, PHILLIP T	8700 RECHE CANYON RD	COLTON	CA	92324
471-090-018	8520 RECHE CANYON RD	COLTON	CA	92324	PEREZ, MARCUS A	8520 RECHE CANYON RD	COLTON	CA	92324
471-090-019		COLTON	CA	92324	LINDENMEYER, STRATTON	4544 TALOFA AVE	TOLUCA LAKE	CA	91602
471-090-020	24670 MANTON RD	COLTON	CA	92324	TECHEN, DONALD K	24670 MANTON RD	COLTON	CA	92324
471-100-017	8851 RECHE CANYON RD	COLTON	CA	92324	COUNTY OF RIVERSIDE	PO BOX 1180	RIVERSIDE	CA	92502
471-100-027	8879 RECHE CANYON RD	COLTON	CA	92324	PRECIADO, JON P	8879 RECHE CANYON RD	COLTON	CA	92324
471-100-028	8873 RECHE CANYON RD	COLTON	CA	92324	PRECIADO, JON P	8873 RECHE CANYON RD	COLTON	CA	92324
471-100-029	8869 RECHE CANYON RD	COLTON	CA	92324	MENDIOLA, MIGUEL	26995 SANDI LN	MORENO VALLEY	CA	92555
471-100-031	8870 RECHE CANYON RD	COLTON	CA	92324	PROP, DFI	4120 DOUGLAS BLVD STE 306	GRANITE BAY	CA	95746
471-100-054	8809 RECHE CANYON RD	COLTON	CA	92324	SIMPSON, RAYMOND DAVID	8809 RECHE CANYON RD	COLTON	CA	92324
471-100-055		COLTON	CA	92324	RIVERSIDE COUNTY FLOOD CONT	1995 MARKET ST	RIVERSIDE	CA	92501
471-100-058	8840 RECHE CANYON RD	COLTON	CA	92324	COOPER, JOHN E	8840 RECHE CANYON RD	COLTON	CA	92324
471-100-059	8900 ARROYO DR	COLTON	CA	92324	MEDRANO, RAFAEL	8900 ARROYO DR	COLTON	CA	92324
471-100-060	8860 RECHE CANYON RD	COLTON	CA	92324	CHAVEZ, LEONARD	8860 RECHE CANYON RD	COLTON	CA	92324

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
471-100-061	8850 RECHE CANYON RD	COLTON	CA	92324	FARIAS, GRISELDA	1937 UNION ST	COLTON	CA	92324
471-100-062	8855 RECHE CANYON RD	COLTON	CA	92324	GRAVES, ELEANOR S	8855 RECHE CANYON RD	COLTON	CA	92324
471-100-063	8865 RECHE CANYON RD	COLTON	CA	92324	FOX, DANIEL THOMAS	W11999 COUNTY ROAD D	COLUMBUS	WI	53925
471-100-065	8311 RECHE VISTA DR	COLTON	CA	92324	YANDELL, CALVIN	8311 RECHE VISTA DR	COLTON	CA	92324
471-100-066		COLTON	CA	92324	SIMPSON, RAYMOND DAVID	8809 RECHE CANYON RD	COLTON	CA	92324
471-100-067		COLTON	CA	92324	SIMPSON, RAYMOND DAVID	8809 RECHE CANYON RD	COLTON	CA	92324
471-100-068		COLTON	CA	92324	LOVATO, PAUL	12560 INDIAN ST	MORENO VALLEY	CA	92553
471-120-006		COLTON	CA	92324	BROE, JOHN	8960 RECHE CANYON RD	COLTON	CA	92324
471-120-024		COLTON	CA	92324	BROE, JOHN	8830 RECHE CANYON RD	COLTON	CA	92324
471-120-028		COLTON	CA	92324	RIVERSEND LLC	3051 E WASHINGTON BLVD	LOS ANGELES	CA	90023
471-120-035	8955 RECHE CANYON RD	COLTON	CA	92324	MIDWEST RE CAPITAL LLC	29522 VIA VALVERDE	LAGUNA NIGUEL	CA	92677
471-120-036		COLTON	CA	92324	RIVERSIDE COUNTY FLOOD CONT	1995 MARKET ST	RIVERSIDE	CA	92501
471-210-002	8500 RECHE VISTA DR	COLTON	CA	92324	ZECENA, ERICK R	8500 RECHE VISTA DR	COLTON	CA	92324
471-210-003	9133 RECHE CANYON RD	COLTON	CA	92324	COOPER, JOHN	8840 RECHE CANYON RD	COLTON	CA	92324
471-210-010		COLTON	CA	92324	NICHOLS, JAMES R	9200 RECHE CANYON RD	COLTON	CA	92324
471-210-012		COLTON	CA	92324	SIPES, MARTHA A	803 OLSEN RD	WINTER HAVEN	FL	33884
471-210-013	9150 RECHE CANYON RD	COLTON	CA	92324	BROWN, PAULINE M	9150 RECHE CANYON RD	COLTON	CA	92324
471-210-014	387 RECHE CANYON RD	COLTON	CA	92324	STANSBERRY, JERED	908 RECHE CANYON RD	COLTON	CA	92324
471-210-016	9086 RECHE CANYON RD	COLTON	CA	92324	WESCH, PETER H	9086 RECHE CANYON RD	COLTON	CA	92324
471-210-017	9068 RECHE CANYON RD	COLTON	CA	92324	HAYES, EARNEST C	PMB 5045	COLTON	CA	92324
471-210-018	9058 RECHE CANYON RD	COLTON	CA	92324	COFFMAN, CURTIS	9058 RECHE CANYON RD	COLTON	CA	92324
471-210-021	9010 RECHE CANYON RD	COLTON	CA	92324	WEEKS, CHARLES D	8950 RECHE CANYON RD	COLTON	CA	92324
471-210-022	9098 RECHE CANYON RD	COLTON	CA	92324	STANSBERRY, KATIE	9098 RECHE CANYON RD	COLTON	CA	92324
471-210-023	9200 RECHE CANYON RD	COLTON	CA	92324	NICHOLS, HELEN L	9200 RECHE CANYON RD	COLTON	CA	92324
471-210-024		COLTON	CA	92324	NICHOLS, HELEN L	9200 RECHE CANYON RD	COLTON	CA	92324
471-210-025	9160 HOLLY CT	COLTON	CA	92324	TOUGAS, JAMES J	9160 HOLLY CT	COLTON	CA	92324
471-210-026	9173 RECHE CANYON RD	COLTON	CA	92324	ORNDOFF, WILLIAM MICHAEL	9173 RECHE CANYON RD	COLTON	CA	92324
471-210-027		COLTON	CA	92324	ORNDOFF, WILLIAM MICHAEL	9173 RECHE CANYON RD	COLTON	CA	92324
471-210-029	8490 RECHE VISTA DR	COLTON	CA	92324	LLAMAS, JUAN	8490 RECHE VISTA DR	COLTON	CA	92324
471-210-030		COLTON	CA	92324	RIVERSIDE COUNTY FLOOD CONT	1995 MARKET ST	RIVERSIDE	CA	92501
471-220-005	9330 RECHE CANYON RD	COLTON	CA	92324	MARKHAM, DONALD L	24821 COUNTRY RD	MORENO VALLEY	CA	92557
471-220-006	376 RECHE CANYON RD	COLTON	CA	92324	MARKHAM, DONALD L	24821 COUNTRY RD	MORENO VALLEY	CA	92557

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
471-220-007		COLTON	CA	92324	CLEMENS, TAMMY L	17626 BROWN ST	PERRIS	CA	92570
471-220-008	9335 RECHE CANYON RD	COLTON	CA	92324	SZANIAWSKI, VIRGINIA L	PO BOX 321045	FAIRFIELD	CT	6825
471-220-009	9255 RECHE CANYON RD	COLTON	CA	92324	EASTER ISLAND LTD	PO BOX 321045	FAIRFIELD	CT	6825
471-220-010		COLTON	CA	92324	SZANIAWSKI, VIRGINIA L	PO BOX 321045	FAIRFIELD	CT	6825
471-220-011	9330 RECHE CANYON RD	COLTON	CA	92324	HURD, NORA M	9440 RECHE CANYON RD	COLTON	CA	92324
471-220-015		COLTON	CA	92324	CARRILLO, MIRIAM	921 E 2ND ST	SAN BERNARDINO	CA	92408
471-220-016		COLTON	CA	92324	CARRILLO, MIRIAM	921 E 2ND ST	SAN BERNARDINO	CA	92408
471-220-017	9425 RECHE CANYON RD	COLTON	CA	92324	LITTLE, MARYLAND E	PO BOX 285	ETIWANDA	CA	91739
471-220-018		COLTON	CA	92324	MARKHAM, DONALD L	24821 COUNTRY RD	MORENO VALLEY	CA	92557
471-220-020	9440 RECHE CANYON RD	COLTON	CA	92324	HURD, NORA M	9440 RECHE CANYON RD	COLTON	CA	92324
471-220-021		COLTON	CA	92324	HURD, NORA M	9440 RECHE CANYON RD	COLTON	CA	92324
471-230-002		COLTON	CA	92324	KATHLEEN BIANCHI FOUNDATION	3333 W COAST HWY	NEWPORT BEACH	CA	92663
471-230-004		COLTON	CA	92324	KATHLEEN BIANCHI FOUNDATION	3333 W COAST HWY	NEWPORT BEACH	CA	92663
471-240-001		COLTON	CA	92324	ROWELL III, GEORGE B	13 HAYEK ST	LADYS ISLAND	SC	29907
471-240-002		COLTON	CA	92324	MORENO VALLEY UNIFIED SCHOOL DIST	25634 ALESSANDRO BLVD	MORENO VALLEY	CA	92553
471-240-003		COLTON	CA	92324	ROWELL III, GEORGE B	13 HAYEK ST	LADYS ISLAND	SC	29907
471-260-044		COLTON	CA	92324	NECOECHEA, NIKO	4616 WILLIS AVE APT 309	SHERMAN OAKS	CA	91403
471-260-058		COLTON	CA	92324	KIM, KYU SUNG	PO BOX 936	SARALAND	AL	36571
471-310-002	24630 KEISSEL RD	COLTON	CA	92324	ZHANG, JOHN	24630 KEISSEL RD	COLTON	CA	92324
471-310-011		COLTON	CA	92324	CAPITAL FINANCE INC	PO BOX 1032	YUCAIPA	CA	92399
471-310-013		COLTON	CA	92324	CAPITAL FINANCE INC	PO BOX 1032	YUCAIPA	CA	92399
471-310-014		COLTON	CA	92324	CAPITAL FINANCE INC	PO BOX 1032	YUCAIPA	CA	92399
474-040-005		COLTON	CA	92324	ROWELL III, GEORGE B	13 HAYEK ST	LADYS ISLAND	SC	29907
474-040-011		COLTON	CA	92324	SEEGRAVES, KATHRYN	25809 BUSINESS CENTER DR	REDLANDS	CA	92374
474-040-012		COLTON	CA	92324	SEEGRAVES, KATHRYN	25809 BUSINESS CENTER DR	REDLANDS	CA	92374
474-040-014		COLTON	CA	92324	SEEGRAVES, KATHRYN	25809 BUSINESS CENTER DR	REDLANDS	CA	92374
474-040-015		COLTON	CA	92324	SEEGRAVES, KATHRYN	25809 BUSINESS CENTER DR	REDLANDS	CA	92374
0357-651-04		OAK HILLS	CA	92344	HILTON, MERIAL P	1260 E DOWNING ST	MESA	AZ	85203
0357-651-05		OAK HILLS	CA	92344	CONNELL, RICHARD	PO BOX 267	TUSTIN	CA	92781
0357-651-08		OAK HILLS	CA	92344	ETHIER, BRIAN E	9805 HIDDEN FARM RD	ALTA LOMA	CA	91737
0357-651-09	7037 BALDY MESA RD	OAK HILLS	CA	92344	SCHUMACHER, BRUCE	7037 BALDY MESA RD	OAK HILLS	CA	92344
0357-651-15		OAK HILLS	CA	92344	ETHIER, BRIAN E	PO BOX 8866	ALTA LOMA	CA	91701

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0357-651-16	LADWP	HESPERIA	CA	92344	CITY OF LOS ANGELES	PO BOX 51111	LOS ANGELES	CA	90051
0357-651-20		OAK HILLS	CA	92344	EMERALD SELECT GROUP LLC	PO BOX 2611	APPLE VALLEY	CA	92307
0357-651-21		OAK HILLS	CA	92344	SINK, JAMES A	PO BOX 2594	VICTORVILLE	CA	92393
0357-651-22	LADWP	HESPERIA	CA	92344	CITY OF LOS ANGELES	PO BOX 51111	LOS ANGELES	CA	90051
0357-651-25		OAK HILLS	CA	92344	OHAI, REYNOLDS	13450 MONTE VISTA AVE	CHINO	CA	91710
0357-651-26		OAK HILLS	CA	92344	OHAI, REYNOLDS	13450 MONTE VISTA AVE	CHINO	CA	91710
0357-651-29	LADWP	HESPERIA	CA	92344	CITY OF LOS ANGELES	PO BOX 51111	LOS ANGELES	CA	90051
0357-651-31	LADWP	HESPERIA	CA	92344	CITY OF LOS ANGELES	PO BOX 51111	LOS ANGELES	CA	90051
0357-651-32	LADWP	HESPERIA	CA	92344	CITY OF LOS ANGELES	PO BOX 51111	LOS ANGELES	CA	90051
0357-651-33		OAK HILLS	CA	92344	GRACIANO, EDWARD	PO BOX 3746	ONTARIO	CA	91761
3039-011-01	9725 MUSCATEL ST	OAK HILLS	CA	92344	ARELLANO, FELIPE	9725 MUSCATEL ST	OAK HILLS	CA	92344
3039-011-03	8825 BALDY MESA RD	OAK HILLS	CA	92344	HOUCHENS, JAMES M	PO BOX 290248	PHELAN	CA	92329
3039-011-05	9711 ADOBE RD	OAK HILLS	CA	92344	AMBRIZ, SILVANO M	21508 GOLDEN HILLS BLVD APT 2	TEHACHAPI	CA	93561
3039-011-07	9740 JOSHUA RD	OAK HILLS	CA	92344	WU, YOUNG HUNG	9740 JOSHUA RD	OAK HILLS	CA	92344
3039-021-02	9757 JOSHUA ST # 264	OAK HILLS	CA	92344	WOODRUFF, LYNDELL W	9757 JOSHUA ST	OAK HILLS	CA	92344
3039-021-03	9779 JOSHUA ST	OAK HILLS	CA	92344	HAVENS, GLENN	9779 JOSHUA ST	OAK HILLS	CA	92344
3039-021-07		OAK HILLS	CA	92344	RLLPSP LLC	PO BOX 784	SOLANA BEACH	CA	92075
3039-021-08	9750 ELM ST	OAK HILLS	CA	92344	RICHARDSON, BRADLEY	9011 TANGLEWOOD DR	ALTA LOMA	CA	91701
3039-021-30	9755 ELM ST	OAK HILLS	CA	92344	GUZMAN, ALBERT J	9755 ELM ST	OAK HILLS	CA	92344
3039-021-31		OAK HILLS	CA	92344	MUMFORD, PAUL	11411 HEMLOCK AVE	HESPERIA	CA	92345
3039-031-01	8431 BALDY MESA RD	OAK HILLS	CA	92344	YOUNG, JEREMY JAMES	8431 BALDY MESA RD	OAK HILLS	CA	92344
3039-031-02	8453 BALDY MESA RD	OAK HILLS	CA	92344	HACKETT, TIFFANY	8453 BALDY MESA RD	OAK HILLS	CA	92344
3039-031-03	9727 CEDAR ST	OAK HILLS	CA	92344	AHMED, IQBAL	PO BOX 8181	LA VERNE	CA	91750
3039-031-04	9749 CEDAR ST	OAK HILLS	CA	92344	THORPE, RONALD B	9749 CEDAR ST	OAK HILLS	CA	92344
3039-031-10	8339 BALDY MESA RD	OAK HILLS	CA	92344	MAGPANTAY, JAMES P	14126 MARE LN	VICTORVILLE	CA	92394
3039-031-11	9736 HIGHLAND RD	OAK HILLS	CA	92344	INJIJIAN, GARREN	9736 HIGHLAND RD	OAK HILLS	CA	92344
3039-031-16	9757 HIGHLAND RD	OAK HILLS	CA	92344	CERRONI, VIRGINIA A	9757 HIGHLAND RD	OAK HILLS	CA	92344
3039-031-17	9735 HIGHLAND RD	OAK HILLS	CA	92344	CONNOLLY, PATRICIA ANN	9735 HIGHLAND RD	OAK HILLS	CA	92344
3039-031-18	8191 BALDY MESA RD	OAK HILLS	CA	92344	MARILUCH, CYNTHIA R	8191 BALDY MESA RD	OAK HILLS	CA	92344
3039-031-19	9750 RATTLESNAKE RD	OAK HILLS	CA	92344	JACOBSON, CAROLE A	9750 RATTLESNAKE RD	OAK HILLS	CA	92344
3039-031-23	9750 MESQUITE ST	OAK HILLS	CA	92344	WEIL, NICHOLAS K	13829 TRINIDAD DR	VICTORVILLE	CA	92395

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
3039-031-24	9792 MESQUITE ST	OAK HILLS	CA	92344	QUARTON, SUZANNE	9792 MESQUITE ST	OAK HILLS	CA	92344
3039-151-01	9725 MESQUITE ST	OAK HILLS	CA	92344	SANCHEZ, EDDIE	9725 MESQUITE ST	OAK HILLS	CA	92344
3039-151-02	9728 ALTA MESA RD	OAK HILLS	CA	92344	JANSEN, PAUL A	9728 ALTA MESA RD	OAK HILLS	CA	92344
3039-151-06	9755 ALTA MESA RD	OAK HILLS	CA	92344	BUTTERS, TIMOTHY SHAWN	9755 ALTA MESA RD	OAK HILLS	CA	92344
3039-161-27		OAK HILLS	CA	92344	PORTER, BRETT	8165 ANACONDA AVE	OAK HILLS	CA	92344
3064-011-01	9779 SMOKE TREE RD	OAK HILLS	CA	92344	ARCH, PAUL L	9779 SMOKETREE CT	HESPERIA	CA	92345
3064-011-03	10375 BALDY MESA RD	OAK HILLS	CA	92344	HEISLER, JAMES	10375 BALDY MESA RD	OAK HILLS	CA	92344
3064-011-04	9824 AVENAL ST	OAK HILLS	CA	92344	SWORDS, ANNETTE M	9824 AVENAL ST	OAK HILLS	CA	92344
3064-011-18		OAK HILLS	CA	92344	10413 BALDY MESA TRUST	18032 LEMON DR STE C	YORBA LINDA	CA	92886
3064-011-19	10413 BALDY MESA RD	OAK HILLS	CA	92344	GARCIA, LUIS	10413 BALDY MESA RD	OAK HILLS	CA	92344
3064-021-01	10251 BALDY MESA RD	OAK HILLS	CA	92344	JUE INVESTMENT PARTNERSHIP	8140 ROSECRANS AVE	PARAMOUNT	CA	90723
3064-021-05		OAK HILLS	CA	92344	BLEEKER, SIMON P	427 E 6TH ST	ONTARIO	CA	91764
3064-021-10	9748 BOLINAS RD	OAK HILLS	CA	92344	MENA, CECILIA Y	9748 BOLINAS RD	OAK HILLS	CA	92344
3064-031-05	7 PALMS DR	OAK HILLS	CA	92344	WEST, GREGORY	2510 WARREN AVE # 3170	CHEYENNE	WY	82001
3064-041-01		OAK HILLS	CA	92344	EUM, DAVID	626 S PLYMOUTH BLVD	LOS ANGELES	CA	90005
3064-041-02	9722 PHELAN RD	OAK HILLS	CA	92344	EUM, DAVID	626 S PLYMOUTH BLVD	LOS ANGELES	CA	90005
3064-171-01		OAK HILLS	CA	92344	MSC CAPITAL INC	537 JAMESTOWN RD	BURBANK	CA	91504
3064-181-03		OAK HILLS	CA	92344	GAUTHIER, BARRY A	101 S AVENIDA FELIPE	ANAHEIM	CA	92807
3064-181-04	9343 BALDY MESA RD	OAK HILLS	CA	92344	PALACIOS, HUGO	9343 BALDY MESA RD	OAK HILLS	CA	92344
3064-181-11	9735 ELSINORE RD	OAK HILLS	CA	92344	RIVERA, GEORGE	13934 NEVERS ST	LA PUENTE	CA	91746
3064-181-14	9445 BALDY MESA RD	OAK HILLS	CA	92344	MUFF, DANIEL	970 W 59TH ST	SAN BERNARDINO	CA	92407
3064-191-01		OAK HILLS	CA	92344	ANCHOR OF HOPE CHURCH	825 RIDGETOP CIR	SAINT CHARLES	MO	63304
3064-191-02	9119 BALDY MESA RD	OAK HILLS	CA	92344	NIELSEN, WILLIAM C	9122 BRACEO ST	OAK HILLS	CA	92344
3064-191-03	9765 NIELSON RD	OAK HILLS	CA	92344	ELYASI, SINA	PO BOX 294628	PHELAN	CA	92329
3064-191-05	9239 BALDY MESA RD	OAK HILLS	CA	92344	GANNON, PAUL	9239 BALDY MESA RD	OAK HILLS	CA	92344
3136-061-17		OAK HILLS	CA	92344	NASRE, NABIL	32101 PEPPERTREE BND	SAN JUAN CAPISTRANO	CA	92675
0351-131-04		HESPERIA	CA	92345	ATCHISON TOPEKA AND SANTA FE RR CO	2650 LOU MENK DR	FORT WORTH	TX	76131
0351-131-07		HESPERIA	CA	92345	ATCHISON TOPEKA AND SANTA FE RR CO	2650 LOU MENK DR	FORT WORTH	TX	76131
0351-131-08		HESPERIA	CA	92345	UNION PACIFIC RAILROAD COMPANY	1400 DOUGLAS ST	OMAHA	NE	68179
0351-131-19		HESPERIA	CA	92345	CALNEV, PIPELINE	1001 LOUISIANA ST STE 1000	HOUSTON	TX	77002
0351-141-01		HESPERIA	CA	92345	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0351-141-02		HESPERIA	CA	92345	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0351-141-18		HESPERIA	CA	92345	ATCHISON TOPEKA AND SANTA FE RR CO	2650 LOU MENK DR	FORT WORTH	TX	76131
0351-171-02		HESPERIA	CA	92345	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0351-171-10		HESPERIA	CA	92345	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0351-171-44		HESPERIA	CA	92345	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
3064-031-06		HESPERIA	CA	92345	WEST, GREGORY	2510 WARREN AVE # 3170	CHEYENNE	WY	82001
3064-031-07		HESPERIA	CA	92345	WEST, GREGORY	2510 WARREN AVE # 3170	CHEYENNE	WY	82001
3064-031-08		HESPERIA	CA	92345	WEST, GREGORY	2510 WARREN AVE # 3170	CHEYENNE	WY	82001
3064-181-17		HESPERIA	CA	92345	CONTINENTAL TELEPHONE CO OF CALIF	16071 MOJAVE DR	VICTORVILLE	CA	92395
3064-201-01		HESPERIA	CA	92345	NIELSON, CAROLINE SLOAN	677 GEORGETOWN CT	SUNNYVALE	CA	94087
3064-201-02		HESPERIA	CA	92345	UNION PACIFIC RAILROAD COMPANY	1400 DOUGLAS ST	OMAHA	NE	68179
0281-331-25	24674 REDLANDS BLVD	LOMA LINDA	CA	92350	CALANTAS, CLAIRE DELACRUG	36750 SELROCCO DR	CALIMESA	CA	92320
0281-091-22	24800 REDLANDS BLVD	LOMA LINDA	CA	92354	LUBINSKY, LOUIS G	24818 REDLANDS BLVD	LOMA LINDA	CA	92354
0281-091-23	24774 REDLANDS BLVD	LOMA LINDA	CA	92354	KIM, SAM S	25441 HURON ST	LOMA LINDA	CA	92354
0281-091-24	24756 REDLANDS BLVD	LOMA LINDA	CA	92354	LAVCO PROPERTIES LLC	11840 HOLLIS CT	LOMA LINDA	CA	92354
0281-091-25	24756 REDLANDS BLVD	LOMA LINDA	CA	92354	VERES, LAWRENCE A	11840 HOLLIS CT	LOMA LINDA	CA	92354
0281-091-32	24816 REDLANDS BLVD	LOMA LINDA	CA	92354	LUBINSKY, LOUIS G	24818 REDLANDS BLVD	LOMA LINDA	CA	92354
0281-091-34	24732 REDLANDS BLVD	LOMA LINDA	CA	92354	CASSADY, ROBERT M	2809 LAS FLORES AVE	RIVERSIDE	CA	92503
0281-091-42	24866 REDLANDS BLVD	LOMA LINDA	CA	92354	GREAT AMERICAN CHICKEN CORP INC	10660 WILSHIRE BLVD APT 409	LOS ANGELES	CA	90024
0281-111-25	9949 TIPPECANOE AVE	LOMA LINDA	CA	92354	RAZZOUK NAJI Y FAMILY TRUST	11583 MURPHY ST	LOMA LINDA	CA	92354
0281-132-27	TIPPECANOE ST	LOMA LINDA	CA	92354	SHIBUYA 1991 REV TRUST	26898 DEZAHARA WAY	LOS ALTOS HILLS	CA	94022
0281-162-24	24910 REDLANDS BLVD	LOMA LINDA	CA	92354	NEAL T BAKER ENTERPRISES INC	1875 BUSINESS CENTER DR	SAN BERNARDINO	CA	92408
0281-162-26	24950 REDLANDS BLVD	LOMA LINDA	CA	92354	AMUSEMENT INDUSTRY COMMERCIAL, PROP P	6665 LONG BEACH BLVD	LONG BEACH	CA	90805
0281-331-01	24530 REDLANDS BLVD	LOMA LINDA	CA	92354	ANDERSON, GARRY	1693 LAURELWOOD AVE	COLTON	CA	92324
0281-331-02	24532 REDLANDS BLVD	LOMA LINDA	CA	92354	ANDERSON, GARRY	1693 LAURELWOOD AVE	COLTON	CA	92324
0281-331-03	24538 REDLANDS BLVD	LOMA LINDA	CA	92354	ANDERSON, GARRY	1693 LAURELWOOD AVE	COLTON	CA	92324
0281-331-04	24540 REDLANDS BLVD	LOMA LINDA	CA	92354	ANDERSON, GARRY	1693 LAURELWOOD AVE	COLTON	CA	92324
0281-331-05	24546 REDLANDS BLVD	LOMA LINDA	CA	92354	ANDERSON, GARRY	1693 LAURELWOOD AVE	COLTON	CA	92324
0281-331-06	24548 REDLANDS BLVD	LOMA LINDA	CA	92354	ANDERSON, GARRY	1693 LAURELWOOD AVE	COLTON	CA	92324
0281-331-07	24554 REDLANDS BLVD	LOMA LINDA	CA	92354	ANDERSON, GARRY	1693 LAURELWOOD AVE	COLTON	CA	92324
0281-331-08	24556 REDLANDS BLVD	LOMA LINDA	CA	92354	CLAYTON, RICHARD	24556 REDLANDS BLVD	LOMA LINDA	CA	92354

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0281-331-09	24562 REDLANDS BLVD	LOMA LINDA	CA	92354	HIGDON, RICKEY T	23256 BUTTERFIELD TRL	BEND	OR	97702
0281-331-11	24574 REDLANDS BLVD	LOMA LINDA	CA	92354	BUOYE, MARK	11522 CRAFTON AVE	REDLANDS	CA	92374
0281-331-15	24630 REDLANDS BLVD	LOMA LINDA	CA	92354	SYD LLC	24630 REDLANDS BLVD	LOMA LINDA	CA	92354
0281-331-17	24638 REDLANDS BLVD	LOMA LINDA	CA	92354	FEENSTRA, STEVEN N	12911 CLUB DR	REDLANDS	CA	92373
0281-331-18	24640 REDLANDS BLVD	LOMA LINDA	CA	92354	CABALUNA, LORETO L	24640 REDLANDS BLVD	LOMA LINDA	CA	92354
0281-331-19	24646 REDLANDS BLVD	LOMA LINDA	CA	92354	BOUSSON, MARTIN E	24646 REDLANDS BLVD	LOMA LINDA	CA	92354
0281-331-20	24648 REDLANDS BLVD	LOMA LINDA	CA	92354	CEBALLOS, ARTURO	6174 BETH PAGE DR	FONTANA	CA	92336
0281-331-21	24654 REDLANDS BLVD	LOMA LINDA	CA	92354	CEBALLOS, ARTURO	6174 BETH PAGE DR	FONTANA	CA	92336
0281-331-22	24656 REDLANDS BLVD	LOMA LINDA	CA	92354	ZORAYAN, ANTRANIK OZBAG	314 VIA LIDO NORD	NEWPORT BEACH	CA	92663
0281-331-23	24662 REDLANDS BLVD	LOMA LINDA	CA	92354	ZORAYAN, ANTRANIK OZBAG	314 VIA LIDO NORD	NEWPORT BEACH	CA	92663
0281-331-24	24664 REDLANDS BLVD	LOMA LINDA	CA	92354	HOMESAFE INC	24664 REDLANDS BLVD	LOMA LINDA	CA	92354
0281-331-26	24676 REDLANDS BLVD	LOMA LINDA	CA	92354	BUSTER, ROBERT R	27176 CALLE JUANITA	CAPISTRANO BEACH	CA	92624
0281-331-27	24686 REDLANDS BLVD	LOMA LINDA	CA	92354	KIM, JIN S	1741 CAMELOT DR	REDLANDS	CA	92374
0281-331-28	24688 REDLANDS BLVD	LOMA LINDA	CA	92354	KIM, JIN S	1741 CAMELOT DR	REDLANDS	CA	92374
0283-011-18	461 REDLANDS BLVD	LOMA LINDA	CA	92354	YEO, SENG KIN	24696 LAWTON AVE	LOMA LINDA	CA	92354
0283-011-19	461 REDLANDS BLVD	LOMA LINDA	CA	92354	YEO, SENG KIN	PO BOX 331	LOMA LINDA	CA	92354
0283-011-20	461 REDLANDS BLVD	LOMA LINDA	CA	92354	YEO, SENG KIN	24696 LAWTON AVE	LOMA LINDA	CA	92354
0283-012-18	2214 GARDENA ST	LOMA LINDA	CA	92354	BIRMINGHAM REVOCABLE TR	PO BOX 1150	TEMECULA	CA	92593
0283-021-18	2161 S GARDENA ST	LOMA LINDA	CA	92354	SCHORK, KENNETH A	12818 FIRESTONE BLVD	SANTA FE SPRINGS	CA	90670
0283-031-06	2306 GARDENA ST	LOMA LINDA	CA	92354	MAIER, JOSEFA	8780 19TH ST # 199	ALTA LOMA	CA	91701
0283-032-07	2295 GARDENA ST	LOMA LINDA	CA	92354	LOVE ROCK MINISTRIES INTERNATIONAL	2345 S WATERMAN AVE	SAN BERNARDINO	CA	92408
0283-032-09	2275 GARDENA ST	LOMA LINDA	CA	92354	LOVE ROCK MINISTRIES INTERNATIONAL	2345 S WATERMAN AVE	SAN BERNARDINO	CA	92408
0283-032-12	2233 GARDENA ST	LOMA LINDA	CA	92354	VILLALOBOS, MARTIN	2311 JUNE WAY	SAN BERNARDINO	CA	92407
0283-041-32		LOMA LINDA	CA	92354	CITY OF RIVERSIDE	3922 MAIN ST	RIVERSIDE	CA	92522
0283-062-01	24519 REDLANDS BLVD	LOMA LINDA	CA	92354	LOMA, LINDA UNIVERSITY	FOUNDATION ADMINISTRATIO	LOMA LINDA	CA	92350
0283-062-02		LOMA LINDA	CA	92354	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0283-062-05	24583 REDLANDS BLVD	LOMA LINDA	CA	92354	AURORA, INTERNATIONAL INC	25500 ALLEN WAY	LOMA LINDA	CA	92354
0283-062-06	24601 REDLANDS BLVD	LOMA LINDA	CA	92354	AZER, SHERIF A	2521 FLINTRIDGE DR	GLENDALE	CA	91206
0283-062-07	REDLANDS BLVD	LOMA LINDA	CA	92354	LOMA LINDA UNIVERSITY	11145 ANDERSON ST # 203	LOMA LINDA	CA	92354
0283-062-08	REDLANDS BLVD	LOMA LINDA	CA	92354	LOMA LINDA UNIVERSITY	11145 ANDERSON ST # 203	LOMA LINDA	CA	92354

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0283-062-17	24821 REDLANDS BLVD	LOMA LINDA	CA	92354	DAVIS, VERNON K	24821 REDLANDS BLVD	LOMA LINDA	CA	92354
0283-062-18		LOMA LINDA	CA	92354	ROZEMA, RANDY L	24831 REDLANDS BLVD	LOMA LINDA	CA	92354
0283-062-19	24831 REDLANDS BLVD	LOMA LINDA	CA	92354	ROZEMA, RANDY	24831 REDLANDS BLVD	LOMA LINDA	CA	92354
0283-062-20	24849 REDLANDS BLVD	LOMA LINDA	CA	92354	PAUL, LEIGHTON L	1037 MOCKINGBIRD DR	GRAPEVINE	TX	76051
0283-062-21		LOMA LINDA	CA	92354	LOMA, LINDA UNIVERSITY	LOMA LINDA UNIVERSITY	LOMA LINDA	CA	92350
0283-062-22	24871 REDLANDS BLVD	LOMA LINDA	CA	92354	LOMA, LINDA UNIVERSITY	LOMA LINDA UNIVERSITY	LOMA LINDA	CA	92350
0283-062-23	24891 REDLANDS BLVD	LOMA LINDA	CA	92354	LOMA, LINDA UNIVERSITY	LOMA LINDA UNIVERSITY	LOMA LINDA	CA	92350
0283-062-24	10540 ANDERSON ST	LOMA LINDA	CA	92354	LOMA, LINDA UNIVERSITY	LOMA LINDA UNIVERSITY	LOMA LINDA	CA	92350
0283-062-25		LOMA LINDA	CA	92354	LOMA, LINDA UNIVERSITY	LOMA LINDA UNIVERSITY	LOMA LINDA	CA	92350
0283-062-31		LOMA LINDA	CA	92354	LOMA, LINDA UNIVERSITY	LOMA LINDA UNIVERSITY	LOMA LINDA	CA	92350
0283-062-40	24769 REDLANDS BLVD	LOMA LINDA	CA	92354	ARBORS BUSINESS CENTER LLC	PO BOX 1210	REDLANDS	CA	92373
0283-062-43		LOMA LINDA	CA	92354	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0283-062-44	24541 REDLANDS BLVD	LOMA LINDA	CA	92354	JUHL INVESTMENTS LP	11490 IRIS ST	LOMA LINDA	CA	92354
0283-062-45	24561 REDLANDS BLVD	LOMA LINDA	CA	92354	JUHL INVESTMENTS LP	11490 IRIS ST	LOMA LINDA	CA	92354
0283-062-48	24797 REDLANDS BLVD	LOMA LINDA	CA	92354	PETERSON, J MARK	24797 REDLANDS BLVD	LOMA LINDA	CA	92354
0283-062-53	24809 REDLANDS BLVD	LOMA LINDA	CA	92354	OLIVERO, MICHAEL	11891 SAN TIMOTEO CANYON RD	REDLANDS	CA	92373
0283-062-54	24779 REDLANDS BLVD	LOMA LINDA	CA	92354	LOMA, LINDA UNIVERSITY	LOMA LINDA UNIVERSITY	LOMA LINDA	CA	92350
0283-082-01	24913 REDLANDS BLVD	LOMA LINDA	CA	92354	LOMA, LINDA UNIVERSITY	LOMA LINDA UNIVERSITY	LOMA LINDA	CA	92350
0283-082-02	24927 REDLANDS BLVD	LOMA LINDA	CA	92354	LOMA, LINDA UNIVERSITY	LOMA LINDA UNIVERSITY	LOMA LINDA	CA	92350
0283-082-03	10535 ANDERSON ST	LOMA LINDA	CA	92354	SHAW MCMINN, MARY K	10535 ANDERSON ST	LOMA LINDA	CA	92354
0283-082-44	24955 REDLANDS BLVD	LOMA LINDA	CA	92354	LOT 13 TRUST	10535 ANDERSON ST	LOMA LINDA	CA	92354
0284-211-18	RECHE CANYON RD	LOMA LINDA	CA	92354	MTB INLAND EMPIRE PROPERTIES LLC	15 ENTERPRISE STE 445	ALISO VIEJO	CA	92656
0284-211-37	12720 RECHE CANYON RD	RECHE CANYON	CA	92354	MESTAS, CHRISTOPHER TROY	12721 RECHE CANYON RD	COLTON	CA	92324
0284-221-13	RECHE CANYON RD	LOMA LINDA	CA	92354	MTB INLAND EMPIRE PROPERTIES LLC	15 ENTERPRISE STE 445	ALISO VIEJO	CA	92656
0284-221-15	RECHE CANYON RD	LOMA LINDA	CA	92354	MTB INLAND EMPIRE PROPERTIES LLC	15 ENTERPRISE STE 445	ALISO VIEJO	CA	92656
1178-341-07	2210 RECHE CANYON RD	RECHE CANYON	CA	92354	GOMER, PERIN	2210 RECHE CANYON RD	COLTON	CA	92324
0350-061-38		LYTLE CREEK	CA	92358	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0350-231-20		LYTLE CREEK	CA	92358	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0350-231-22	16091 CAJON BLVD	LYTLE CREEK	CA	92358	BAKEMAN, DAVID D	PO BOX 9346	SAN BERNARDINO	CA	92427
0350-231-23		LYTLE CREEK	CA	92358	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0351-141-35		PHELAN	CA	92371	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0357-651-14	BALDY MESA RD	PHELAN	CA	92371	ETHIER RONALD A TR	1120 FARRINGTON DR	LA HABRA	CA	90631
3038-441-06		PHELAN	CA	92371	KIM, PHILLIP	7898 PHELAN RD	PHELAN	CA	92371
3038-451-10	JOSHUA	PHELAN	CA	92371	US GOLDENLAND INVESTMENT INC	410 GREENWOOD AVE # A	SAN BERNARDINO	CA	92407
3038-471-01		PHELAN	CA	92371	BLS ENTRPRISES LLC	650 TOWN CENTER DR STE 1300	COSTA MESA	CA	92626
3038-471-02	8270 BALDY MESA RD	PHELAN	CA	92371	B L S ENTERPRISES LLC	PO BOX 5083	DOWNEY	CA	90241
3038-471-03		PHELAN	CA	92371	MADRAZO, MELVYN R	9320 HASTY AVE	DOWNEY	CA	90240
3038-471-04	8236 BALDY MESA RD	PHELAN	CA	92371	KETCHESIDE, ERICA	PO BOX 400031	HESPERIA	CA	92340
3038-471-05	8174 BALDY MESA RD	PHELAN	CA	92371	CANEZ, REYNALDO	8174 BALDY MESA RD	PHELAN	CA	92371
3038-471-06	8142 BALDY MESA RD	PHELAN	CA	92371	COMPTON, ROBERT M	8142 BALDY MESA RD	PHELAN	CA	92371
3038-471-07	9676 MESQUITE ST	PHELAN	CA	92371	LANEY, DAVID MICHAEL	9676 MESQUITE ST	PHELAN	CA	92371
3038-471-18	9564 ARROWHEAD CT	PHELAN	CA	92371	SANSONETTI, NANCY J	PO BOX 293835	PHELAN	CA	92329
3038-471-21	8424 CEDAR CT	PHELAN	CA	92371	ARNOLD, DONALD	PO BOX 710	VICTORVILLE	CA	92393
3038-471-26	8465 CEDAR CT	PHELAN	CA	92371	REISS, ANDREW W	8465 CEDAR CT	PHELAN	CA	92371
3038-471-27	8433 CEDAR CT	PHELAN	CA	92371	HURST, GLEN RHODES	8433 CEDAR CT	PHELAN	CA	92371
3038-561-03	MESQUITE ST	PHELAN	CA	92371	OAK HILLS INVESTMENT CO LLC	PO BOX 1233	WRIGHTWOOD	CA	92397
3038-571-02		PHELAN	CA	92371	VICTORVILLE LLC	3890 TAMARACK LN	LAKE OSWEGO	OR	97035
3038-571-03		PHELAN	CA	92371	DOUTHIT, KENNETH	549 FLINT AVE	LONG BEACH	CA	90814
3065-451-02		PHELAN	CA	92371	SNOWLINE JOINT UNIFIED SCHOOL DIST	4075 NIELSON RD	PHELAN	CA	92371
3065-451-04		PHELAN	CA	92371	SNOWLINE JOINT UNIFIED SCHOOL DIST	4075 NIELSON RD	PHELAN	CA	92371
3065-451-09		PHELAN	CA	92371	MELIDO INC	26941 POTOMAC DR	SUN CITY	CA	92586
3065-451-11	9670 BONANZA RD	PHELAN	CA	92371	BURNS, THOMAS B	PO BOX 2764	VICTORVILLE	CA	92393
3065-461-03		PHELAN	CA	92371	CHIU, HWONG CHIN HWA	244 CALLE CONCORDIA	SAN DIMAS	CA	91773
3065-461-08		PHELAN	CA	92371	ACUNA, ROBERT	PO BOX 583	SAN FERNANDO	CA	91341
3065-471-05	YUCCA TERRACE DR	PHELAN	CA	92371	MEYERS, SONYA	2770 N WOLCOTT AVE APT F	CHICAGO	IL	60614
3065-471-07	BALDY MESA RD	PHELAN	CA	92371	MULLANEY, PHILIP J	34181 SUNCREST DR	CATHEDRAL CITY	CA	92234
3065-471-08		PHELAN	CA	92371	WANG, CHRISTINA C R	735 FRANCESCA DR UNIT 101	WALNUT	CA	91789
3065-471-10		PHELAN	CA	92371	WANG, CHRISTINA C R	735 FRANCESCA DR UNIT 101	WALNUT	CA	91789
3065-481-04	9878 BALDY MESA RD	PHELAN	CA	92371	XING, CHANG ZAI	9878 BALDY MESA RD	PHELAN	CA	92371
3065-481-07	9688 PHELAN RD	PHELAN	CA	92371	B MESA LLC	8384 SVL BOX	VICTORVILLE	CA	92395
3065-481-11		PHELAN	CA	92371	LEON RAMONA A TR	1850 LEON AVE	SAN DIEGO	CA	92154
3065-611-02		PHELAN	CA	92371	MOSCOSO, MYRNA	3637 B ST	LA VERNE	CA	91750

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
3065-611-03	9675 PHELAN RD	PHELAN	CA	92371	PHELAN BALDY SWC LLC	30011 IVY GLENN DR STE 113	LAGUNA NIGUEL	CA	92677
3065-611-04	9558 BALDY MESA RD	PHELAN	CA	92371	SUTER, TODD A	4558 BALDY MESA RD	PHELAN	CA	92371
3065-621-05		PHELAN	CA	92371	KIM, HYONG SOK	1049 S HOBART BLVD # 301	LOS ANGELES	CA	90006
3065-621-07	BALDY MESA RD	PHELAN	CA	92371	ORO GRANDE GARDEN LLC	745 CRENSHAW BLVD	LOS ANGELES	CA	90005
3065-621-08		PHELAN	CA	92371	CLOSE PAL, ALICIA	PO BOX 1031	SAN MARCOS	CA	92079
3065-621-09		PHELAN	CA	92371	UNION PACIFIC RAILROAD COMPANY	1400 DOUGLAS ST	OMAHA	NE	68179
3065-621-11	9530 BALDY MESA RD	PHELAN	CA	92371	LEE, HUI OK	9530 BALDY MESA RD	PHELAN	CA	92371
3065-631-01		PHELAN	CA	92371	BEAK PROPERTIES LLC	1565 CARLA RDG	BEVERLY HILLS	CA	90210
3065-631-12		PHELAN	CA	92371	THYBERG, LORALEE	5772 LOS ARCOS WAY	BUENA PARK	CA	90620
3065-641-03		PHELAN	CA	92371	CHEN FAMILY TRUST	21733 EVALYN AVE	TORRANCE	CA	90503
3065-641-06		PHELAN	CA	92371	BERNABE, SAMUEL	12549 LOMA VERDE DR	VICTORVILLE	CA	92392
3065-641-10		PHELAN	CA	92371	FERNANDEZ, ANTHONY	5612 WALTHAM AVE	FORT WORTH	TX	76133
3070-621-02		PHELAN	CA	92371	KIM, GIONG SUG	962 LAS PALMAS DR	SANTA CLARA	CA	95051
3070-621-03		PHELAN	CA	92371	YONG, HYUNG K	701 E HERMOSA DR	FULLERTON	CA	92835
3070-631-06		PHELAN	CA	92371	ARD, JAMIE A	275 SAINT ALBANS AVE	SOUTH PASADENA	CA	91030
3071-011-01		PHELAN	CA	92371	D G S INVESTMENTS	PO BOX 734	WRIGHTWOOD	CA	92397
3071-061-01		PHELAN	CA	92371	FIRST CHURCH, OF GOD	PO BOX 290861	PHELAN	CA	92329
3071-061-21	11399 BALDY MESA RD	PHELAN	CA	92371	YUN, KISOOK	1213 FRANKLIN NOOK WAY	EL PASO	TX	79912
3097-441-01		PHELAN	CA	92371	DR PREM REDDY FAMILY FOUNDATION	16850 BEAR VALLEY RD	VICTORVILLE	CA	92395
3097-441-02		PHELAN	CA	92371	DR PREM REDDY FAMILY FOUNDATION	16850 BEAR VALLEY RD	VICTORVILLE	CA	92395
3097-441-03		PHELAN	CA	92371	DR PREM REDDY FAMILY FOUNDATION	16850 BEAR VALLEY RD	VICTORVILLE	CA	92395
3097-441-04		PHELAN	CA	92371	DR PREM REDDY FAMILY FOUNDATION	16850 BEAR VALLEY RD	VICTORVILLE	CA	92395
3097-451-02		PHELAN	CA	92371	DR PREM REDDY FAMILY FOUNDATION	16850 BEAR VALLEY RD	VICTORVILLE	CA	92395
3097-461-01	BALDY MESA RD	PHELAN	CA	92371	FIRST SAVINGS BANK	2605 E FLAMINGO RD	LAS VEGAS	NV	89121
3097-471-02		PHELAN	CA	92371	B NGAE1 LLC	3455 CLIFF SHADOWS PKWY STE 220	LAS VEGAS	NV	89129
3097-631-02	9696 DUNCAN RD	PHELAN	CA	92371	WALTON, RAMONA ARTEAGA	PO BOX 1284	VICTORVILLE	CA	92393
3102-301-16	KOALA RD	ADELANTO	CA	92371	VILLAR, CONCHITA R	3947 LA RICA AVE # A	BALDWIN PARK	CA	91706
3102-301-17		PHELAN	CA	92371	SENG, JOHN	3765 GAVIOTA AVE	LONG BEACH	CA	90807
3128-351-01	KOALA	PHELAN	CA	92371	RICHARDSON PROPERTIES LLC	34 EXECUTIVE PARK STE 210	IRVINE	CA	92614
3133-191-16	12451 BALDY MESA RD	PHELAN	CA	92371	GONZALEZ, MARGARET FIGUEROA	PO BOX 1157	VICTORVILLE	CA	92393
0351-131-14		VICTORVILLE	CA	92392	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
3070-441-01		VICTORVILLE	CA	92392	CHANG, WON	24000 INGOMAR ST	WEST HILLS	CA	91304
3070-441-02	12022 BALDY MESA RD	VICTORVILLE	CA	92392	JUE, VINCENT	8140 E ROSERANS AVE	PARAMOUNT	CA	90723
3070-441-03	11976 BALDY MESA RD	VICTORVILLE	CA	92392	COPPER FAMILY TR	11976 BALDY MESA RD	VICTORVILLE	CA	92392
3070-441-04	11930 BALDY MESA RD	VICTORVILLE	CA	92392	W B W INC	8140 ROSECRANS AVE	PARAMOUNT	CA	90723
3070-451-04	11880 BALDY MESA RD	VICTORVILLE	CA	92392	ROGERS, STANLEY J	10373 COLUMBINE	HESPERIA	CA	92345
3070-451-05	11784 BALDY MESA RD	VICTORVILLE	CA	92392	CURFMAN, MICHAEL	6328 MISSION BLVD	RIVERSIDE	CA	92509
3070-451-09	11820 BALDY MESA RD	VICTORVILLE	CA	92392	O LEARY KELLEY, COLLEEN MARIE	PO BOX 1521	VICTORVILLE	CA	92393
3070-451-20	11722 BALDY MESA RD	VICTORVILLE	CA	92392	CHOI, BOK HWA	11722 BALDY MESA RD	VICTORVILLE	CA	92392
3070-461-20	11696 BALDY MESA RD	VICTORVILLE	CA	92392	PARK, ESTHER S	2145 IDAHO FALLS DR	HENDERSON	NV	89044
3070-461-27		VICTORVILLE	CA	92392	JGD PROPERTIES LLC	5589 W PHILLIPS ST	ONTARIO	CA	91762
3070-471-08		VICTORVILLE	CA	92392	BYUN, JUNA	CHONBUK NATIONAL UNIVERS CHONJU 560-182 KO			
3070-471-10	11434 BALDY MESA RD	VICTORVILLE	CA	92392	MARTINEZ, OSBALDO JOE	11434 BALDY MESA RD	VICTORVILLE	CA	92392
3070-471-28		VICTORVILLE	CA	92392	KIM, TAE	1003 LAGUNA TER	FULLERTON	CA	92835
3070-471-30		VICTORVILLE	CA	92392	SEONG, CHANG YUN	1773 GILDA WAY	SAN JOSE	CA	95124
3070-601-14	1124 BALDY MESA RD	VICTORVILLE	CA	92392	CUMMINGS, CONI M	11124 BALDY MESA RD	VICTORVILLE	CA	92392
3070-601-16	11106 BALDY MESA RD	VICTORVILLE	CA	92392	EMERSON, REIICHI	11106 BALDY MESA RD	VICTORVILLE	CA	92392
3070-601-18	9681 GOODWIN DR	VICTORVILLE	CA	92392	KIM, JOANN C	9975 DEL SOL AVE	PHELAN	CA	92371
3070-601-19		VICTORVILLE	CA	92392	PAK, SANG M	507 N MARIPOSA AVE	LOS ANGELES	CA	90004
3070-611-10	11046 BALDY MESA RD	VICTORVILLE	CA	92392	MACQUEEN, BRENDA	11046 BALDY MESA RD	VICTORVILLE	CA	92392
3070-611-11		VICTORVILLE	CA	92392	MAZI M ALI AND SHIMA SAERI TR	11949 HESPERIA RD	HESPERIA	CA	92345
3070-611-13	10980 BALDY MESA RD	VICTORVILLE	CA	92392	ANDRADE, GUADALUPE	1017 ELAINE DR	SANTA ANA	CA	92703
3070-611-15	10928 BALDY MESA RD # 164	VICTORVILLE	CA	92392	DONALD L & BERNIECE E KINZLE REV TR	10928 BALDY MESA RD	VICTORVILLE	CA	92392
3070-611-33	11083 DE ANZA RD	VICTORVILLE	CA	92392	MCCORMICK, ELIZABETH M	11083 DE ANZA RD	VICTORVILLE	CA	92392
3071-011-14	11905 BALDY MESA RD	VICTORVILLE	CA	92392	DGS INVESTMENTS	PO BOX 734	WRIGHTWOOD	CA	92397
3071-021-01	11877 BALDY MESA RD	PHELAN	CA	92392	BENSON LAWRENCE TR	8742 SVL BOX	VICTORVILLE	CA	92395
3071-021-02	11823 BALDY MESA RD	VICTORVILLE	CA	92392	RAMIREZ, JORGE L	11823 BALDY MESA RD	VICTORVILLE	CA	92392
3071-021-19	11757 BALDY MESA RD	VICTORVILLE	CA	92392	CONNERS, DANIEL M	11757 BALDY MESA RD	PHELAN	CA	92371
3071-051-01	9725 5TH ST	VICTORVILLE	CA	92392	ROMERO, SOPHIA CHARLENE	9725 5TH ST	VICTORVILLE	CA	92392
3071-051-02	9735 5TH ST	VICTORVILLE	CA	92392	KIM, SUN AE	9599 SHEEP CREEK RD	PHELAN	CA	92371
3071-051-17	11515 BALDY MESA RD	VICTORVILLE	CA	92392	FIRST CHURCH OF GOD	PO BOX 290861	PHELAN	CA	92329

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
3097-601-03		VICTORVILLE	CA	92392	M J J INVESTMENT CO	PO BOX 571986	TARZANA	CA	91357
3097-611-02		VICTORVILLE	CA	92392	BRADLEY MCCALL LLC	8316 RED OAK ST STE 206	RANCHO CUCAMONGA	CA	91730
3097-611-06		VICTORVILLE	CA	92392	BRADLEY MCCALL LLC	8316 RED OAK ST STE 206	RANCHO CUCAMONGA	CA	91730
3097-621-02		VICTORVILLE	CA	92392	AW PROPERTIES WEST LLC	PO BOX 9296	RANCHO SANTA FE	CA	92067
3097-621-03		VICTORVILLE	CA	92392	AW PROPERTIES WEST LLC	PO BOX 9296	RANCHO SANTA FE	CA	92067
3097-621-11	9661 OLIVINE RD	VICTORVILLE	CA	92392	HERNANDEZ, LUIS RODRIGUEZ	PO BOX 292734	PHELAN	CA	92329
3097-621-12	12466 BALDY MESA RD	VICTORVILLE	CA	92392	WHITT, ROBERT	12466 BALDY MESA RD	VICTORVILLE	CA	92392
3097-621-18	9664 MARCO RD	VICTORVILLE	CA	92392	HOLLIDAY, AARON	9664 MARCO RD # 243	VICTORVILLE	CA	92392
3097-621-19	12426 BALDY MESA RD	VICTORVILLE	CA	92392	HARVEY, CHARLOTTE C	11630 LOCUST LN	APPLE VALLEY	CA	92308
3097-621-20	12414 BALDY MESA RD	VICTORVILLE	CA	92392	KIM, JOHN	12414 BALDY MESA RD	VICTORVILLE	CA	92392
3102-581-01		VICTORVILLE	CA	92392	DR PREM REDDY FAMILY FOUNDATION	16850 BEAR VALLEY RD	VICTORVILLE	CA	92395
3102-581-02		VICTORVILLE	CA	92392	AZBELL, SHELLEY	206 VALHALLA DR	SOLVANG	CA	93463
3103-341-01		VICTORVILLE	CA	92392	BEAR VALLEY PROPERTIES LLC	3966 LAS FLORES CANYON RD	MALIBU	CA	90265
3103-341-03		VICTORVILLE	CA	92392	PRASTER, ELEANOR C	18467 BELLFLOWER ST	ADELANTO	CA	92301
3103-341-04		VICTORVILLE	CA	92392	DESERT WIND LLC	3595 INLAND EMPIRE BLVD STE 2200	ONTARIO	CA	91764
3132-011-04		VICTORVILLE	CA	92392	CHEN, TAI JEN	2400 JUPITER RD APT C6	PLANO	TX	75074
3133-011-01		VICTORVILLE	CA	92392	TATE, W DANIEL	PO BOX 294610	PHELAN	CA	92329
3133-011-02		VICTORVILLE	CA	92392	BRENTWOOD FUNDING LLC	13911 PARK AVE STE 106	VICTORVILLE	CA	92392
3133-021-01		VICTORVILLE	CA	92392	HUI, DONNA	537 JAMESTOWN RD	BURBANK	CA	91504
3133-021-02		VICTORVILLE	CA	92392	BRENTWOOD FUNDING LLC	PO BOX 1748	VICTORVILLE	CA	92393
3133-051-02	BALDY MESA RD	VICTORVILLE	CA	92392	OVERHEAD INVESTMENT COMPANY LLC	4607 ORRINGTON RD	CORONA DEL MAR	CA	92625
3133-051-04	LUNA RD	VICTORVILLE	CA	92392	OVERHEAD INVESTMENT COMPANY LLC	4607 ORRINGTON RD	CORONA DEL MAR	CA	92625
3133-051-06	LA MESA RD	VICTORVILLE	CA	92392	OVERHEAD INVESTMENT COMPANY LLC	4607 ORRINGTON RD	CORONA DEL MAR	CA	92625
3133-151-01		VICTORVILLE	CA	92392	HOBSON, PHILIP PATRICK	11780 W LA DE DA LN	PRESCOTT	AZ	86305
3133-151-02		VICTORVILLE	CA	92392	HOBSON, PHILIP PATRICK	11780 W LA DE DA LN	PRESCOTT	AZ	86305
3133-151-03		VICTORVILLE	CA	92392	GILCHRIST, ROBERT	PO BOX 1316	RANCHO SANTA FE	CA	92067

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
3133-191-01		VICTORVILLE	CA	92392	GONZALES, PELAGIO B	8292 KATHERINE CLAIRE CT	SAN DIEGO	CA	92127
3133-191-02		VICTORVILLE	CA	92392	MARIN, REYNALDO C	16115 CRESTLINE DR	LA MIRADA	CA	90638
3133-201-01	12233 BALDY MESA RD	VICTORVILLE	CA	92392	FERNANDEZ, FRANK C	PO BOX 2284	VICTORVILLE	CA	92393
3133-201-03	9728 DUNCAN RD	VICTORVILLE	CA	92392	CHANG, MOON S	3671 W 6TH ST	LOS ANGELES	CA	90020
3133-201-12	12291 BALDY MESA RD # A	VICTORVILLE	CA	92392	BORRAYO, ARMANDO FLORES	12291 BALDY MESA RD	PHELAN	CA	92371
3136-011-01	9889 GOSS RD	VICTORVILLE	CA	92392	WORTHY, N MICHAEL	9889 GOODWIN DR	VICTORVILLE	CA	92392
3136-011-06		VICTORVILLE	CA	92392	WORTHY, MICHAEL N	23925 WAALEW RD	APPLE VALLEY	CA	92307
3136-011-07		VICTORVILLE	CA	92392	WORTHY, MICHAEL N	23925 WAALEW RD	APPLE VALLEY	CA	92307
3136-011-08		VICTORVILLE	CA	92392	RUISCH FAMILY TRUST	23925 WAALEW RD	APPLE VALLEY	CA	92307
3136-011-09		VICTORVILLE	CA	92392	RUISCH FAMILY TRUST	23925 WAALEW RD	APPLE VALLEY	CA	92307
3136-011-14		VICTORVILLE	CA	92392	FLESHNER, BRUCE	9722 SOLANO RD	VICTORVILLE	CA	92392
3136-011-15	9764 SOLANO RD	VICTORVILLE	CA	92392	MOORE, TONYA	9764 SOLANO RD	VICTORVILLE	CA	92392
3136-011-20	11081 BALDY MESA RD	VICTORVILLE	CA	92392	BACHWANSKY, NORMA	29 N LIMA ST	SIERRA MADRE	CA	91024
3136-011-24	11033 BALDY MESA RD	VICTORVILLE	CA	92392	COLLINS, TERRENCE E	11033 BALDY MESA RD	VICTORVILLE	CA	92392
3136-011-26		VICTORVILLE	CA	92392	RAMIREZ, GERARDO	10450 RODEO CIR	ADELANTO	CA	92301
3136-051-01	9710 MESA ST	VICTORVILLE	CA	92392	JIMENEZ JR, LAURO CARLOS	9710 MESA ST	VICTORVILLE	CA	92392
3136-051-02	9730 MESA ST	VICTORVILLE	CA	92392	BUSTAMONTE, GEORGE J	9730 MESA ST	VICTORVILLE	CA	92392
3136-051-10	9715 LA PANTO RD	VICTORVILLE	CA	92392	HARPER, CYNTHIA L	7282 EISENHOWER ST	VENTURA	CA	93003
3136-051-11	9735 LA PANTO RD	VICTORVILLE	CA	92392	BUENO, JOSE C	9735 LA PANTO RD	VICTORVILLE	CA	92392
0351-101-05		WRIGHTWOOD	CA	92397	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0351-101-06		WRIGHTWOOD	CA	92397	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0351-111-02		WRIGHTWOOD	CA	92397	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0351-111-03		WRIGHTWOOD	CA	92397	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0351-111-07		WRIGHTWOOD	CA	92397	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0351-111-11		WRIGHTWOOD	CA	92397	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0351-131-15		WRIGHTWOOD	CA	92397	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0350-071-33	CAJON BLVD	DEVORE	CA	92403	BAKEMAN, DAVID D	PO BOX 9346	SAN BERNARDINO	CA	92427
0147-251-09	1201 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	ROMAN CATHOLIC BISHOP OF SAN BDNO	1201 E HIGHLAND AVE	SAN BERNARDINO	CA	92404
0147-251-12	1191 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	ROMAN CATHOLIC BISHOP OF SB	1201 E HIGHLAND AVE	SAN BERNARDINO	CA	92404
0147-251-15	1255 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	EATON LANE LLC	25032 EATON LN	LAGUNA NIGUEL	CA	92677
0147-251-16	1275 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	COCKING, RONALD I	1275 E HIGHLAND AVE	SAN BERNARDINO	CA	92404
0147-251-19	1175 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	DMK HIGHLAND INVESTMENTS LLC	2825 VISTA DEL RIO	FALLBROOK	CA	92028

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0147-261-02	1321 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	LUNDY, DENISE M	PO BOX 3549	SAN BERNARDINO	CA	92413
0147-261-05	1299 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	BOBBITT, GARY M	1299 E HIGHLAND AVE	SAN BERNARDINO	CA	92404
0147-262-01	1355 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	PODSKALAN, JUDY	6595 MONTE VISTA DR	SAN BERNARDINO	CA	92404
0147-262-02	1373 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	KEVINPRO CORP	11063 PROVENCE LN	TUJUNGA	CA	91042
0147-271-03		SAN BERNARDINO	CA	92404	SARKARIA, DALJIT S	PO BOX 5766	ORANGE	CA	92863
0147-271-04	1427 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	ANKRUM, RICKY G	1427 E HIGHLAND AVE	SAN BERNARDINO	CA	92404
0147-271-05	1411 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	GHERIR, MAHER	1411 E HIGHLAND AVE	SAN BERNARDINO	CA	92404
0147-271-06	1411 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	GHERIR, MAHER	1411 E HIGHLAND AVE	SAN BERNARDINO	CA	92404
0147-271-07	1427 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	ANKRUM, RICKY G	1427 E HIGHLAND AVE	SAN BERNARDINO	CA	92404
0147-271-18	1565 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	WORLD, SAVINGS	PO BOX 2609	CARLSBAD	CA	92018
0147-271-20	1996 DEL ROSA AVE	SAN BERNARDINO	CA	92404	COULIS, NTINA	5398 SEPULVEDA AVE	SAN BERNARDINO	CA	92404
0147-271-23		SAN BERNARDINO	CA	92404	SARKARIA, DALJIT S	PO BOX 5766	ORANGE	CA	92863
0147-271-24		SAN BERNARDINO	CA	92404	SARKARIA, DALJIT S	PO BOX 5766	ORANGE	CA	92863
0147-271-29	1535 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	WORLD, SAVINGS	PO BOX 2609	CARLSBAD	CA	92018
0147-271-30		SAN BERNARDINO	CA	92404	WORLD, SAVINGS	PO BOX 2609	CARLSBAD	CA	92018
0147-271-31		SAN BERNARDINO	CA	92404	WORLD, SAVINGS	PO BOX 2609	CARLSBAD	CA	92018
0147-271-32	1445 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	COULIS, NTINA	5398 SEPULVEDA AVE	SAN BERNARDINO	CA	92404
0147-271-33	1435 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	COULIS, NTINA	5398 SEPULVEDA AVE	SAN BERNARDINO	CA	92404
0147-271-34	1505 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	VITAL ENTERPRISES	PO BOX 4349	ANAHEIM	CA	92803
0147-271-35	1499 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	FLORES, ROGER STEVEN	549 PALOMAR DR	PALOMAR PARK	CA	94062
0147-271-36	1575 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	TURNER, DAVID N	3155 SEDONA CT	ONTARIO	CA	91764
0150-371-04	2876 N GOLDEN AVE	SAN BERNARDINO	CA	92404	GRIER, SCOTT D	7447 NEW SALEM ST	SAN DIEGO	CA	92126
0150-371-05	2866 N GOLDEN AVE	SAN BERNARDINO	CA	92404	SPSSM INVESTMENTS VIII LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0150-371-06	2856 N GOLDEN AVE	SAN BERNARDINO	CA	92404	FEDERAL NATIONAL MORTGAGE ASSOCIATION	5401 N BEACH ST	FORT WORTH	TX	76137
0150-371-07	2846 N GOLDEN AVE	SAN BERNARDINO	CA	92404	MORA, JESUS C	2846 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0150-371-08	2836 N GOLDEN AVE	SAN BERNARDINO	CA	92404	SOSA, MARIO L CRUZ	2836 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0150-371-09	2826 N GOLDEN AVE	SAN BERNARDINO	CA	92404	BURRY, KIM JON	417 W FOOTHILL BLVD # 512	GLENDORA	CA	91741
0150-371-10	2816 N GOLDEN AVE	SAN BERNARDINO	CA	92404	CAZARES, FIDEL	2816 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0150-371-11	2806 N GOLDEN AVE	SAN BERNARDINO	CA	92404	TESSLER, JASON IRA	2098 BOGANS LAKE PATH	ATLANTA	GA	30338
0150-371-12	2805 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	PATEL, SHAILESH	1651 E WASHINGTON ST	COLTON	CA	92324
0150-371-13	2815 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	ALI, ABID	2815 N ALAMEDA AVE	SAN BERNARDINO	CA	92404

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0150-371-14	2825 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	DECKER, JOANNE	2825 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0150-371-15	2835 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	CAMPOS, TOMAS	2835 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0150-371-16	2845 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	MUNOZ, GEORGINA	2845 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0150-371-17	2855 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	KELLER, JACQUELINE E	2855 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0150-371-18	2865 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	DAVIS, DENNIS	7110 HIGHLAND SPRING LN	HIGHLAND	CA	92346
0150-371-20	2875 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	HUIZAR, EDUARDO	2875 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0150-381-12	1171 E 28TH ST	SAN BERNARDINO	CA	92404	WILLIAMS, CARL L	1171 E 28TH ST	SAN BERNARDINO	CA	92404
0150-381-13	1177 E 28TH ST	SAN BERNARDINO	CA	92404	LITTLETON, JOHN F	1177 E 28TH ST	SAN BERNARDINO	CA	92404
0150-381-14	1183 E 28TH ST	SAN BERNARDINO	CA	92404	CLEAVER GORDON W TR	1183 E 28TH ST	SAN BERNARDINO	CA	92404
0150-381-15	1189 E 28TH ST	SAN BERNARDINO	CA	92404	COBRA 28 NO 3 LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0150-381-16	1195 E 28TH ST	SAN BERNARDINO	CA	92404	GASCA, LUCAS	175 S EUCALYPTUS DR	ANAHEIM	CA	92808
0150-381-17	1196 E ALEXANDER AVE	SAN BERNARDINO	CA	92404	MORENO, GRICELDA C	1196 E ALEXANDER AVE	SAN BERNARDINO	CA	92404
0150-381-18	1190 E ALEXANDER AVE	SAN BERNARDINO	CA	92404	ORTEGA, BEATRICE C	1190 E ALEXANDER AVE	SAN BERNARDINO	CA	92404
0150-381-19	1184 E ALEXANDER AVE	SAN BERNARDINO	CA	92404	MARKTHALER, CHARLES R	PO BOX 2859	KETCHUM	ID	83340
0150-381-20	1178 E ALEXANDER AVE	SAN BERNARDINO	CA	92404	BARRALES, JOSE I	1178 E ALEXANDER AVE	SAN BERNARDINO	CA	92404
0150-381-21	1172 E ALEXANDER AVE	SAN BERNARDINO	CA	92404	JOHNSON FREDDIE J SR & ARTHUREE TR	134 AENIDA GRULLA	WALNUT	CA	91789
0150-382-12	1171 E ALEXANDER AVE	SAN BERNARDINO	CA	92404	ALLISON, ROBERT D	1171 E ALEXANDER AVE	SAN BERNARDINO	CA	92404
0150-382-13	1177 E ALEXANDER AVE	SAN BERNARDINO	CA	92404	BRANDSTETTER, PATRICIA	1177 E ALEXANDER AVE	SAN BERNARDINO	CA	92404
0150-382-14	1183 E ALEXANDER AVE	SAN BERNARDINO	CA	92404	BOGGS, BARBARA M	1183 E ALEXANDER AVE	SAN BERNARDINO	CA	92404
0150-382-15	1189 E ALEXANDER AVE	SAN BERNARDINO	CA	92404	BERRER, RICHARD W	1189 E ALEXANDER AVE	SAN BERNARDINO	CA	92404
0150-382-16	1195 E ALEXANDER AVE	SAN BERNARDINO	CA	92404	JUAREZ, MARIA ELENA	1195 E ALEXANDER AVE	SAN BERNARDINO	CA	92404
0150-382-17	1196 E 27TH ST	SAN BERNARDINO	CA	92404	SERRANO, CRISOSTO	1196 E 27TH ST	SAN BERNARDINO	CA	92404
0150-382-18	1190 E 27TH ST	SAN BERNARDINO	CA	92404	KARDASH, CHARLES N	1190 E 27TH ST	SAN BERNARDINO	CA	92404
0150-382-19	1184 E 27TH ST	SAN BERNARDINO	CA	92404	ODEN, DARRELL B	1184 E 27TH ST	SAN BERNARDINO	CA	92404
0150-382-20	1178 E 27TH ST	SAN BERNARDINO	CA	92404	CROMWELL, HENRIETTA D	1178 E 27TH ST	SAN BERNARDINO	CA	92404
0150-382-21	1172 E 27TH ST	SAN BERNARDINO	CA	92404	HERNANDEZ, JULIA C	1172 E 27TH ST	SAN BERNARDINO	CA	92404
0150-391-04	1215 E DATE ST	SAN BERNARDINO	CA	92404	CLAY, BETTY L	PO BOX 30324	SAN BERNARDINO	CA	92413
0150-391-10	1205 E DATE ST	SAN BERNARDINO	CA	92404	BAER, DONALD C	2463 45TH AVE	SAN FRANCISCO	CA	94116
0150-391-11	2737 N GOLDEN AVE	SAN BERNARDINO	CA	92404	FOX, DARYL	2737 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0150-392-06	1200 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	INFINITI ENTERPRISES LLC	3710 ROCKWELL AVE STE G	EL MONTE	CA	91731
0150-392-08	1200 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	INFINITI ENTERPRISES LLC	3710 ROCKWELL AVE STE G	EL MONTE	CA	91731

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0150-392-09		SAN BERNARDINO	CA	92404	RAINBOLT, WILLIAM R	3648 HEMLOCK DR	SAN BERNARDINO	CA	92404
0150-392-10		SAN BERNARDINO	CA	92404	RAINBOLT, WILLIAM M	3648 HEMLOCK DR	SAN BERNARDINO	CA	92404
0150-392-11	1250 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	LOTFIMOGHADDAS, MOSHEN	12445 BENTON DR UNIT 1	RANCHO CUCAMONGA	CA	91739
0150-401-02	2881 N GOLDEN AVE	SAN BERNARDINO	CA	92404	LEE, GENII C	2881 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0150-401-03	2879 N GOLDEN AVE	SAN BERNARDINO	CA	92404	JONES, COLVER H	2879 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0150-401-06		SAN BERNARDINO	CA	92404	BNSF RAILWAY	2650 LOU MENK DR	FORT WORTH	TX	76131
0150-401-07		SAN BERNARDINO	CA	92404	BNSF RAILWAY	2650 LOU MENK DR	FORT WORTH	TX	76131
0150-401-08		SAN BERNARDINO	CA	92404	LEE, GENII C	2881 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0150-411-02	1254 ORCHID DR	SAN BERNARDINO	CA	92404	GRENOWICH, MINA P	1254 ORCHID DR	SAN BERNARDINO	CA	92404
0150-411-03	1234 ORCHID DR	SAN BERNARDINO	CA	92404	HOFFMAN, RICHARD J	1234 ORCHID DR	SAN BERNARDINO	CA	92404
0150-411-04	1224 ORCHID DR	SAN BERNARDINO	CA	92404	SAHAGUN, ALEJANDRO	1224 ORCHID DR	SAN BERNARDINO	CA	92404
0150-411-05	1204 ORCHID DR	SAN BERNARDINO	CA	92404	WILLIAMS, ALFRED RAY	1265 CAHUILLA ST	COLTON	CA	92324
0150-411-06	1205 PUMALO ST	SAN BERNARDINO	CA	92404	FARRIS, CECIL P	1205 PUMALO ST	SAN BERNARDINO	CA	92404
0150-411-07	1225 PUMALO ST	SAN BERNARDINO	CA	92404	CABALLERO, MARCO ANTONIO	1225 PUMALO ST	SAN BERNARDINO	CA	92404
0150-411-08	1235 PUMALO ST	SAN BERNARDINO	CA	92404	BRAME, CHARLES L	PO BOX 8521	RANCHO CUCAMONGA	CA	91701
0150-411-09	1255 PUMALO ST	SAN BERNARDINO	CA	92404	HILYARD, GORDON E	1255 PUMALO ST	SAN BERNARDINO	CA	92404
0150-412-01	2395 N GOLDEN AVE	SAN BERNARDINO	CA	92404	ORONA, JOEL	2395 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0150-412-02	1225 ORCHID DR	SAN BERNARDINO	CA	92404	LIANG, KAREN YUN	2551 CENTRAL AVE	SOUTH EL MONTE	CA	91733
0150-412-03	1235 ORCHID DR	SAN BERNARDINO	CA	92404	WASKEL, WILLIAM R	1235 ORCHID DR	SAN BERNARDINO	CA	92404
0150-412-04	1255 ORCHID DR	SAN BERNARDINO	CA	92404	MAI, ZHEN HE	30 LA SIERRA DR	POMONA	CA	91766
0150-431-01	1244 E 25TH ST	SAN BERNARDINO	CA	92404	SMITH, GAIL A	1244 E 25TH ST	SAN BERNARDINO	CA	92404
0150-431-02	1234 E 25TH ST	SAN BERNARDINO	CA	92404	MARTINEZ, ALBERT	1234 E 25TH ST	SAN BERNARDINO	CA	92404
0150-431-03	1224 E 25TH ST	SAN BERNARDINO	CA	92404	ANDRADE, RICHARD A	1224 E 25TH ST	SAN BERNARDINO	CA	92404
0150-431-04	1204 E 25TH ST	SAN BERNARDINO	CA	92404	FERNANDEZ, WILLIAM A	1204 E 25TH ST	SAN BERNARDINO	CA	92404
0150-431-05	1205 E 26TH ST	SAN BERNARDINO	CA	92404	STARLITE MGMT VI LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0150-431-06	1225 E 26TH ST	SAN BERNARDINO	CA	92404	SPSSM INVESTMENTS VI LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0150-431-07	1235 E 26TH ST	SAN BERNARDINO	CA	92404	KEHEW R N JR & M F FAMILY REV TRUST	1235 E 26TH ST	SAN BERNARDINO	CA	92404
0150-431-08	1255 E 26TH ST	SAN BERNARDINO	CA	92404	BENNETT, JOSEPH D	1255 E 26TH ST	SAN BERNARDINO	CA	92404
0150-432-14	1254 E 26TH ST	SAN BERNARDINO	CA	92404	MANTEI, KENNETH A	1254 E 26TH ST	SAN BERNARDINO	CA	92404

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0150-432-15	1234 E 26TH ST	SAN BERNARDINO	CA	92404	ZLAKET, MICHAEL LEE	1234 E 26TH ST	SAN BERNARDINO	CA	92404
0150-432-16	1224 E 26TH ST	SAN BERNARDINO	CA	92404	HAMELL, FRANK E	1844 PACIFIC TERRACE DR	LAS VEGAS	NV	89128
0150-432-17	1204 E 26TH ST	SAN BERNARDINO	CA	92404	VACATIONLAND LLC	1204 E 26TH ST	SAN BERNARDINO	CA	92404
0150-433-05	1254 PUMALO ST	SAN BERNARDINO	CA	92404	MOLINA, ARMANDO	1264 PUMALO ST	SAN BERNARDINO	CA	92404
0150-433-06	1234 PUMALO ST	SAN BERNARDINO	CA	92404	LOUDEN LLC	1999 HARRISON ST FL 22ND	OAKLAND	CA	94612
0150-433-07	1224 PUMALO ST	SAN BERNARDINO	CA	92404	MARCINIAK, RICHARD B	5496 KATHERINE AVE	SHERMAN OAKS	CA	91401
0150-433-08	1204 PUMALO ST	SAN BERNARDINO	CA	92404	THR CALIFORNIA LP	291 CORPORATE TERRACE CIR	CORONA	CA	92879
0150-433-09	1205 E 25TH ST	SAN BERNARDINO	CA	92404	CORY, LARRY J	1295 E 25TH ST	SAN BERNARDINO	CA	92404
0150-433-10	1225 E 25TH ST	SAN BERNARDINO	CA	92404	SINGH, GURPREET	1225 E 25TH ST	SAN BERNARDINO	CA	92404
0150-433-11	1235 E 25TH ST	SAN BERNARDINO	CA	92404	OSGOOD, BARBARA A	PO BOX 30121	SAN BERNARDINO	CA	92413
0150-433-12	1255 E 25TH ST	SAN BERNARDINO	CA	92404	KRATOCHVIL, KEVIN E	1255 E 25TH ST	SAN BERNARDINO	CA	92404
0150-461-02	1598 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	BEVERLY WESTWOOD MORTGAGE CO	18627 BROOKHURST ST # 388	FOUNTAIN VALLEY	CA	92708
0150-461-03	1488 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	TRIE, JIMMY C	29138 LAKEVIEW LN	HIGHLAND	CA	92346
0150-461-04	1470 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	HUROSEN PROPERTIES INC	1887 BUSINESS CENTER DR STE 1B	SAN BERNARDINO	CA	92408
0150-461-05	1552 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	STATER BROS MARKETS	3750 UNIVERSITY AVE # 6TH	RIVERSIDE	CA	92501
0150-461-06	1540 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	LONGS DRUG STORES INC	1 CVS DR	WOONSOCKET	RI	2895
0150-461-07	1556 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	STATER BROS MARKETS	3750 UNIVERSITY AVE # 6TH	RIVERSIDE	CA	92501
0150-462-03	1644 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	PIZZA PLUS PROPERTIES INC	330 6TH ST STE 103	REDLANDS	CA	92374
0150-462-04	1634 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	ROBERTSON INVESTMENT PROPERTIES LLC	PO BOX 1159	DEERFIELD	IL	60015
0150-471-02	1398 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	TOFAN, ALLEN	19751 DORADO DR	TRABUCO CANYON	CA	92679
0150-471-04	1320 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	RAINBOLT, WILLIAM M	3648 HEMLOCK DR	SAN BERNARDINO	CA	92404
0150-471-05	1312 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	RAINBOLT, WILLIAM M	3648 HEMLOCK DR	SAN BERNARDINO	CA	92404
0150-471-06		SAN BERNARDINO	CA	92404	RAINBOLT, WILLIAM M	3648 HEMLOCK DR	SAN BERNARDINO	CA	92404
0150-471-07	1300 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	RAINBOLT, WILLIAM M	3648 HEMLOCK DR	SAN BERNARDINO	CA	92404
0150-471-08	1264 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	RAINBOLT, WILLIAM M	3648 HEMLOCK DR	SAN BERNARDINO	CA	92404
0150-471-09	2222 MOUNTAIN AVE	SAN BERNARDINO	CA	92404	COLIMA APARTMENT LLC	PO BOX 1007	REDLANDS	CA	92373
0150-471-11	1386 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	SAHKAR HOSPITALITY CORP	1386 E HIGHLAND AVE	SAN BERNARDINO	CA	92404
0150-471-12	1386 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	SAHKAR HOSPITALITY CORP	1386 E HIGHLAND AVE	SAN BERNARDINO	CA	92404
0150-471-13	1380 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	SAN BERNARDINO MASONIC TEMPLE ASSOCIATIO	PO BOX 9958	SAN BERNARDINO	CA	92427

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0150-472-01		SAN BERNARDINO	CA	92404	HYROSEN PROPERTIES INC	1887 BUSINESS CENTER DR STE 1B	SAN BERNARDINO	CA	92408
0150-472-03	1408 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	HIGHLAND PLAZA LLC	PO BOX 3028	SAN BERNARDINO	CA	92413
0150-472-04	1430 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	HIGHLAND PLAZA LLC	PO BOX 3028	SAN BERNARDINO	CA	92413
0150-472-05	1444 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	HIGHLAND PLAZA LLC	PO BOX 3028	SAN BERNARDINO	CA	92413
0150-472-06	1464 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	KAHROS, KOSTADINOS	5826 JUMILLA AVE	WOODLAND HILLS	CA	91367
0151-211-02	KENDALL	SAN BERNARDINO	CA	92404	FOXDALE ASSOCIATES LTD	851 BURLWAY RD STE 520	BURLINGAME	CA	94010
0151-211-03	KENDALL	SAN BERNARDINO	CA	92404	FOXDALE ASSOCIATES LTD	851 BURLWAY RD STE 520	BURLINGAME	CA	94010
0151-211-04	KENDALL	SAN BERNARDINO	CA	92404	FOXDALE ASSOCIATES LTD	851 BURLWAY RD STE 520	BURLINGAME	CA	94010
0151-211-05	KENDALL	SAN BERNARDINO	CA	92404	FOXDALE ASSOCIATES LTD	851 BURLWAY RD STE 520	BURLINGAME	CA	94010
0151-211-06	KENDALL	SAN BERNARDINO	CA	92404	FOXDALE ASSOCIATES LTD	851 BURLWAY RD STE 520	BURLINGAME	CA	94010
0153-201-14		SAN BERNARDINO	CA	92404	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0153-251-11		SAN BERNARDINO	CA	92404	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0153-293-22	1173 E LYNWOOD DR	SAN BERNARDINO	CA	92404	CARDENAS, LORENZO	18211 SLOVER AVE	BLOOMINGTON	CA	92316
0153-293-28	1189 E LYNWOOD DR	SAN BERNARDINO	CA	92404	NINO, SAMI	22421 BIRCHCREST	MISSION VIEJO	CA	92692
0153-293-43	2996 N GOLDEN AVE	SAN BERNARDINO	CA	92404	CALIANNO, FRANK JR	2996 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0153-293-45	2992 N GOLDEN AVE	SAN BERNARDINO	CA	92404	PAZSOLDAN, PEDRO L	1462 E PIONEER DR	WEST COVINA	CA	91791
0153-293-50	3056 N GOLDEN AVE	SAN BERNARDINO	CA	92404	FITZGERALD, SCOTT	3056 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0153-293-51	3050 N GOLDEN AVE	SAN BERNARDINO	CA	92404	FAZ, SYLVIA	6659 ELM AVE	SAN BERNARDINO	CA	92404
0153-293-52	3006 N GOLDEN AVE	SAN BERNARDINO	CA	92404	SKKR LLC	PO BOX 3785	PALOS VERDES PENINSULA	CA	90274
0153-293-53	2984 N GOLDEN AVE	SAN BERNARDINO	CA	92404	NAJERA, G JANNETTE	2984 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0153-293-54	2974 N GOLDEN AVE	SAN BERNARDINO	CA	92404	STURM, EMILY ANN	2974 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0153-293-55	3024 N GOLDEN AVE	SAN BERNARDINO	CA	92404	WILLIAMS, HAROLD L	3024 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0153-293-56	1172 HOLLY VISTA BLVD	SAN BERNARDINO	CA	92404	CARTY, JAMES P	1172 HOLLY VISTA BLVD	SAN BERNARDINO	CA	92404
0153-293-57	3049 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	STANLEY, ROBIN D	3049 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0153-293-58		SAN BERNARDINO	CA	92404	NINO, SAMI	22421 BIRCHCREST	MISSION VIEJO	CA	92692
0153-293-60	3045 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	FUENTES, MAXIMO D	3045 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0153-293-61	3059 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	FISCHBACHER, PHILLIP H	3059 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0153-293-62	3015 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	LAMBERT, KATHARINA B	3015 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0153-293-63	3025 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	HERNANDEZ, MARY E	3025 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0153-293-64	2995 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	CUARON, ROBERT	2995 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0153-293-65	2983 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	CARTY, JAMES P	1172 HOLLY VISTA BLVD	SAN BERNARDINO	CA	92404

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0153-293-66	3044 N GOLDEN AVE	SAN BERNARDINO	CA	92404	MENDEZ, ANICETO	3044 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0153-293-67	3035 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	HIDALGO, ROBERT	3035 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0153-293-68	3066 N GOLDEN AVE	SAN BERNARDINO	CA	92404	KUMANSKI, HARRY D	PO BOX 1106	BANNING	CA	92220
0153-293-69		SAN BERNARDINO	CA	92404	TOLBIRT, MARION M	280 E 42ND ST	SAN BERNARDINO	CA	92404
0153-313-07	2959 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	SHOUCAIR, SAM	2959 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0153-313-08	ALAMEDA AVE	SAN BERNARDINO	CA	92404	GRECIAN, DAROLD L	1315 E MARSHALL BLVD SPC 109	SAN BERNARDINO	CA	92404
0153-321-02	1105 E 39TH ST	SAN BERNARDINO	CA	92404	DENNY, TONEY	1105 E 39TH ST	SAN BERNARDINO	CA	92404
0153-321-03	1107 E 39TH ST	SAN BERNARDINO	CA	92404	MINER, RALPH W	4040 PIEDMONT DR SPC 305	HIGHLAND	CA	92346
0153-321-04	1117 E 39TH ST	SAN BERNARDINO	CA	92404	GOMEZ, NORMA	380 W 29TH ST	SAN BERNARDINO	CA	92405
0153-321-05	1119 E 39TH ST	SAN BERNARDINO	CA	92404	DUNBAR, ANN MARIE	1119 E 39TH ST	SAN BERNARDINO	CA	92404
0153-321-06	1123 E 39TH ST	SAN BERNARDINO	CA	92404	HAYS, THOMAS	PO BOX 3582	SAN BERNARDINO	CA	92413
0153-321-23	1124 ECHO DR	SAN BERNARDINO	CA	92404	MCKINSEY, GAIL JAY	1124 ECHO DR	SAN BERNARDINO	CA	92404
0153-321-24	1120 ECHO DR	SAN BERNARDINO	CA	92404	SANCHEZ, ISRAEL	1120 ECHO DR	SAN BERNARDINO	CA	92404
0153-321-25	1112 ECHO DR	SAN BERNARDINO	CA	92404	CLAYTON, RICHARD	24556 REDLANDS BLVD	LOMA LINDA	CA	92354
0153-321-26	3822 DEL REY DR	SAN BERNARDINO	CA	92404	BUTLER, CARL A	3822 DEL REY DR	SAN BERNARDINO	CA	92404
0153-321-27	3816 DEL REY DR	SAN BERNARDINO	CA	92404	TROY, PATRICIA A	3816 DEL REY DR	SAN BERNARDINO	CA	92404
0153-321-28	3808 DEL REY DR	SAN BERNARDINO	CA	92404	BLASER, PATRICIA A	3808 DEL REY DR	SAN BERNARDINO	CA	92404
0153-322-01	1119 ECHO DR	SAN BERNARDINO	CA	92404	HILL, SHAWN	1119 ECHO DR	SAN BERNARDINO	CA	92404
0153-322-02	1123 ECHO DR	SAN BERNARDINO	CA	92404	LAGUNA, JOSE ARMANDO	1123 ECHO DR	SAN BERNARDINO	CA	92404
0153-322-19	1124 E 38TH ST	SAN BERNARDINO	CA	92404	WILEY, ROBERT B	PO BOX 334	HIGHLAND	CA	92346
0153-322-20	1120 E 38TH ST	SAN BERNARDINO	CA	92404	WAGGONER, GLORIA	1120 E 38TH ST	SAN BERNARDINO	CA	92404
0153-323-01	3798 DEL REY DR	SAN BERNARDINO	CA	92404	BARRY, MAYRE L	2206 N LAUREL WAY	UPLAND	CA	91784
0153-323-02	3786 DEL REY DR	SAN BERNARDINO	CA	92404	TIRRELL, SCOTT W	3786 DEL REY DR	SAN BERNARDINO	CA	92404
0153-323-03	3778 DEL REY DR	SAN BERNARDINO	CA	92404	HANSEN, NORMAN S	97666 N BANK CHETCO	BROOKINGS	OR	97415
0153-323-04	1111 E 38TH ST	SAN BERNARDINO	CA	92404	CHITTY, DAVID M	1111 E 38TH ST	SAN BERNARDINO	CA	92404
0153-323-05	1119 E 38TH ST	SAN BERNARDINO	CA	92404	TORBITT, LOUIS A	1119 E 38TH ST	SAN BERNARDINO	CA	92404
0153-323-06	1123 E 38TH ST	SAN BERNARDINO	CA	92404	PINE, CHARLES L	1123 E 38TH ST	SAN BERNARDINO	CA	92404
0153-323-23	1124 MESA VERDE AVE	SAN BERNARDINO	CA	92404	LE, SON HENARY	4140 NEWPORT CT	SAN BERNARDINO	CA	92404
0153-323-24	1120 MESA VERDE AVE	SAN BERNARDINO	CA	92404	BAILEY, MARY K	1120 MESA VERDE AVE	SAN BERNARDINO	CA	92404
0153-323-25	1112 MESA VERDE AVE	SAN BERNARDINO	CA	92404	CRUZ, JOSE	1112 MESA VERDE AVE	SAN BERNARDINO	CA	92404
0153-323-26	3722 DEL REY DR	SAN BERNARDINO	CA	92404	RIVERO, ELADIO V	435 E MESA DR	RIALTO	CA	92376

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0153-323-27	3716 DEL REY DR	SAN BERNARDINO	CA	92404	FRIDENBERG, JERRY T	PO BOX 3244	SAN BERNARDINO	CA	92413
0153-323-28	3708 DEL REY DR	SAN BERNARDINO	CA	92404	EBERHART, RODNEY J	3708 DEL REY DR	SAN BERNARDINO	CA	92404
0153-324-01	1119 MESA VERDE AVE	SAN BERNARDINO	CA	92404	ALFARO, CARLOS H	1119 MESA VERDE AVE	SAN BERNARDINO	CA	92404
0153-324-02	1123 MESA VERDE AVE	SAN BERNARDINO	CA	92404	LUCERO, VIVIAN M	1123 MESA VERDE AVE	SAN BERNARDINO	CA	92404
0153-324-19	1124 E 37TH ST	SAN BERNARDINO	CA	92404	QUINTERO, JOSE G	1124 E 37TH ST	SAN BERNARDINO	CA	92404
0153-324-20	1120 E 37TH ST	SAN BERNARDINO	CA	92404	RODRIGUEZ, ANITA J	1120 E 37TH ST	SAN BERNARDINO	CA	92404
0153-325-01	3698 DEL REY DR	SAN BERNARDINO	CA	92404	ROBINSON, MELVIN T	3698 DEL REY DR	SAN BERNARDINO	CA	92404
0153-325-02	3686 DEL REY DR	SAN BERNARDINO	CA	92404	CLARK, DAVID H	3686 DEL REY DR	SAN BERNARDINO	CA	92404
0153-325-03	3678 DEL REY DR	SAN BERNARDINO	CA	92404	ROUNDY, GORDON W	3678 DEL REY DR	SAN BERNARDINO	CA	92404
0153-325-04	1111 E 37TH ST	SAN BERNARDINO	CA	92404	KOLEHMAINEN, KAREN	1111 E 37TH ST	SAN BERNARDINO	CA	92404
0153-325-05	1119 E 37TH ST	SAN BERNARDINO	CA	92404	MOFFITT, RONALD RAY	1119 E 37TH ST	SAN BERNARDINO	CA	92404
0153-325-06	1123 E 37TH ST	SAN BERNARDINO	CA	92404	ARAGON, DAVID	1123 E 37TH ST	SAN BERNARDINO	CA	92404
0153-325-23	1124 MONTROSE AVE	SAN BERNARDINO	CA	92404	TIGER TEMPLE 12 LLC	PO BOX 4607	ORANGE	CA	92863
0153-325-24	1120 MONTROSE AVE	SAN BERNARDINO	CA	92404	MOFFITT, FAITH I	1120 MONTROSE AVE	SAN BERNARDINO	CA	92404
0153-325-25	1112 MONTROSE AVE	SAN BERNARDINO	CA	92404	DALLIN LLC	5440 TRABUCO RD STE 200	IRVINE	CA	92620
0153-325-26	3622 DEL REY DR	SAN BERNARDINO	CA	92404	EARHART, DAVID ALLEN	3622 DEL REY DR	SAN BERNARDINO	CA	92404
0153-325-27	3616 DEL REY DR	SAN BERNARDINO	CA	92404	TREJO, RODOLFO	3616 DEL REY DR	SAN BERNARDINO	CA	92404
0153-325-28	3608 DEL REY DR	SAN BERNARDINO	CA	92404	COBRA 28 NO 4 LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0153-331-01	1119 MONTROSE AVE	SAN BERNARDINO	CA	92404	HENDRICKSEN, PAMELA RAE	1119 MONTROSE AVE	SAN BERNARDINO	CA	92404
0153-331-02	1123 MONTROSE AVE	SAN BERNARDINO	CA	92404	VELAZQUEZ, DANNY	1123 MONTROSE AVE	SAN BERNARDINO	CA	92404
0153-331-18	1124 E 36TH ST	SAN BERNARDINO	CA	92404	CARLSON, GARY	22731 RUNNING RABBIT CT	CANYON LAKE	CA	92587
0153-331-19	1120 E 36TH ST	SAN BERNARDINO	CA	92404	IDIGO, ROBERT	1120 E 36TH ST	SAN BERNARDINO	CA	92404
0153-332-01	3598 DEL REY DR	SAN BERNARDINO	CA	92404	MANGUM, JAMES	3598 DEL REY DR	SAN BERNARDINO	CA	92404
0153-332-02	3586 DEL REY DR	SAN BERNARDINO	CA	92404	SACK, ANN G	3586 DEL REY DR	SAN BERNARDINO	CA	92404
0153-332-03	3578 DEL REY DR	SAN BERNARDINO	CA	92404	LANDRUS, STEVEN R	1666 MESA VERDE AVE	SAN BERNARDINO	CA	92404
0153-332-04	1111 E 36TH ST	SAN BERNARDINO	CA	92404	MONTANO, CHARLOTTE	1111 E 36TH ST	SAN BERNARDINO	CA	92404
0153-332-05	1119 E 36TH ST	SAN BERNARDINO	CA	92404	KEVARI CLIFFORD D TR	28814 ORANGEWOOD RD	HIGHLAND	CA	92346
0153-332-06	1123 E 36TH ST	SAN BERNARDINO	CA	92404	NEVAREZ, ISMAEL	28375 CARRIAGE HILL DR	HIGHLAND	CA	92346
0153-332-28	1124 BERNARD WAY	SAN BERNARDINO	CA	92404	DE AVILA, ROCIO	1124 BERNARD WAY	SAN BERNARDINO	CA	92404
0153-332-29	1120 BERNARD WAY	SAN BERNARDINO	CA	92404	DOSHI, NEIL	PO BOX 6545	ORANGE	CA	92863
0153-332-30	1112 BERNARD WAY	SAN BERNARDINO	CA	92404	SANTOYA, ARTHUR	22990 MERLE CT	GRAND TERRACE	CA	92313

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0153-332-31	3572 DEL REY DR	SAN BERNARDINO	CA	92404	SCHOENFELD, LEON B	3381 BLACK OAK DR	ROCKLIN	CA	95765
0153-332-32	3564 DEL REY DR	SAN BERNARDINO	CA	92404	SEAY REVOCABLE FAMILY TR	14846 ARROW HWY	BALDWIN PARK	CA	91706
0153-332-33	3552 DEL REY DR	SAN BERNARDINO	CA	92404	GP TEAM INVESTMENTS LLC	245 N RIVESIDE AVE	RIALTO	CA	92376
0153-332-34	3540 DEL REY DR	SAN BERNARDINO	CA	92404	ENCINAS, AARON ALFRED	3540 DEL REY DR	SAN BERNARDINO	CA	92404
0153-332-35	3534 DEL REY DR	SAN BERNARDINO	CA	92404	ESCOBAR, CARL S	3534 DEL REY DR	SAN BERNARDINO	CA	92404
0153-332-36	3522 DEL REY DR	SAN BERNARDINO	CA	92404	GOULD, JOHN	3522 DEL REY DR	SAN BERNARDINO	CA	92404
0153-332-37	3516 DEL REY DR	SAN BERNARDINO	CA	92404	SPSSM INVESTMENTS LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0153-332-38	3508 DEL REY DR	SAN BERNARDINO	CA	92404	ODEN, MICHAEL A	268 W HOSPITALITY LN STE 425	SAN BERNARDINO	CA	92408
0153-333-01	3507 DEL REY DR	SAN BERNARDINO	CA	92404	LOPEZ, ENRIQUE TORRES	3507 DEL REY DR	SAN BERNARDINO	CA	92404
0153-333-02	3515 DEL REY DR	SAN BERNARDINO	CA	92404	AGUIRRE, AMELIA	3515 DEL REY DR	SAN BERNARDINO	CA	92404
0153-333-03	3521 DEL REY DR	SAN BERNARDINO	CA	92404	MAYA VENTURES LLC	105 GREEN TREE TAVERN RD	NORTH WALES	PA	19454
0153-333-04	3533 DEL REY DR	SAN BERNARDINO	CA	92404	MARIN, JONATHAN A	3533 DEL REY DR	SAN BERNARDINO	CA	92404
0153-333-05	3539 DEL REY DR	SAN BERNARDINO	CA	92404	HERRERA, JOSE	3539 DEL REY DR	SAN BERNARDINO	CA	92404
0153-333-06	3551 DEL REY DR	SAN BERNARDINO	CA	92404	RICE, PATRICIA L	3551 DEL REY DR	SAN BERNARDINO	CA	92404
0153-333-07	3563 DEL REY DR	SAN BERNARDINO	CA	92404	BOLTON, VIRGINIA R	3563 DEL REY DR	SAN BERNARDINO	CA	92404
0153-334-01	1107 E 35TH ST	SAN BERNARDINO	CA	92404	GOLD, DAVID	9150 W PICO BLVD SUI # 201	LOS ANGELES	CA	90035
0153-334-02	1115 E 35TH ST	SAN BERNARDINO	CA	92404	LOPEZ, RAYMUNDO	1115 E 35TH ST	SAN BERNARDINO	CA	92404
0153-334-03	1123 E 35TH ST	SAN BERNARDINO	CA	92404	BRONSTRUP, RICHARD HAROLD	3255 VALENCIA AVE	SAN BERNARDINO	CA	92404
0153-334-04	1131 E 35TH ST	SAN BERNARDINO	CA	92404	SAMANIEGO, DELIA	1131 E 35TH ST	SAN BERNARDINO	CA	92404
0153-334-05	1139 E 35TH ST	SAN BERNARDINO	CA	92404	COLLINS, RICK	1139 E 35TH ST	SAN BERNARDINO	CA	92404
0153-341-01	3194 CASA LOMA DR	SAN BERNARDINO	CA	92404	COBRA 28 #2 LIMITED PARTNERSHIP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0153-341-02	3188 CASA LOMA DR	SAN BERNARDINO	CA	92404	LOUDEN LLC	620 NEWPORT CENTER DR FL 8TH	NEWPORT BEACH	CA	92660
0153-341-03	3184 CASA LOMA DR	SAN BERNARDINO	CA	92404	STARLITE MGMT II LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0153-342-12	3185 CASA LOMA DR	SAN BERNARDINO	CA	92404	BALLIERS, CLYDE	33978 WILDWOOD CANYON RD	YUCAIPA	CA	92399
0154-242-02	194 E 40TH ST	SAN BERNARDINO	CA	92404	AMERICAN LEGION POST NO 777 R O REED	194 E 40TH ST	SAN BERNARDINO	CA	92404
0154-242-03	194 E 40TH ST	SAN BERNARDINO	CA	92404	AMERICAN LEGION POST NO 777 R O REED	194 E 40TH ST	SAN BERNARDINO	CA	92404

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0154-242-05	156 E 40TH ST	SAN BERNARDINO	CA	92404	LAKES, ROBERT L	5734 N PERSHING AVE	SAN BERNARDINO	CA	92407
0154-242-21	176 E 40TH ST	SAN BERNARDINO	CA	92404	MONSON AL & DOROTHY TR 3/15/84-EST	10060 WHITEWATER RD	MORENO VALLEY	CA	92557
0154-242-22	164 E 40TH ST	SAN BERNARDINO	CA	92404	LAKES, GARY M	34981 HEATHERVIEW DR	YUCAIPA	CA	92399
0154-242-23	170 E 40TH ST	SAN BERNARDINO	CA	92404	CHURCH OF JESUS CHRIST/APOSTOLIC	PO BOX 90785	SAN BERNARDINO	CA	92427
0154-242-41	4080 SEPULVEDA AVE	SAN BERNARDINO	CA	92404	SKG PROPERTIES LLC	8491 W SUNSET BLVD # 378	LOS ANGELES	CA	90069
0154-252-01	207 E 41ST ST	SAN BERNARDINO	CA	92404	LA, DE EMILIANO	207 E 41ST ST	SAN BERNARDINO	CA	92404
0154-252-02	219 E 41ST ST	SAN BERNARDINO	CA	92404	MORENO, DANIEL J	1043 W SUNCREST CIR	SAN BERNARDINO	CA	92407
0154-252-03	223 E 41ST ST	SAN BERNARDINO	CA	92404	GOOD, CECELIA L	223 E 41ST ST	SAN BERNARDINO	CA	92404
0154-252-04	227 E 41ST ST	SAN BERNARDINO	CA	92404	ROMERO JR, ENRIQUE	227 E 41ST ST	SAN BERNARDINO	CA	92404
0154-252-05	231 E 41ST ST	SAN BERNARDINO	CA	92404	CHARLTON, LOUISE G	231 E 41ST ST	SAN BERNARDINO	CA	92404
0154-252-06	235 E 41ST ST	SAN BERNARDINO	CA	92404	FARKAS, TIBOR	5056 RIO BRAVO DR	BANNING	CA	92220
0154-252-07	239 E 41ST ST	SAN BERNARDINO	CA	92404	ARANDA, SAUL	239 E 41ST ST	SAN BERNARDINO	CA	92404
0154-252-08	243 E 41ST ST	SAN BERNARDINO	CA	92404	GARCIA, NINO	4308 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92407
0154-252-09	247 E 41ST ST	SAN BERNARDINO	CA	92404	MALDONADO, JOSE G	5365 WHITTIER BLVD	LOS ANGELES	CA	90022
0154-252-14	232 E 40TH ST	SAN BERNARDINO	CA	92404	FRANCHISE REALTY INTERSTATE CORP	PO BOX 182571	COLUMBUS	OH	43218
0154-252-15	228 E 40TH ST	SAN BERNARDINO	CA	92404	BZ PROPERTY SERVICES	228 E 40TH ST	SAN BERNARDINO	CA	92404
0154-252-16	224 E 40TH ST	SAN BERNARDINO	CA	92404	CISNEROS, VICTOR	21900 BARTON RD STE 105	GRAND TERRACE	CA	92313
0154-252-17		SAN BERNARDINO	CA	92404	CISNEROS, VICTOR M	224 E 40TH ST	SAN BERNARDINO	CA	92404
0154-252-20	4053 SEPULVEDA AVE	SAN BERNARDINO	CA	92404	HERNANDEZ, MARTHA	4053 SEPULVEDA AVE	SAN BERNARDINO	CA	92404
0154-252-21	4075 SEPULVEDA AVE	SAN BERNARDINO	CA	92404	CETNAROWSKI, PATRICIA	6716 S FIGUEROA ST	LOS ANGELES	CA	90003
0154-252-22	202 E 40TH ST	SAN BERNARDINO	CA	92404	BRAL, ESHAK	PO BOX 491099	LOS ANGELES	CA	90049
0154-252-23	202 E 40TH ST	SAN BERNARDINO	CA	92404	BRAL, ESHAK	PO BOX 491099	LOS ANGELES	CA	90049
0154-252-24	240 E 40TH ST	SAN BERNARDINO	CA	92404	CUSHMAN, STEFAN	PO BOX 182571	COLUMBUS	OH	43218
0154-254-01	251 E 41ST ST	SAN BERNARDINO	CA	92404	SANCHEZ, ANTONIO	251 E 41ST ST	SAN BERNARDINO	CA	92404
0154-254-02	255 E 41ST ST	SAN BERNARDINO	CA	92404	NELSON, BRIAN DEAN	255 E 41ST ST	SAN BERNARDINO	CA	92404
0154-254-03	259 E 41ST ST	SAN BERNARDINO	CA	92404	GRIGORYAN, VAHAN	1540 HILLSIDE	GLENDALE	CA	91201
0154-254-04	263 E 41ST ST	SAN BERNARDINO	CA	92404	CENTOFANTI, ALESSANDRO	3934 MODESTO DR	SAN BERNARDINO	CA	92404
0154-254-05	267 E 41ST ST	SAN BERNARDINO	CA	92404	PAPPAS, LOUIS	272 E 41ST ST	SAN BERNARDINO	CA	92404
0154-254-06	271 E 41ST ST	SAN BERNARDINO	CA	92404	OLIVAS, ARMANDO E	5373 PARK LN	SAN BERNARDINO	CA	92404
0154-254-07	275 E 41ST ST	SAN BERNARDINO	CA	92404	TOFFOLLA, RICHARD B	PO BOX 11253	SAN BERNARDINO	CA	92423
0154-254-08	279 E 41ST ST	SAN BERNARDINO	CA	92404	LANCASTER, CYNTHIA MAYE	4581 CALIFORNIA AVE	NORCO	CA	92860
0154-254-09	283 E 41ST ST	SAN BERNARDINO	CA	92404	LIU, MASON	16300 S GROVE AVE	ONTARIO	CA	91761

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0154-254-10	292 E 40TH ST	SAN BERNARDINO	CA	92404	OUT TO SEA LP	PO BOX 507	REDLANDS	CA	92373
0154-254-11	292 E 40TH ST	SAN BERNARDINO	CA	92404	OUT TO SEA LP	PO BOX 507	REDLANDS	CA	92373
0154-254-18		SAN BERNARDINO	CA	92404	YOUNG, MARY LEE	23 TRAWLER	LAGUNA NIGUEL	CA	92677
0154-254-19	256 E 40TH ST	SAN BERNARDINO	CA	92404	KRITIKOS, GEORGE	3579 N ORANGEWOOD AVE	RIALTO	CA	92377
0154-254-20	E 40TH ST	SAN BERNARDINO	CA	92404	KRITIKOS, GEORGE	3579 N ORANGEWOOD AVE	RIALTO	CA	92377
0154-254-22	252 E 40TH ST	SAN BERNARDINO	CA	92404	CAMPOS, BETTY	252 E 40TH ST	SAN BERNARDINO	CA	92404
0154-254-23		SAN BERNARDINO	CA	92404	YOUNG D J & M L FAMILY REVOCABLE TR	23 TRAWLER	LAGUNA NIGUEL	CA	92677
0154-254-24	272 E 40TH ST	SAN BERNARDINO	CA	92404	YOUNG, DANIEL JOSEPH	272 E 40TH ST	SAN BERNARDINO	CA	92404
0154-254-30	256 E 40TH ST	SAN BERNARDINO	CA	92404	KRITIKOS, GEORGE	3579 N ORANGEWOOD AVE	RIALTO	CA	92377
0154-254-31	280 E 40TH ST	SAN BERNARDINO	CA	92404	4 BROS #2 LLC	280 E 40TH ST	SAN BERNARDINO	CA	92404
0154-254-32		SAN BERNARDINO	CA	92404	YOUNG, DANIEL JOSEPH	272 E 40TH ST	SAN BERNARDINO	CA	92404
0154-254-34	292 E 40TH ST	SAN BERNARDINO	CA	92404	OUT TO SEA LP	PO BOX 507	REDLANDS	CA	92373
0154-351-08		SAN BERNARDINO	CA	92404	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0154-371-05	686 E 40TH ST	SAN BERNARDINO	CA	92404	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0154-391-03	396 SONORA ST	SAN BERNARDINO	CA	92404	ESTAVILLO, VICTOR R	396 SONORA ST	SAN BERNARDINO	CA	92404
0154-391-04	382 SONORA ST	SAN BERNARDINO	CA	92404	GARCIA, VERONICA J	382 SONORA ST	SAN BERNARDINO	CA	92404
0154-391-05	368 SONORA ST	SAN BERNARDINO	CA	92404	GALLEGOS, KEITH G	368 SONORA ST	SAN BERNARDINO	CA	92404
0154-391-06	354 SONORA ST	SAN BERNARDINO	CA	92404	HERNANDEZ, JENNIFER KATHERINE	354 SONORA ST	SAN BERNARDINO	CA	92404
0154-391-07	340 SONORA ST	SAN BERNARDINO	CA	92404	ESTRADA, MARCO	340 SONORA ST	SAN BERNARDINO	CA	92404
0154-391-08	326 SONORA ST	SAN BERNARDINO	CA	92404	GARCIA, SONYA	326 SONORA ST	SAN BERNARDINO	CA	92404
0154-391-09	312 SONORA ST	SAN BERNARDINO	CA	92404	CARDENAS, ERNESTO	312 SONORA ST	SAN BERNARDINO	CA	92404
0154-391-10	3970 BROADMOOR BLVD	SAN BERNARDINO	CA	92404	HEBRON, LAWRENCE P	28731 FOX TAIL WAY	HIGHLAND	CA	92346
0154-391-11	3960 BROADMOOR BLVD	SAN BERNARDINO	CA	92404	BOWDEN, SETH	3960 BROADMOOR BLVD	SAN BERNARDINO	CA	92404
0154-391-23	305 E 40TH ST	SAN BERNARDINO	CA	92404	SMITH, BEVERLY	305 E 40TH ST	SAN BERNARDINO	CA	92404
0154-391-24	319 E 40TH ST	SAN BERNARDINO	CA	92404	GOMEZ, DAVID VALDEZ	319 E 40TH ST	SAN BERNARDINO	CA	92404
0154-391-25	335 E 40TH ST	SAN BERNARDINO	CA	92404	KOOIMAN, FORREST	PO BOX 3396	SAN BERNARDINO	CA	92413
0154-391-26	349 E 40TH ST	SAN BERNARDINO	CA	92404	HARTMAN, RICHARD A	349 E 40TH ST	SAN BERNARDINO	CA	92404
0154-391-27	365 E 40TH ST	SAN BERNARDINO	CA	92404	DRAKE, JONATHAN	365 E 40TH ST	SAN BERNARDINO	CA	92404
0154-391-28	383 E 40TH ST	SAN BERNARDINO	CA	92404	RODRIGUEZ, JOSE	383 E 40TH ST	SAN BERNARDINO	CA	92404
0154-391-29	3990 PARKSIDE DR	SAN BERNARDINO	CA	92404	HARMON, NANCY	3990 PARKSIDE DR	SAN BERNARDINO	CA	92404
0154-392-07	335 SONORA ST	SAN BERNARDINO	CA	92404	KNUCKEY, ARTHUR E	335 SONORA ST	SAN BERNARDINO	CA	92404
0154-392-08	347 SONORA ST	SAN BERNARDINO	CA	92404	BARNES, JAMES M	PO BOX 2347	WRIGHTWOOD	CA	92397

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0154-392-09	359 SONORA ST	SAN BERNARDINO	CA	92404	CONANT, NATHANIEL E	359 SONORA ST	SAN BERNARDINO	CA	92404
0154-392-10	371 SONORA ST	SAN BERNARDINO	CA	92404	SILVA, FERNANDO T	7407 MARIGOLD AVE	SAN BERNARDINO	CA	92404
0154-392-11	383 SONORA ST	SAN BERNARDINO	CA	92404	ALLEN, CHRISTINA R	383 SONORA ST	SAN BERNARDINO	CA	92404
0154-392-12	395 SONORA ST	SAN BERNARDINO	CA	92404	MOWER, IVA JEAN	395 SONORA ST	SAN BERNARDINO	CA	92404
0154-393-01	565 SONORA ST	SAN BERNARDINO	CA	92404	MC MULLEN, TIMOTHY K	565 SONORA ST	SAN BERNARDINO	CA	92404
0154-393-02	555 SONORA ST	SAN BERNARDINO	CA	92404	MC GRAW, JANE	555 SONORA ST	SAN BERNARDINO	CA	92404
0154-393-03	545 SONORA ST	SAN BERNARDINO	CA	92404	CAPITALIST MASTERS GROUP LLC	9190 SIERRA AVE STE 206	FONTANA	CA	92335
0154-393-04	535 SONORA ST	SAN BERNARDINO	CA	92404	SOGI, JOHN	535 SONORA ST	SAN BERNARDINO	CA	92404
0154-393-05	525 SONORA ST	SAN BERNARDINO	CA	92404	SHEEHE, PATRICIA J	525 SONORA ST	SAN BERNARDINO	CA	92404
0154-393-06	515 SONORA ST	SAN BERNARDINO	CA	92404	ZIMMER, NORMA R	1296 HOLLY ST APT 7	SAN CARLOS	CA	94070
0154-393-07	505 SONORA ST	SAN BERNARDINO	CA	92404	WOODSON, STEPHEN E	PO BOX 2848	SAN BERNARDINO	CA	92406
0154-394-01	565 E 40TH ST	SAN BERNARDINO	CA	92404	MORALES, VALERIE	565 E 40TH ST	SAN BERNARDINO	CA	92404
0154-394-02	555 E 40TH ST	SAN BERNARDINO	CA	92404	BEACH, DOROTHY M	555 E 40TH ST	SAN BERNARDINO	CA	92404
0154-394-03	545 E 40TH ST	SAN BERNARDINO	CA	92404	WILSON, DEBORAH	545 E 40TH ST	SAN BERNARDINO	CA	92404
0154-394-04	535 E 40TH ST	SAN BERNARDINO	CA	92404	COOLEY, DENVER C	535 E 40TH ST	SAN BERNARDINO	CA	92404
0154-394-05	525 E 40TH ST	SAN BERNARDINO	CA	92404	CHAVEZ, LORETTA ANN	525 E 40TH ST	SAN BERNARDINO	CA	92404
0154-394-06	515 E 40TH ST	SAN BERNARDINO	CA	92404	DAGMEL RESIDENTIAL PROPERTIES LLC	7736 FAY AVE STE 202	LA JOLLA	CA	92037
0154-394-07	505 E 40TH ST	SAN BERNARDINO	CA	92404	ACERETO, CHRISTOPHER A	505 E 40TH ST	SAN BERNARDINO	CA	92404
0154-394-08	3965 PARKSIDE DR	SAN BERNARDINO	CA	92404	GEMAR, MARVIN D	3965 PARKSIDE DR	SAN BERNARDINO	CA	92404
0154-394-09	516 SONORA ST	SAN BERNARDINO	CA	92404	JOSLIN, RICHARD	516 SONORA ST	SAN BERNARDINO	CA	92404
0154-394-10	526 SONORA ST	SAN BERNARDINO	CA	92404	ARMIJO, VINCENT	526 SONORA ST	SAN BERNARDINO	CA	92404
0154-394-11	536 SONORA ST	SAN BERNARDINO	CA	92404	SHEEHE, CYNTHIA A	536 SONORA ST	SAN BERNARDINO	CA	92404
0154-394-12	546 SONORA ST	SAN BERNARDINO	CA	92404	ARAGON, FRANKIE R	546 SONORA ST	SAN BERNARDINO	CA	92404
0154-394-13	556 SONORA ST	SAN BERNARDINO	CA	92404	GARCIA, PATRICIA FRANCIS	556 SONORA ST	SAN BERNARDINO	CA	92404
0154-394-14	566 SONORA ST	SAN BERNARDINO	CA	92404	CHARTIER, RICHARD R	566 SONORA ST	SAN BERNARDINO	CA	92404
0154-421-01	579 E 40TH ST	SAN BERNARDINO	CA	92404	FERRARIS, ALICIA	579 E 40TH ST	SAN BERNARDINO	CA	92404
0154-421-02	591 E 40TH ST	SAN BERNARDINO	CA	92404	BOUFFARD, ERICA	591 E 40TH ST	SAN BERNARDINO	CA	92404
0154-421-03	603 E 40TH ST	SAN BERNARDINO	CA	92404	LACER, ROSE	603 E 40TH ST	SAN BERNARDINO	CA	92404
0154-421-04	619 E 40TH ST	SAN BERNARDINO	CA	92404	LATHON, ANDRE	619 E 40TH ST	SAN BERNARDINO	CA	92404
0154-421-05	635 E 40TH ST	SAN BERNARDINO	CA	92404	OWEN, JONATHAN W	635 E 40TH ST	SAN BERNARDINO	CA	92404
0154-421-06	651 E 40TH ST	SAN BERNARDINO	CA	92404	ROSAS, RAFAEL	651 E 40TH ST	SAN BERNARDINO	CA	92404
0154-421-07	667 E 40TH ST	SAN BERNARDINO	CA	92404	LEET, GARY	4 FARMER CIR	MILFORD	MA	1757

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0154-421-08	683 E 40TH ST	SAN BERNARDINO	CA	92404	MURPHY, BERNARD L	683 E 40TH ST	SAN BERNARDINO	CA	92404
0154-421-09	699 E 40TH ST	SAN BERNARDINO	CA	92404	GRAHAM, ELLIOTT L	699 E 40TH ST	SAN BERNARDINO	CA	92404
0154-421-10	698 SONORA ST	SAN BERNARDINO	CA	92404	JOSUE, JAMIE C	698 SONORA ST	SAN BERNARDINO	CA	92404
0154-421-11	682 SONORA ST	SAN BERNARDINO	CA	92404	NUMATA, MIKE M	682 SONORA ST	SAN BERNARDINO	CA	92404
0154-421-12	668 SONORA ST	SAN BERNARDINO	CA	92404	MALINOWSKI, SCOTT EDWARD JOSEPH	668 SONORA ST	SAN BERNARDINO	CA	92404
0154-421-13	650 SONORA ST	SAN BERNARDINO	CA	92404	PELKEY, MARK C	650 SONORA ST	SAN BERNARDINO	CA	92404
0154-421-14	634 SONORA ST	SAN BERNARDINO	CA	92404	AUSTERO, PETER P	634 SONORA ST	SAN BERNARDINO	CA	92404
0154-421-15	618 SONORA ST	SAN BERNARDINO	CA	92404	LOUDEN LLC	5440 TRABUCO RD # H-2001	IRVINE	CA	92620
0154-421-16	602 SONORA ST	SAN BERNARDINO	CA	92404	TAKAISHI, KOJI	602 SONORA ST	SAN BERNARDINO	CA	92404
0154-421-17	590 SONORA ST	SAN BERNARDINO	CA	92404	PEDROZA, PAUL	590 SONORA ST	SAN BERNARDINO	CA	92404
0154-421-18	578 SONORA ST	SAN BERNARDINO	CA	92404	LONDON, DEVON A	578 SONORA ST	SAN BERNARDINO	CA	92404
0154-422-01	579 SONORA ST	SAN BERNARDINO	CA	92404	LOPEZ, JOHN V	579 SONORA ST	SAN BERNARDINO	CA	92404
0154-422-02	591 SONORA ST	SAN BERNARDINO	CA	92404	WILLIS, KELLY E	591 SONORA ST	SAN BERNARDINO	CA	92404
0154-422-03	603 SONORA ST	SAN BERNARDINO	CA	92404	DOLAN, MICHAEL H	603 SONORA ST	SAN BERNARDINO	CA	92404
0154-422-04	619 SONORA ST	SAN BERNARDINO	CA	92404	HALL, BARBARA M	619 SONORA ST	SAN BERNARDINO	CA	92404
0154-422-05	635 SONORA ST	SAN BERNARDINO	CA	92404	SAKIRI, SHUKRI	976 E BASE LINE ST	SAN BERNARDINO	CA	92410
0154-422-06	651 SONORA ST	SAN BERNARDINO	CA	92404	BIRCSAK, ATTILA	651 SONORA ST	SAN BERNARDINO	CA	92404
0154-422-07	667 SONORA ST	SAN BERNARDINO	CA	92404	CARLTON, DANA MARIE	667 SONORA ST	SAN BERNARDINO	CA	92404
0154-422-08	683 SONORA ST	SAN BERNARDINO	CA	92404	MORALES, ROBERT	683 SONORA ST	SAN BERNARDINO	CA	92404
0154-422-09	699 SONORA ST	SAN BERNARDINO	CA	92404	CONNOLLY, JAMES P	699 SONORA ST	SAN BERNARDINO	CA	92404
0154-452-33	295 E 40TH ST	SAN BERNARDINO	CA	92404	SHAMSCO INC	1752 W AVENUE E	LANCASTER	CA	93534
0154-452-35	249 E 40TH ST	SAN BERNARDINO	CA	92404	BEST CALIFORNIA GAS, LTD	13116 IMPERIAL HWY	SANTA FE SPRINGS	CA	90670
0154-452-38	293 E 40TH ST	SAN BERNARDINO	CA	92404	STATER BROS MARKETS	PO BOX 150	SAN BERNARDINO	CA	92402
0154-452-40	263 E 40TH ST	SAN BERNARDINO	CA	92404	LEE, CHUL	263 E 40TH ST	SAN BERNARDINO	CA	92404
0154-452-43	233 E 40TH ST	SAN BERNARDINO	CA	92404	AUTOZONE INC	PO BOX 2198	MEMPHIS	TN	38101
0154-452-44	255 E 40TH ST	SAN BERNARDINO	CA	92404	SALAPATAS, STEVE	3150 N LAKE SHORE DR	CHICAGO	IL	60657
0154-452-45	259 E 40TH ST	SAN BERNARDINO	CA	92404	SALAPATAS, STEVE	3150 N LAKE SHORE DR	CHICAGO	IL	60657
0154-452-46	265 E 40TH ST	SAN BERNARDINO	CA	92404	SALAPATAS, STEVE	3150 N LAKE SHORE DR	CHICAGO	IL	60657
0154-452-48	3972 N WATERMAN AVE	SAN BERNARDINO	CA	92404	JALARAM LLC	2629 SHADY RIDGE LN	DIAMOND BAR	CA	91765
0154-452-49	277 E 40TH ST	SAN BERNARDINO	CA	92404	STATER BROS MARKETS	PO BOX 150	SAN BERNARDINO	CA	92402
0154-461-08	133 E 40TH ST	SAN BERNARDINO	CA	92404	PATEL, CHANDU N	5734 N D ST	SAN BERNARDINO	CA	92407

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0154-461-09	3974 N LUGO AVE	SAN BERNARDINO	CA	92404	PATEL, CHANDU N	5734 N D ST	SAN BERNARDINO	CA	92407
0154-462-14	161 E 40TH ST	SAN BERNARDINO	CA	92404	STATER BROS MARKETS	PO BOX 150	SAN BERNARDINO	CA	92402
0154-462-15		SAN BERNARDINO	CA	92404	STATER BROS MARKETS	PO BOX 150	SAN BERNARDINO	CA	92402
0154-462-16	193 E 40TH ST	SAN BERNARDINO	CA	92404	STANGL, MORRAINE E	9330 BALBOA AVE	SAN DIEGO	CA	92123
0154-462-17	201 E 40TH ST	SAN BERNARDINO	CA	92404	STATER BROS MARKETS	PO BOX 150	SAN BERNARDINO	CA	92402
0154-571-01	794 SONORA ST	SAN BERNARDINO	CA	92404	SALZMANN, MICHAEL JOHN	794 SONORA ST	SAN BERNARDINO	CA	92404
0154-571-02	782 SONORA ST	SAN BERNARDINO	CA	92404	CLEGG, WELDON F	1310 SAN PABLO AVE	REDLANDS	CA	92373
0154-571-03	768 SONORA ST	SAN BERNARDINO	CA	92404	GUILLOU LOUIS J M TR	768 SONORA ST	SAN BERNARDINO	CA	92404
0154-571-04	756 SONORA ST	SAN BERNARDINO	CA	92404	CLARK, JAMES MILTON	756 SONORA ST	SAN BERNARDINO	CA	92404
0154-571-05	742 SONORA ST	SAN BERNARDINO	CA	92404	DECEDENTS TRUST	4409 CANDLEBERRY AVE	SEAL BEACH	CA	90740
0154-571-06	730 SONORA ST	SAN BERNARDINO	CA	92404	THOMPSON, TODD A	730 SONORA ST	SAN BERNARDINO	CA	92404
0154-571-07	716 SONORA ST	SAN BERNARDINO	CA	92404	BOTTING, RICHARD JOHN	716 SONORA ST	SAN BERNARDINO	CA	92404
0154-571-08	3983 VALENCIA AVE	SAN BERNARDINO	CA	92404	RMS RESIDENTIAL PROPERTIES LLC	2800 28TH ST STE 102	SANTA MONICA	CA	90405
0154-571-09	705 E 40TH ST	SAN BERNARDINO	CA	92404	MCDANIEL, ADRIAN J	705 E 40TH ST	SAN BERNARDINO	CA	92404
0154-571-10	715 E 40TH ST	SAN BERNARDINO	CA	92404	LUPEAR, MARLENE M	715 E 40TH ST	SAN BERNARDINO	CA	92404
0154-571-11	731 E 40TH ST	SAN BERNARDINO	CA	92404	PACE, JAMES B	38385 SHADY CT	YUCAIPA	CA	92399
0154-571-12	743 E 40TH ST	SAN BERNARDINO	CA	92404	ACEVEDO, FRANKLIN	743 E 40TH ST	SAN BERNARDINO	CA	92404
0154-571-13	757 E 40TH ST	SAN BERNARDINO	CA	92404	WILDWOOD LIMITED LLC	740 E PARKDALE DR	SAN BERNARDINO	CA	92404
0154-571-14	769 E 40TH ST	SAN BERNARDINO	CA	92404	WILDWOOD LIMITED LLC	740 E PARKDALE DR	SAN BERNARDINO	CA	92404
0154-571-15	783 E 40TH ST	SAN BERNARDINO	CA	92404	CABALLERO, JORGE E	783 E 40TH ST	SAN BERNARDINO	CA	92404
0154-571-16	795 E 40TH ST	SAN BERNARDINO	CA	92404	NEWELL, MICHELLE B	795 E 40TH ST	SAN BERNARDINO	CA	92404
0154-572-20	705 SONORA ST	SAN BERNARDINO	CA	92404	PHILLIPS, LOGAN J	705 SONORA ST	SAN BERNARDINO	CA	92404
0154-572-21	717 SONORA ST	SAN BERNARDINO	CA	92404	FELIX, RICHARD	717 SONORA ST	SAN BERNARDINO	CA	92404
0154-572-22	731 SONORA ST	SAN BERNARDINO	CA	92404	MERRELL, GERALD R	731 SONORA ST	SAN BERNARDINO	CA	92404
0154-572-23	743 SONORA ST	SAN BERNARDINO	CA	92404	SCHOTT, ROBERT J	743 SONORA ST	SAN BERNARDINO	CA	92404
0154-572-24	757 SONORA ST	SAN BERNARDINO	CA	92404	FRECH, CARL D	757 SONORA ST	SAN BERNARDINO	CA	92404
0154-572-25	769 SONORA ST	SAN BERNARDINO	CA	92404	FLORES, BARBARA M	769 SONORA ST	SAN BERNARDINO	CA	92404
0154-572-26	783 SONORA ST	SAN BERNARDINO	CA	92404	MOFFETT, TONI R	783 SONORA ST	SAN BERNARDINO	CA	92404
0154-572-27	795 SONORA ST	SAN BERNARDINO	CA	92404	JAFFE, ELI	795 SONORA ST	SAN BERNARDINO	CA	92404
0154-572-28	797 SONORA ST	SAN BERNARDINO	CA	92404	TABUENCA, JULIO C	797 SONORA ST	SAN BERNARDINO	CA	92404
0154-572-29	3961 SAN GABRIEL ST	SAN BERNARDINO	CA	92404	FINCHER, DIANE K	3961 SAN GABRIEL ST	SAN BERNARDINO	CA	92404
0154-572-30	3975 SAN GABRIEL ST	SAN BERNARDINO	CA	92404	HELFMAN STANLEY TR	PO BOX 315	TWIN PEAKS	CA	92391

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0154-572-31	3983 SAN GABRIEL ST	SAN BERNARDINO	CA	92404	DALLIN LLC	5440 TRABUCO RD # H200	IRVINE	CA	92620
0154-572-32	805 E 40TH ST	SAN BERNARDINO	CA	92404	BERNAL, JORGE	805 E 40TH ST	SAN BERNARDINO	CA	92404
0155-044-01		SAN BERNARDINO	CA	92404	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0155-151-02	3005 N GOLDEN AVE	SAN BERNARDINO	CA	92404	MANN, SIDNEY JEAN	3005 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0155-151-03	3025 N GOLDEN AVE	SAN BERNARDINO	CA	92404	GROUP X ROSEMEAD PROPERTIES LP	4900 SANTA ANITA 2-C # 246	EL MONTE CA	CA	91731
0155-151-04	3055 N GOLDEN AVE	SAN BERNARDINO	CA	92404	GOLDEN 9039 APTS LLC	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0155-151-15	1225 E LYNWOOD DR	SAN BERNARDINO	CA	92404	LYNGOLD PLAZA LLC	6734 MERIWETHER CT	RANCHO CUCAMONGA	CA	91701
0155-151-21	GOLDEN	SAN BERNARDINO	CA	92404	BEARD, RONNIE V	2431 BRADFORD AVE	HIGHLAND	CA	92346
0155-151-23	1221 E LYNWOOD DR	SAN BERNARDINO	CA	92404	BEARD, RONNIE V	2431 BRADFORD AVE	HIGHLAND	CA	92346
0155-152-02	2950 N GOLDEN AVE	SAN BERNARDINO	CA	92404	THOMPSON, HOWARD	3259 E VIKING RD	LAS VEGAS	NV	89121
0155-152-05	2950 N GOLDEN AVE	SAN BERNARDINO	CA	92404	THOMPSON, PHIL	3259 E VIKING RD	LAS VEGAS	NV	89121
0155-171-14	2642 N GOLDEN AVE	SAN BERNARDINO	CA	92404	CHENNAULT, VERGIL O	2676 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0155-171-17	2600 N GOLDEN AVE	SAN BERNARDINO	CA	92404	GARCIA VAZQUEZ, MARCELA	2600 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0155-171-25	2676 N GOLDEN AVE	SAN BERNARDINO	CA	92404	CHENNAULT, VERGIL O	2676 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0155-171-32		SAN BERNARDINO	CA	92404	CHENNAULT, VERGIL O	2676 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0155-171-34	2628 N GOLDEN AVE	SAN BERNARDINO	CA	92404	DEWART, JARED A	2628 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0155-171-36	2670 N GOLDEN AVE	SAN BERNARDINO	CA	92404	CHENNAULT, VERGIL O	2676 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0155-171-42	2614 N GOLDEN AVE	SAN BERNARDINO	CA	92404	DE LA CRUZ, JUAN	2614 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0155-171-43	1177 E 27TH ST	SAN BERNARDINO	CA	92404	WATSON, KATHY J	1177 E 27TH ST	SAN BERNARDINO	CA	92404
0155-171-44	1171 E 27TH ST	SAN BERNARDINO	CA	92404	MARTINEZ, ELIAS	1171 E 27TH ST	SAN BERNARDINO	CA	92404
0155-171-45	2455 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	VILLA, FERMIN J	2455 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0155-171-46	2485 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	MENDEZ, CARLOS	2485 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0155-171-47	2513 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	JACK, FERNE	2513 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0155-171-48	2535 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	MIRAMONTES, FAVIOLA	2535 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0155-171-49	2555 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	HANKS, DAVID R	917 INVERNESS AVE	GLENDORA	CA	91740
0155-171-50	2575 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	GONZALEZ, JORGE	2575 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0155-171-51	2595 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	ROSECOMP LLC	620 NEWPORT CENTER DR FL 8TH	NEWPORT BEACH	CA	92660
0155-171-65	2696 N GOLDEN AVE	SAN BERNARDINO	CA	92404	TALAMANTEZ, MARIA K	1445 PUMALO ST	SAN BERNARDINO	CA	92404
0155-171-66	1185 E 27TH ST	SAN BERNARDINO	CA	92404	ROSE, JOHN E	1185 E 27TH ST	SAN BERNARDINO	CA	92404
0155-183-03	1167 E 23RD ST	SAN BERNARDINO	CA	92404	GARCIA, ALBERTO M	1167 E 23RD ST	SAN BERNARDINO	CA	92404

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0155-183-04	1173 E 23RD ST	SAN BERNARDINO	CA	92404	ALEMANY, ARTURO	1173 E 23RD ST	SAN BERNARDINO	CA	92404
0155-183-05	2301 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	FORSE, TRACIE	3292 SAN AMADEO	LAGUNA WOODS	CA	92637
0155-183-06	2313 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	CROSSLIN, LOANA	2313 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0155-183-07	2325 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	MORLET, MARK ANTHONY	2325 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0155-183-08	2337 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	ADAMS, DEANNA H	2337 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0155-183-09	2349 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	ADAMS, DEANNA	1156 N F ST	SAN BERNARDINO	CA	92410
0155-183-10	2361 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	ALLEN, NORMA L	2361 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0155-183-11	2373 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	BUTLER, HELEN J	2373 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0155-183-12	2385 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	SALCIDO, JOEL	2385 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0155-183-13	2397 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	MAXEY, STEPHEN E H	386 E ELIZABETH ST	PASADENA	CA	91104
0155-183-14	2415 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	MILLER, DOREEN P	2415 N ALAMEDA AVE	SAN BERNARDINO	CA	92404
0155-183-15	2435 N ALAMEDA AVE	SAN BERNARDINO	CA	92404	2012-B PROPERTY HOLDINGS LLC	3200 E GUASTI RD STE 100	ONTARIO	CA	91761
0155-183-18	1198 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	JHAWAR ENTERPRISES LTD	16196 JACOBS CIR	RIVERSIDE	CA	92504
0155-183-26	2404 N GOLDEN AVE	SAN BERNARDINO	CA	92404	GOLDEN AVENUE CHURCH RELIGIOUS, SCIEN	2404 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0155-183-27	2312 N GOLDEN AVE	SAN BERNARDINO	CA	92404	OH, YOUNG CHIN	2312 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0155-183-29	2228 N GOLDEN AVE	SAN BERNARDINO	CA	92404	CORTEZ, LUCILA	1078 E MIRADA RD	SAN BERNARDINO	CA	92404
0155-183-30		SAN BERNARDINO	CA	92404	GUTIERREZ, JORGE	3608 BROADMOOR BLVD	SAN BERNARDINO	CA	92404
0155-183-32	1180 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	GUTIERREZ, JORGE	3608 BROADMOOR BLVD	SAN BERNARDINO	CA	92404
0155-183-34	2222 N GOLDEN AVE	SAN BERNARDINO	CA	92404	GUTIERREZ, JORGE	3608 BROADMOOR BLVD	SAN BERNARDINO	CA	92404
0155-191-13	2965 GARDEN DR	SAN BERNARDINO	CA	92404	PACE, JAMES B	38385 SHADY CT	YUCAIPA	CA	92399
0155-191-14	2977 GARDEN DR	SAN BERNARDINO	CA	92404	DOSHI FAMILY LIMITED PARTNERSHIP	PO BOX 6545	ORANGE	CA	92863
0155-191-15	2989 GARDEN DR	SAN BERNARDINO	CA	92404	CASILLAS, ANA ROSA	2989 GARDEN DR	SAN BERNARDINO	CA	92404
0155-191-16	2988 GARDEN DR	SAN BERNARDINO	CA	92404	CITIGROUP	9200 OAKDALE AVE	CHATSWORTH	CA	91311
0155-191-17	2976 GARDEN DR	SAN BERNARDINO	CA	92404	MARQUEZ, BEATRIZ	2976 GARDEN DR	SAN BERNARDINO	CA	92404
0155-191-18	2964 GARDEN DR	SAN BERNARDINO	CA	92404	BIEGEL, NORMA	2964 GARDEN DR	SAN BERNARDINO	CA	92404
0155-191-19	1206 HOLLY VISTA BLVD	SAN BERNARDINO	CA	92404	RIOS, CARMELO S	1206 HOLLY VISTA BLVD	SAN BERNARDINO	CA	92404
0155-191-20	2975 N GOLDEN AVE	SAN BERNARDINO	CA	92404	FONT, KENNETH M	2975 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0155-191-21	2985 N GOLDEN AVE	SAN BERNARDINO	CA	92404	GOFFNEY, YUNKA	2985 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0155-191-22	2995 N GOLDEN AVE	SAN BERNARDINO	CA	92404	ZENDEJAS, JESSIE R	2995 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0155-192-05	1241 HOLLY VISTA BLVD	SAN BERNARDINO	CA	92404	MUNOZ, GENOVEVA	1241 HOLLY VISTA BLVD	SAN BERNARDINO	CA	92404
0155-192-15	1233 HOLLY VISTA BLVD	SAN BERNARDINO	CA	92404	DALLIN LLC	111 E KATELLA AVE	ORANGE	CA	92867
0155-192-16	1223 HOLLY VISTA BLVD	SAN BERNARDINO	CA	92404	ARNOLD, RICHARD	2812 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92405

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0155-192-17	1215 HOLLY VISTA BLVD	SAN BERNARDINO	CA	92404	ECK, HELEN S	1215 HOLLY VISTA BLVD	SAN BERNARDINO	CA	92404
0155-192-18	1205 HOLLY VISTA BLVD	SAN BERNARDINO	CA	92404	KASCHUBE, COURTNEY L	1205 HOLLY VISTA BLVD	SAN BERNARDINO	CA	92404
0155-242-24	1162 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	HEBRON, LAWRENCE	28731 FOX TAIL WAY	HIGHLAND	CA	92346
0155-352-01	1105 E 41ST ST	SAN BERNARDINO	CA	92404	DEVOE, DEAN	1105 E 41ST ST	SAN BERNARDINO	CA	92404
0155-461-15	1120 DEVONSHIRE RD	SAN BERNARDINO	CA	92404	DALLIN LLC	2248 MERIDIAN BLVD	MINDEN	NV	89423
0155-461-16	1116 DEVONSHIRE RD	SAN BERNARDINO	CA	92404	ASLAN, ARYEH	15411 BRIARWOOD DR	SHERMAN OAKS	CA	91403
0155-461-17	3998 DEL REY DR	SAN BERNARDINO	CA	92404	MC GOWAN, KEVIN P	1114 DEVONSHIRE RD	SAN BERNARDINO	CA	92404
0155-461-18	1112 DEVONSHIRE RD	SAN BERNARDINO	CA	92404	MARTINEZ, JOSE	29142 ROSEWOOD LN	HIGHLAND	CA	92346
0155-461-19	1110 DEVONSHIRE RD	SAN BERNARDINO	CA	92404	SCHNEPP, KIMBERLY K	1110 DEVONSHIRE RD	SAN BERNARDINO	CA	92404
0155-461-20	1108 DEVONSHIRE RD	SAN BERNARDINO	CA	92404	DEMULLING, BRIAN R	1108 DEVONSHIRE RD	SAN BERNARDINO	CA	92404
0155-461-21	1106 DEVONSHIRE RD	SAN BERNARDINO	CA	92404	SHEHAB, ELIAS Q	1106 DEVONSHIRE RD	SAN BERNARDINO	CA	92404
0155-461-22	3956 DEL REY DR	SAN BERNARDINO	CA	92404	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0155-461-23	1125 E 40TH ST	SAN BERNARDINO	CA	92404	L-K FAMILY II LLC	20450 E WALNUT DR N	WALNUT	CA	91789
0155-462-01	3942 DEL REY DR	SAN BERNARDINO	CA	92404	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0155-462-02	3934 DEL REY DR	SAN BERNARDINO	CA	92404	POULSEN, JOY DOROTHY	3934 DEL REY DR	SAN BERNARDINO	CA	92404
0155-462-03	3926 DEL REY DR	SAN BERNARDINO	CA	92404	MCCULLOUGH, ROBERT E	3931 DEL REY DR	SAN BERNARDINO	CA	92404
0155-462-04	3920 DEL REY DR	SAN BERNARDINO	CA	92404	KUBESH, KATHRYN J	3920 DEL REY DR	SAN BERNARDINO	CA	92404
0155-462-05	3912 DEL REY DR	SAN BERNARDINO	CA	92404	GARCIA, RITA M	3912 DEL REY DR	SAN BERNARDINO	CA	92404
0155-462-06	3904 DEL REY DR	SAN BERNARDINO	CA	92404	GIFFORD, MERYLE	3904 DEL REY DR	SAN BERNARDINO	CA	92404
0155-463-01	3905 DEL REY DR	SAN BERNARDINO	CA	92404	REYES, FRANKIE III	3905 DEL REY DR	SAN BERNARDINO	CA	92404
0155-463-02	3911 DEL REY DR	SAN BERNARDINO	CA	92404	STACKHOUSE, JOAN	3911 DEL REY DR	SAN BERNARDINO	CA	92404
0155-463-03	3917 DEL REY DR	SAN BERNARDINO	CA	92404	MONCADA, HECTOR M	3917 DEL REY DR	SAN BERNARDINO	CA	92404
0155-463-04	3925 DEL REY DR	SAN BERNARDINO	CA	92404	STARKWEATHER, DANIEL	3925 DEL REY DR	SAN BERNARDINO	CA	92404
0155-463-05	3931 DEL REY DR	SAN BERNARDINO	CA	92404	MCCULLOUGH, ROBERT E	3931 DEL REY DR	SAN BERNARDINO	CA	92404
0155-463-06	3937 DEL REY DR	SAN BERNARDINO	CA	92404	COY, DAVID G	3937 DEL REY DR	SAN BERNARDINO	CA	92404
0155-463-07	3945 DEL REY DR	SAN BERNARDINO	CA	92404	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0155-464-09	1124 HAMPSHIRE AVE	SAN BERNARDINO	CA	92404	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0155-464-10	1118 HAMPSHIRE AVE	SAN BERNARDINO	CA	92404	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0155-464-11	1119 DEVONSHIRE RD	SAN BERNARDINO	CA	92404	CRANFORD, EVERETTE E	1119 DEVONSHIRE RD	SAN BERNARDINO	CA	92404
0155-464-12	1123 DEVONSHIRE RD	SAN BERNARDINO	CA	92404	HILLER, IRVING	1123 DEVONSHIRE RD	SAN BERNARDINO	CA	92404
0261-231-30	HAPPY FACE CT	SAN BERNARDINO	CA	92404	HAPPY FACE COURT LLC	2288 KENDALL DR	SAN BERNARDINO	CA	92407
0261-231-32	HAPPY FACE CT	SAN BERNARDINO	CA	92404	HAPPY FACE COURT LLC	2288 KENDALL DR	SAN BERNARDINO	CA	92407

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0270-111-10		SAN BERNARDINO	CA	92404	METROPOLITAN WATER DIST/SO CALIF	PO BOX 54153	LOS ANGELES	CA	90054
0270-142-19		SAN BERNARDINO	CA	92404	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0271-341-07	1130 E 34TH ST	SAN BERNARDINO	CA	92404	LOFTIS, KATHLEEN A	1130 E 34TH ST	SAN BERNARDINO	CA	92404
0271-341-08	1120 E 34TH ST	SAN BERNARDINO	CA	92404	RAWAL, SUCHITA D	PO BOX	PATTON	CA	92369
0271-341-09	1110 E 34TH ST	SAN BERNARDINO	CA	92404	MONTIEL, MARGARITA S	1110 E 34TH ST	SAN BERNARDINO	CA	92404
0271-341-10	3398 DEL REY DR	SAN BERNARDINO	CA	92404	BALDWIN, SHIRLEY M	3398 DEL REY DR	SAN BERNARDINO	CA	92404
0271-341-11	3392 DEL REY DR	SAN BERNARDINO	CA	92404	GILBERT, JERRY BEN	3392 DEL REY DR	SAN BERNARDINO	CA	92404
0271-341-12	3382 DEL REY DR	SAN BERNARDINO	CA	92404	AVECTOR LLC	PO BOX 2513	RANCHO CUCAMONGA	CA	91729
0271-341-13	3378 DEL REY DR	SAN BERNARDINO	CA	92404	PATEL, MOHAN N	760 S BUNTING CT	ANAHEIM	CA	92808
0271-341-14	3372 DEL REY DR	SAN BERNARDINO	CA	92404	THAMKHAW, SONVATH	3372 DEL REY DR	SAN BERNARDINO	CA	92404
0271-341-15	3362 DEL REY DR	SAN BERNARDINO	CA	92404	CASKEY, TERRENCE A	3362 DEL REY DR	SAN BERNARDINO	CA	92404
0271-341-16	3358 DEL REY DR	SAN BERNARDINO	CA	92404	HUERTA, CEVERO SALGADO	3358 DEL REY DR	SAN BERNARDINO	CA	92404
0271-341-17	3352 DEL REY DR	SAN BERNARDINO	CA	92404	KNIPPER, VIOLA	3352 DEL REY DR	SAN BERNARDINO	CA	92404
0271-341-18	3342 DEL REY DR	SAN BERNARDINO	CA	92404	GONZALEZ, CAMILO	3342 DEL REY DR	SAN BERNARDINO	CA	92404
0271-341-19	3334 DEL REY DR	SAN BERNARDINO	CA	92404	KISS, ROBERT I	3334 DEL REY DR	SAN BERNARDINO	CA	92404
0271-341-20	3328 DEL REY DR	SAN BERNARDINO	CA	92404	BECK, NANCY J	3328 DEL REY DR	SAN BERNARDINO	CA	92404
0271-341-21	3322 DEL REY DR	SAN BERNARDINO	CA	92404	WINN BETTY JEAN REV LIV TRUST	3322 DEL REY DR	SAN BERNARDINO	CA	92404
0271-341-22	3314 DEL REY DR	SAN BERNARDINO	CA	92404	LANCASTER, CYNTHIA MAYE	PO BOX 1314	ONTARIO	CA	91762
0271-341-23	3306 DEL REY DR	SAN BERNARDINO	CA	92404	APARICIO, AUDREY M	3306 DEL REY DR	SAN BERNARDINO	CA	92404
0271-341-24	3300 DEL REY DR	SAN BERNARDINO	CA	92404	EIDELMAN FAMILY LIMITED PARTNERSHIP	PO BOX 1639	BEVERLY HILLS	CA	90213
0271-341-25	1104 E 33RD ST	SAN BERNARDINO	CA	92404	PACE, FLETCHER E	1104 E 33RD ST	SAN BERNARDINO	CA	92404
0271-342-01	1118 E 33RD ST	SAN BERNARDINO	CA	92404	DELIMAN, DARYL	2949 ROSEMARY LN	FULLERTON	CA	92835
0271-342-02	3305 DEL REY DR	SAN BERNARDINO	CA	92404	ROBERTS, DOROTHY G	2229 BARBERS POINT PL	LAS VEGAS	NV	89134
0271-342-03	3315 DEL REY DR	SAN BERNARDINO	CA	92404	ADVANCED SALES INC	7811 BOLERO DR	RIVERSIDE	CA	92509
0271-342-04	3319 DEL REY DR	SAN BERNARDINO	CA	92404	BUVIK, MATT C	3319 DEL REY DR	SAN BERNARDINO	CA	92404
0271-342-05	3323 DEL REY DR	SAN BERNARDINO	CA	92404	MALDONADO, ARACELI	3323 DEL REY DR	SAN BERNARDINO	CA	92404
0271-342-06	3335 DEL REY DR	SAN BERNARDINO	CA	92404	BRADBURY, SCOTT	19432 OLANA LN	HUNTINGTON BEACH	CA	92646
0271-342-07	3339 DEL REY DR	SAN BERNARDINO	CA	92404	GONZALEZ, JOGE	3339 DEL REY DR	SAN BERNARDINO	CA	92404
0271-342-08	3343 DEL REY DR	SAN BERNARDINO	CA	92404	ANDHE, VAMSHEEKHER	1825 NIXON AVE	PLACENTIA	CA	92870
0271-342-09	3359 DEL REY DR	SAN BERNARDINO	CA	92404	RAMIREZ, J DANIEL	3359 DEL REY DR	SAN BERNARDINO	CA	92404
0271-342-10	3363 DEL REY DR	SAN BERNARDINO	CA	92404	TROOST, DANIEL R	3363 DEL REY DR	SAN BERNARDINO	CA	92404

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0271-342-11	3379 DEL REY DR	SAN BERNARDINO	CA	92404	DOSHI, AMITKUMAR N	105 GREEN TREE TAVERN RD	NORTH WALES	PA	19454
0271-342-12	3383 DEL REY DR	SAN BERNARDINO	CA	92404	NOLAND, CLIFFORD	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0271-342-13	3395 DEL REY DR	SAN BERNARDINO	CA	92404	JUAREZ, GILBERTO ANTONIO	3395 DEL REY DR	SAN BERNARDINO	CA	92404
0271-342-27	1128 E 33RD ST	SAN BERNARDINO	CA	92404	DONAHUE ROBERT J & VIRGINIA A TRS	94 HOKUAHIAHI ST # 202	MILILANI	HI	96789
0271-361-01	1115 E 33RD ST	SAN BERNARDINO	CA	92404	COBRA 28 #6 LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0271-361-02	1121 E 33RD ST	SAN BERNARDINO	CA	92404	FERNANDEZ, FERNANDO	1121 E 33RD ST	SAN BERNARDINO	CA	92404
0271-361-17	1194 E EDGEMONT DR	SAN BERNARDINO	CA	92404	CANALES, ANTHONY	1194 E EDGEMONT DR	SAN BERNARDINO	CA	92404
0271-361-18	1186 E EDGEMONT DR	SAN BERNARDINO	CA	92404	CRUZ, ANSELMO RENDON	1186 E EDGEMONT DR	SAN BERNARDINO	CA	92404
0271-361-19	1178 E EDGEMONT DR	SAN BERNARDINO	CA	92404	CHHARAN, RAJINDER S	7223 CHURCH ST A13 # 172	HIGHLAND	CA	92346
0271-361-24	1162 E EDGEMONT DR	SAN BERNARDINO	CA	92404	SALAZAR, GONZALO	16319 UPLAND AVE	FONTANA	CA	92335
0271-361-25	1152 E EDGEMONT DR	SAN BERNARDINO	CA	92404	HERBERT RUDOLPH LIV TR	1152 E EDGEMONT DR	SAN BERNARDINO	CA	92404
0271-361-26	1142 E EDGEMONT DR	SAN BERNARDINO	CA	92404	KNOTT, RICHARD J	PO BOX 4746	ORANGE	CA	92863
0271-361-27	1136 E EDGEMONT DR	SAN BERNARDINO	CA	92404	CASAS, RICHARD J	1136 E EDGEMONT DR	SAN BERNARDINO	CA	92404
0271-361-28	1130 E EDGEMONT DR	SAN BERNARDINO	CA	92404	FUENTES, JUAN M	1130 E EDGEMONT DR	SAN BERNARDINO	CA	92404
0271-361-29	1122 E EDGEMONT DR	SAN BERNARDINO	CA	92404	PATEL, PINAKIN R	17790 VINELAND AVE	MONTE SERENO	CA	95030
0271-361-30	1116 E EDGEMONT DR	SAN BERNARDINO	CA	92404	PATEL, SHARDEBEN	1116 E EDGEMONT DR	SAN BERNARDINO	CA	92404
0271-362-01	1195 E EDGEMONT DR	SAN BERNARDINO	CA	92404	HERNANDEZ, DANIEL	1195 E EDGEMONT DR	SAN BERNARDINO	CA	92404
0271-362-02	1189 E EDGEMONT DR	SAN BERNARDINO	CA	92404	MARIA, FAVIOLA	1189 E EDGEMONT DR	SAN BERNARDINO	CA	92404
0271-362-03	1181 E EDGEMONT DR	SAN BERNARDINO	CA	92404	ALLEN, MARILYN D	1181 E EDGEMONT DR	SAN BERNARDINO	CA	92404
0271-362-04	1175 E EDGEMONT DR	SAN BERNARDINO	CA	92404	PRADO, LEOPOLDO R	1175 E EDGEMONT DR	SAN BERNARDINO	CA	92404
0271-362-05	1167 E EDGEMONT DR	SAN BERNARDINO	CA	92404	BHAVSAR, CHETAN R	301 S THURSTON AVE	LOS ANGELES	CA	90049
0271-362-06	1161 E EDGEMONT DR	SAN BERNARDINO	CA	92404	SON, JOON M	1161 E EDGEMONT DR	SAN BERNARDINO	CA	92404
0271-362-07	1153 E EDGEMONT DR	SAN BERNARDINO	CA	92404	DAVIS, TAMMY L	1153 E EDGEMONT DR	SAN BERNARDINO	CA	92404
0271-362-08	1147 E EDGEMONT DR	SAN BERNARDINO	CA	92404	MARABEL, ERICA M	1147 E EDGEMONT DR	SAN BERNARDINO	CA	92404
0271-362-09	1139 E EDGEMONT DR	SAN BERNARDINO	CA	92404	VALI LLC	PO BOX 1226	OAKLAND	CA	94604
0271-362-10	1133 E EDGEMONT DR	SAN BERNARDINO	CA	92404	RANGEL, FRANK	1133 E EDGEMONT DR	SAN BERNARDINO	CA	92404
0271-362-11	1125 E EDGEMONT DR	SAN BERNARDINO	CA	92404	KUEHN, SOMPOG	1125 E EDGEMONT DR	SAN BERNARDINO	CA	92404
0271-362-12	1119 E EDGEMONT DR	SAN BERNARDINO	CA	92404	SIRIRAT, SAKORN	1119 E EDGEMONT DR	SAN BERNARDINO	CA	92404
0271-362-13	1111 E EDGEMONT DR	SAN BERNARDINO	CA	92404	DOSHI, SUDHIR R	PO BOX 4607	ORANGE	CA	92863
0271-362-14	1105 E EDGEMONT DR	SAN BERNARDINO	CA	92404	POLICH, MARGARET E	1105 E EDGEMONT DR	SAN BERNARDINO	CA	92404

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0271-362-15	3242 DEL REY DR	SAN BERNARDINO	CA	92404	CLAY, WILLIAM S	3242 DEL REY DR	SAN BERNARDINO	CA	92404
0271-362-16	3260 DEL REY DR	SAN BERNARDINO	CA	92404	SIRIRAT, SAKORN	3260 DEL REY DR	SAN BERNARDINO	CA	92404
0271-362-17	3276 DEL REY DR	SAN BERNARDINO	CA	92404	THE KATHLEEN ANN MCPHERSON 2012 TRUST	3276 DEL REY DR	SAN BERNARDINO	CA	92404
0271-362-18	3294 DEL REY DR	SAN BERNARDINO	CA	92404	MONTIEL, MATTHEW G	3294 DEL REY DR	SAN BERNARDINO	CA	92404
0271-371-01	1204 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	CHI YU LINDERGARD, JENNY	26068 JODI CT	MORENO VALLEY	CA	92555
0271-371-02	3221 N GOLDEN AVE	SAN BERNARDINO	CA	92404	SORIA, OLIVIA MEJIA	3221 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0271-371-03	3233 N GOLDEN AVE	SAN BERNARDINO	CA	92404	RAMIREZ, JORGE M	3233 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0271-371-04	3245 N GOLDEN AVE	SAN BERNARDINO	CA	92404	WESSMAN, DONNA MAY COCHRAN	3245 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0271-371-05	3253 N GOLDEN AVE	SAN BERNARDINO	CA	92404	SDF LLC	12091 SAINT MARK ST	GARDEN GROVE	CA	92845
0271-371-23	3232 GARDEN DR	SAN BERNARDINO	CA	92404	3232 GARDEN DRIVE TRUST	114 E AIRPORT DR STE 112	SAN BERNARDINO	CA	92408
0271-371-24	3226 GARDEN DR	SAN BERNARDINO	CA	92404	3226 GARDEN DRIVE TRUST	PO BOX 1718	UPLAND	CA	91785
0271-371-25	3218 GARDEN DR	SAN BERNARDINO	CA	92404	OLSON, AXEL	3218 GARDEN DR	SAN BERNARDINO	CA	92404
0271-371-26	3210 GARDEN DR	SAN BERNARDINO	CA	92404	PASTRANO, MARY C	3210 GARDEN DR	SAN BERNARDINO	CA	92404
0271-371-27	3202 GARDEN DR	SAN BERNARDINO	CA	92404	D A S ASSET HOLDINGS INC	8926 W 25TH ST	LOS ANGELES	CA	90034
0271-372-01	3201 GARDEN DR	SAN BERNARDINO	CA	92404	SMITH, JOYCE	3201 GARDEN DR	SAN BERNARDINO	CA	92404
0271-372-02	3209 GARDEN DR	SAN BERNARDINO	CA	92404	ASGHAR, MOHAMMED	2135 N TIMBERGROVE RD	ORANGE	CA	92867
0272-032-05	1220 E LYNWOOD DR	SAN BERNARDINO	CA	92404	VIRAMONTES, MARIA ELENA	16044 BOYLE AVE	FONTANA	CA	92337
0272-032-08	3135 N GOLDEN AVE	SAN BERNARDINO	CA	92404	LITTLETON, JACK E	3135 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0272-032-17	1219 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	LITTLETON, CHARLES R	3165 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0272-032-18	1217 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	LITTLETON, CHARLES R	3165 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0272-032-20	3155 N GOLDEN AVE	SAN BERNARDINO	CA	92404	LITTLETON, MARK A	3155 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0272-032-21		SAN BERNARDINO	CA	92404	LITTLETON, CHARLES R	3165 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0272-032-22	3145 N GOLDEN AVE	SAN BERNARDINO	CA	92404	LITTLETON, CHARLES R	3165 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0272-032-23		SAN BERNARDINO	CA	92404	LITTLETON, CHARLES R	3165 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0272-032-24	3165 N GOLDEN AVE	SAN BERNARDINO	CA	92404	LITTLETON, CHARLES R	3165 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0272-032-25	3175 N GOLDEN AVE	SAN BERNARDINO	CA	92404	CATHREN, BRENDA LYNN	3175 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0272-032-26	3197 N GOLDEN AVE	SAN BERNARDINO	CA	92404	LITTLETON, CHARLES R	3165 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0272-032-27	1215 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	MCGRAIL, CHERYL ANN	1215 E MARSHALL BLVD	SAN BERNARDINO	CA	92404
0272-032-28	1202 E LYNWOOD DR	SAN BERNARDINO	CA	92404	KIRSCHNER, JOAN M	1202 E LYNWOOD DR	SAN BERNARDINO	CA	92404
0272-032-30	1214 E LYNWOOD DR	SAN BERNARDINO	CA	92404	KIRSCHNER, EDWARD	4420 N VARSITY AVE APT 1044	SAN BERNARDINO	CA	92407
0272-032-32	3119 N GOLDEN AVE	SAN BERNARDINO	CA	92404	LO, ROGER CHIEH	2362 CUATRO DR	ROWLAND HEIGHTS	CA	91748

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0272-032-34	3133 N GOLDEN AVE	SAN BERNARDINO	CA	92404	SINGH, RAJNEET KAUR	3133 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0272-032-35	3125 N GOLDEN AVE	SAN BERNARDINO	CA	92404	INNOVATIVE PROPERTIES LLC	PO BOX 1530	TUSTIN	CA	92781
0272-111-05	2877 N GOLDEN AVE	SAN BERNARDINO	CA	92404	KAHN, MUMTAZ AHMAD	1850 N MACY ST	SAN BERNARDINO	CA	92411
0272-111-13	2865 N GOLDEN AVE	SAN BERNARDINO	CA	92404	VELAZQUEZ, BENITO	2865 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0272-111-28	2761 N GOLDEN AVE	SAN BERNARDINO	CA	92404	OLVERA, JOSE LUIS	744 FORESTVIEW AVE	LA PUENTE	CA	91746
0272-111-29	920 E DATE ST	SAN BERNARDINO	CA	92404	OLVERA, JOSE LUIS	744 FORESTVIEW AVE	LA PUENTE	CA	91746
0272-111-30	1226 E DATE ST	SAN BERNARDINO	CA	92404	ORANGE-LEMON LIMITED PARTNERSHIP	770 MAGNOLIA AVE STE 2A	CORONA	CA	92879
0272-231-01	1196 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	VARELA, WALTER	1196 E MARSHALL BLVD	SAN BERNARDINO	CA	92404
0272-231-02	1188 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	DESAI, SUMIR	PO BOX 4746	ORANGE	CA	92863
0272-231-03	1180 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	CRUZ, MARVIN E	1180 E MARSHALL BLVD	SAN BERNARDINO	CA	92404
0272-231-04	1176 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	MONTOYA, MONA LISA	1176 E MARSHALL BLVD	SAN BERNARDINO	CA	92404
0272-231-05	1164 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	BRANDSTETTER, PATRICIA	1177 E ALEXANDER AVE	SAN BERNARDINO	CA	92404
0272-231-06	1158 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	HARGROVE, CHRISTINE C	1158 E MARSHALL BLVD	SAN BERNARDINO	CA	92404
0272-231-07	1150 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	ONTIVEROS, MAGDALENO	1150 E MARSHALL BLVD	SAN BERNARDINO	CA	92404
0272-231-08	1144 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	SPSSM INVESTMENTS LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0272-231-09	1132 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	LIU, SHU CHAN	2638 AMELGADO DR	HACIENDA HEIGHTS	CA	91745
0272-231-10	1126 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	BUSH, KEVIN	7768 STERLING AVE	SAN BERNARDINO	CA	92410
0272-231-11	1118 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	REYNOLDS, BURL L	1118 E MARSHALL BLVD	SAN BERNARDINO	CA	92404
0272-231-12	1110 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	DE LA CRUZ FAMILY TRUST	1110 E MARSHALL BLVD	SAN BERNARDINO	CA	92404
0272-231-13	1104 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	BARRAGAN, JUAN CARLOS	1104 E MARSHALL BLVD	SAN BERNARDINO	CA	92404
0272-232-01	1103 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	IORGONI, LIVIU	1103 E MARSHALL BLVD	SAN BERNARDINO	CA	92404
0272-232-02	1111 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	EIDELMAN FAMILY LIMITED PARTNERSHIP	PO BOX 1639	BEVERLY HILLS	CA	90213
0272-232-03	1119 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	HAGMANN, JOHN W	7043 MISSION GROVE PKWY	RIVERSIDE	CA	92506
0272-232-04	1125 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	ANDHE, VAMSHEEKHER	1825 NIXON AVE	PLACENTIA	CA	92870
0272-232-05	1133 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	SIMENTAL, EFREN	1133 E MARSHALL BLVD	SAN BERNARDINO	CA	92404
0272-232-06	1145 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	MILIAN, A JAY	3690 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0272-232-07	1151 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	AMBRIS, ANTONIO	1151 E MARSHALL BLVD	SAN BERNARDINO	CA	92404
0272-232-08	1159 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	LOPEZ, ANNA	1159 E MARSHALL BLVD	SAN BERNARDINO	CA	92404
0272-232-09	1165 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	RAMIREZ, MOISES	1165 E MARSHALL BLVD	SAN BERNARDINO	CA	92404
0272-232-10	1169 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	STARLITE MGMT-II LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0272-232-11	1175 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	GUTIERREZ, MARIO	1175 E MARSHALL BLVD	SAN BERNARDINO	CA	92404
0272-232-12	1179 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	WERNER, LEROY C	1179 E MARSHALL BLVD	SAN BERNARDINO	CA	92404
0272-232-13	1185 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	CRUZ ALFARO, FELICITO ALBERTO	1185 E MARSHALL BLVD	SAN BERNARDINO	CA	92404
0272-232-14	1197 E MARSHALL BLVD	SAN BERNARDINO	CA	92404	JULLERY, DAVID D	37260 IRONWOOD DR	YUCAIPA	CA	92399
0272-232-15	3188 N GOLDEN AVE	SAN BERNARDINO	CA	92404	JOHNSON, STONEY T	3188 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0272-232-16	3176 N GOLDEN AVE	SAN BERNARDINO	CA	92404	REYES, VICENTE	3176 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0272-232-17	3168 N GOLDEN AVE	SAN BERNARDINO	CA	92404	BORGARDT, JOHN F	3168 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0272-232-18	3156 N GOLDEN AVE	SAN BERNARDINO	CA	92404	CAMARENA, INEZ Q	3156 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0272-232-19	3148 N GOLDEN AVE	SAN BERNARDINO	CA	92404	CAMPOS, ELVIA RANGEL	3148 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0272-232-20	3136 N GOLDEN AVE	SAN BERNARDINO	CA	92404	JOHNSON, JIMMY WAYNE	3136 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0272-232-21	3128 N GOLDEN AVE	SAN BERNARDINO	CA	92404	SAUCEDO, JESUS	3128 N GOLDEN AVE	SAN BERNARDINO	CA	92404
0272-232-22	3137 ALAMEDA CT	SAN BERNARDINO	CA	92404	SHERMAN, ROBERT W	3137 ALAMEDA CT	SAN BERNARDINO	CA	92404
0272-232-23	3143 ALAMEDA CT	SAN BERNARDINO	CA	92404	FUENTES, MAXIMO D	3143 ALAMEDA CT	SAN BERNARDINO	CA	92404
0272-232-24	3151 ALAMEDA CT	SAN BERNARDINO	CA	92404	CANO, HUMBERTO GARCIA	786 N BRAMPTON AVE	RIALTO	CA	92376
0272-232-25	3157 ALAMEDA CT	SAN BERNARDINO	CA	92404	MANN WARREN, ALISHA	3157 ALAMEDA CT	SAN BERNARDINO	CA	92404
0272-232-26	3165 ALAMEDA CT	SAN BERNARDINO	CA	92404	RIVERS, SOTERO R	3165 ALAMEDA CT	SAN BERNARDINO	CA	92404
0272-232-27	3171 ALAMEDA CT	SAN BERNARDINO	CA	92404	FUENTES, FLORO R	3171 ALAMEDA CT	SAN BERNARDINO	CA	92404
0272-232-28	3189 ALAMEDA CT	SAN BERNARDINO	CA	92404	CLEBECK, STANLEY	PO BOX 523	PATTON	CA	92369
0272-232-29	3172 ALAMEDA CT	SAN BERNARDINO	CA	92404	FLORES, ALVARO URIEL	3172 ALAMEDA CT	SAN BERNARDINO	CA	92404
0272-232-30	3166 ALAMEDA CT	SAN BERNARDINO	CA	92404	MARQUEZ, RODRIGO	3166 ALAMEDA CT	SAN BERNARDINO	CA	92404
0272-232-40	3177 DEL REY DR	SAN BERNARDINO	CA	92404	GALLEGOS, JOAQUIN D	3177 DEL REY DR	SAN BERNARDINO	CA	92404
0272-232-41	3187 DEL REY DR	SAN BERNARDINO	CA	92404	REDMAN, DERMAN	3187 DEL REY DR	SAN BERNARDINO	CA	92404
0272-232-42	3184 DEL REY DR	SAN BERNARDINO	CA	92404	ROMO, JUAN JOSE	3184 DEL REY DR	SAN BERNARDINO	CA	92404
0272-232-43	3176 DEL REY DR	SAN BERNARDINO	CA	92404	ROBLES, ADOLPHO	3176 DEL REY DR	SAN BERNARDINO	CA	92404
0272-232-44	3168 DEL REY DR	SAN BERNARDINO	CA	92404	RAMIREZ, JUAN FLORES	3168 DEL REY DR	SAN BERNARDINO	CA	92404
0272-232-51	3165 HARRISON ST	SAN BERNARDINO	CA	92404	FERREE, HEATHER	3165 HARRISON ST	SAN BERNARDINO	CA	92404
0272-232-52	3177 HARRISON ST	SAN BERNARDINO	CA	92404	DELGADO, ALBERT	3177 HARRISON ST	SAN BERNARDINO	CA	92404
0272-232-53	3185 HARRISON ST	SAN BERNARDINO	CA	92404	GARCIA, FERNANDO V	3185 HARRISON ST	SAN BERNARDINO	CA	92404
0272-242-06	1173 DEL NORTE DR	SAN BERNARDINO	CA	92404	PALMA, RENE MARTINEZ	1173 DEL NORTE DR	SAN BERNARDINO	CA	92404
0272-242-07	1181 DEL NORTE DR	SAN BERNARDINO	CA	92404	PLUNK, HERMAN CLOIS	1181 DEL NORTE DR	SAN BERNARDINO	CA	92404
0272-242-08	1189 DEL NORTE DR	SAN BERNARDINO	CA	92404	FLORES, MARIA DEL CARMEN	1189 DEL NORTE DR	SAN BERNARDINO	CA	92404
0272-242-09	1195 DEL NORTE DR	SAN BERNARDINO	CA	92404	BAKER, ADAM	1195 DEL NORTE DR	SAN BERNARDINO	CA	92404

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0272-242-12	1184 E LYNWOOD DR	SAN BERNARDINO	CA	92404	SANDOVAL, ALLAN A	1184 E LYNWOOD DR	SAN BERNARDINO	CA	92404
0272-242-13	1180 E LYNWOOD DR	SAN BERNARDINO	CA	92404	UNDERWOOD PARTNERS LLC	180 NEWPORT CENTER DR STE 230	NEWPORT BEACH	CA	92660
0272-242-15	1190 E LYNWOOD DR	SAN BERNARDINO	CA	92404	YU, YOUNG SOO	1192 E LYNWOOD DR	SAN BERNARDINO	CA	92404
0273-011-22		SAN BERNARDINO	CA	92404	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0273-011-23		SAN BERNARDINO	CA	92404	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0273-063-05	25256 17TH ST	SAN BERNARDINO	CA	92404	WHITE VERNON L JR LIVING TRUST	25258 17TH ST	SAN BERNARDINO	CA	92404
0273-063-08	6810 DEL ROSA DR	SAN BERNARDINO	CA	92404	VELARDE, ANA ROSA	6810 DEL ROSA DR	SAN BERNARDINO	CA	92404
0273-063-09	6826 DEL ROSA DR	SAN BERNARDINO	CA	92404	REYES, ROSA M	26785 CYPRESS ST	HIGHLAND	CA	92346
0273-063-10	25278 17TH ST	SAN BERNARDINO	CA	92404	SALCIDO ARCEO, JOSE E	25278 17TH ST	SAN BERNARDINO	CA	92404
0273-064-05	25247 17TH ST	SAN BERNARDINO	CA	92404	SHANNON, JEAN YOSHIKO	25247 17TH ST	SAN BERNARDINO	CA	92404
0273-064-06	25259 17TH ST	SAN BERNARDINO	CA	92404	MALDONADO, ENEYDA G	640 DRAKE DR	SAN JACINTO	CA	92582
0273-064-07	25267 17TH ST	SAN BERNARDINO	CA	92404	CARRANZA, FRANCISCO	22299 CROWN PRINCESS CT	NUEVO	CA	92567
0273-064-08	25277 17TH ST	SAN BERNARDINO	CA	92404	WALSH, WILLIAM L	25277 17TH ST	SAN BERNARDINO	CA	92404
0273-064-09	25287 17TH ST	SAN BERNARDINO	CA	92404	COBRA 28 NO 2 LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0273-064-15	25266 PACIFIC ST	SAN BERNARDINO	CA	92404	ALEXANDER, ELIZABETH A	2167 BASSWOOD CT	SAN BERNARDINO	CA	92404
0273-064-16	25256 PACIFIC ST	SAN BERNARDINO	CA	92404	CONES, ROBERT E	25256 PACIFIC ST	SAN BERNARDINO	CA	92404
0273-064-24	25276 PACIFIC ST	SAN BERNARDINO	CA	92404	NIJJAR, SANJEET S	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0273-064-25	25282 PACIFIC ST	SAN BERNARDINO	CA	92404	RUV INVESTMENT LLC	4951 THORNBERRY WAY	FONTANA	CA	92336
0273-071-01	25315 DEL ROSA AVE	SAN BERNARDINO	CA	92404	HERNANDEZ, JORGE	PO BOX 4892	CARSON	CA	90749
0273-071-02	6706 DEL ROSA AVE	SAN BERNARDINO	CA	92404	DESIMONI, RICARDO H	6706 DEL ROSA AVE	SAN BERNARDINO	CA	92404
0273-071-03	6708 ELMWOOD RD	SAN BERNARDINO	CA	92404	CORONA, SAMUEL	6708 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-071-04	6720 ELMWOOD RD	SAN BERNARDINO	CA	92404	LOPEZ, JUAN JOSE	6720 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-071-05	6730 ELMWOOD RD	SAN BERNARDINO	CA	92404	ROGERS, LEO G	6730 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-071-06	6738 ELMWOOD RD	SAN BERNARDINO	CA	92404	ANDERSON, BRENT D	6738 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-071-07	6748 ELMWOOD RD	SAN BERNARDINO	CA	92404	2012-C PROPERTY HOLDINS LLC	601 CARISON PKY 250	MINNETONKA	MN	55305
0273-071-08	6758 ELMWOOD RD	SAN BERNARDINO	CA	92404	HAINES, JIMMY HICKS	1406 SAN FELIPE DR	BOULDER CITY	NV	89005
0273-071-09	6764 ELMWOOD RD	SAN BERNARDINO	CA	92404	CARDENAS, JOSE S	6764 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-071-10	6776 ELMWOOD RD	SAN BERNARDINO	CA	92404	REYNOLDS, LEAH S	6776 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-071-11	6786 ELMWOOD RD	SAN BERNARDINO	CA	92404	CASTRO, CRHISTIAN ROBERTO	6786 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-071-12	6796 ELMWOOD RD	SAN BERNARDINO	CA	92404	HOLGUIN, ANGEL A	6796 ELMWOOD RD	SAN BERNARDINO	CA	92404

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0273-071-13	6806 ELMWOOD RD	SAN BERNARDINO	CA	92404	SAUCEDO, FRANCISCO J	6806 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-071-14	6816 ELMWOOD RD	SAN BERNARDINO	CA	92404	ACEITUNO, CRISTINA	6816 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-071-15	6826 ELMWOOD RD	SAN BERNARDINO	CA	92404	VALI LLC	620 NEWPORT CENTER DR STE 800	NEWPORT BEACH	CA	92660
0273-071-16	6834 ELMWOOD RD	SAN BERNARDINO	CA	92404	ATMORE, NEWTON C	6834 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-071-17	6844 ELMWOOD RD	SAN BERNARDINO	CA	92404	DE MAIO, RONALD	1349 E 35TH ST	SAN BERNARDINO	CA	92404
0273-071-18	6854 ELMWOOD RD	SAN BERNARDINO	CA	92404	COPADO, PAULA	6854 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-071-19	6864 ELMWOOD RD	SAN BERNARDINO	CA	92404	HECOX, STEVEN V	6864 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-071-20	ELMWOOD RD	SAN BERNARDINO	CA	92404	MONARREZ, ADRIAN	7475 GUTHRIE ST	SAN BERNARDINO	CA	92410
0273-071-21	6888 ELMWOOD RD	SAN BERNARDINO	CA	92404	RAYA, ALEJANDRO	1930 S E ST	SAN BERNARDINO	CA	92408
0273-071-22	PACIFIC ST	SAN BERNARDINO	CA	92404	MONARREZ, ADRIAN	7475 GUTHRIE ST	SAN BERNARDINO	CA	92410
0273-071-23	25324 PACIFIC ST	SAN BERNARDINO	CA	92404	LOPEZ, JOSE G	25324 PACIFIC ST	SAN BERNARDINO	CA	92404
0273-071-24	6883 DEL ROSA DR	SAN BERNARDINO	CA	92404	AGUILERA, RAYMOND II	16721 LAKE KNOLL PKWY	RIVERSIDE	CA	92503
0273-071-25	6871 DEL ROSA DR	SAN BERNARDINO	CA	92404	PARADA, JOSE G	6871 DEL ROSA DR	SAN BERNARDINO	CA	92404
0273-071-26	6861 DEL ROSA DR	SAN BERNARDINO	CA	92404	ALVA, ROBERT M	6861 DEL ROSA DR	SAN BERNARDINO	CA	92404
0273-071-27	6853 DEL ROSA DR	SAN BERNARDINO	CA	92404	TOVAR, MIGUEL	6853 DEL ROSA DR	SAN BERNARDINO	CA	92404
0273-071-28	6845 DEL ROSA DR	SAN BERNARDINO	CA	92404	DIAZ, JOSE DAVID	25180 BASE LINE ST	SAN BERNARDINO	CA	92410
0273-071-29	6833 DEL ROSA DR	SAN BERNARDINO	CA	92404	VALDEZ, JACINTA JO	6833 DEL ROSA DR	SAN BERNARDINO	CA	92404
0273-071-30	6825 DEL ROSA DR	SAN BERNARDINO	CA	92404	CUNNINGHAM, LEARY E	3003 ZIA ST NE	RIO RANCHO	NM	87144
0273-071-31	6817 DEL ROSA DR	SAN BERNARDINO	CA	92404	CAMARENA, ELIZABETH	6817 DEL ROSA DR	SAN BERNARDINO	CA	92404
0273-071-32	6809 DEL ROSA DR	SAN BERNARDINO	CA	92404	MEADOWS, MARTHA	6809 DEL ROSA DR	SAN BERNARDINO	CA	92404
0273-071-33	6797 DEL ROSA DR	SAN BERNARDINO	CA	92404	SKEFOS, JAMES	2884 WALNUT GROVE RD	MEMPHIS	TN	38111
0273-071-34	6787 DEL ROSA DR	SAN BERNARDINO	CA	92404	CHANDLER, JAMES H	6787 DEL ROSA DR	SAN BERNARDINO	CA	92404
0273-071-35	6779 DEL ROSA DR	SAN BERNARDINO	CA	92404	ARIAS, MARCIANO	6779 DEL ROSA DR	SAN BERNARDINO	CA	92404
0273-071-36	6769 DEL ROSA DR	SAN BERNARDINO	CA	92404	SAMPLES, SHIRLEY E	7119 W SUNSET BLVD # 405	LOS ANGELES	CA	90046
0273-071-37	6757 DEL ROSA DR	SAN BERNARDINO	CA	92404	ALVAREZ, ISIDRO	5164 WADENA ST	LOS ANGELES	CA	90032
0273-071-38	6751 DEL ROSA DR	SAN BERNARDINO	CA	92404	MARTINEZ, JOSE G	6751 DEL ROSA DR	SAN BERNARDINO	CA	92404
0273-071-39	6743 DEL ROSA DR	SAN BERNARDINO	CA	92404	ARROYO, JOSE	6743 DEL ROSA DR	SAN BERNARDINO	CA	92404
0273-071-40	6733 DEL ROSA DR	SAN BERNARDINO	CA	92404	PEREZ, JEFFREY	6733 DEL ROSA DR	SAN BERNARDINO	CA	92404
0273-141-02	6920 ELMWOOD RD	SAN BERNARDINO	CA	92404	GONZALES, CHRISTOPHER	6920 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-141-03	6930 ELMWOOD RD	SAN BERNARDINO	CA	92404	DOSHI FAMILY LIMITED PARTNERSHIP	PO BOX 6545	ORANGE	CA	92863
0273-141-06	6958 ELMWOOD RD	SAN BERNARDINO	CA	92404	RAMIREZ, MANUEL	6958 ELMWOOD RD	SAN BERNARDINO	CA	92404

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0273-141-07	6968 ELMWOOD RD	SAN BERNARDINO	CA	92404	SANCHEZ, CARLOS	6968 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-141-08	6976 ELMWOOD RD	SAN BERNARDINO	CA	92404	POPOCA, RAMON	6967 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-141-09	6986 ELMWOOD RD	SAN BERNARDINO	CA	92404	HENRY, THOMAS R	6986 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-141-10	6994 ELMWOOD RD	SAN BERNARDINO	CA	92404	DEARK, ZELDA GAYAL	12946 5TH ST	YUCAIPA	CA	92399
0273-141-11	7004 ELMWOOD RD	SAN BERNARDINO	CA	92404	MADRIGAL, ROSAURA	7004 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-141-12	7016 ELMWOOD RD	SAN BERNARDINO	CA	92404	TOKARUK, BONNIE S	7016 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-141-13	7026 ELMWOOD RD	SAN BERNARDINO	CA	92404	MENDOZA, MARIA ELENA	7026 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-141-16	25258 FISHER ST # A	SAN BERNARDINO	CA	92404	VARGAS, JOSE L	25258 FISHER ST	SAN BERNARDINO	CA	92404
0273-141-28	25275 ANSON ST	SAN BERNARDINO	CA	92404	COX, JAMES S M	25275 ANSON ST	SAN BERNARDINO	CA	92404
0273-141-33	25273 PACIFIC ST	SAN BERNARDINO	CA	92404	MARTINEZ, ELENA G	25273 PACIFIC ST	SAN BERNARDINO	CA	92404
0273-141-34	25272 ANSON ST	SAN BERNARDINO	CA	92404	LARA, OSCAR FLORES	25272 ANSON ST	SAN BERNARDINO	CA	92404
0273-141-35	25264 ANSON ST	SAN BERNARDINO	CA	92404	VOSEN, BRANDON J	25264 ANSON ST	SAN BERNARDINO	CA	92404
0273-141-42	25254 ANSON ST	SAN BERNARDINO	CA	92404	VALENCIA YANEZ, ARLENE R	25254 ANSON ST	SAN BERNARDINO	CA	92404
0273-141-46	6948 ELMWOOD RD	SAN BERNARDINO	CA	92404	NGUYEN, LANA	6948 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-141-48	25276 FISHER ST	SAN BERNARDINO	CA	92404	GALARZA, MARIBEL	25276 FISHER ST	SAN BERNARDINO	CA	92404
0273-141-49	25268 FISHER ST	SAN BERNARDINO	CA	92404	BUI, HAILY L	11715 THOMAS HAYES LN	SAN DIEGO	CA	92126
0273-141-50	25255 PACIFIC ST	SAN BERNARDINO	CA	92404	LIGHTFOOT, THOMAS W	25255 PACIFIC ST	SAN BERNARDINO	CA	92404
0273-141-51	25265 PACIFIC ST	SAN BERNARDINO	CA	92404	RIVERA, RAFAEL V	25265 PACIFIC ST	SAN BERNARDINO	CA	92404
0273-141-52	25282 ANSON ST	SAN BERNARDINO	CA	92404	DROST, THOMAS A	25282 ANSON ST	SAN BERNARDINO	CA	92404
0273-141-53	25285 PACIFIC ST	SAN BERNARDINO	CA	92404	NAVARRO, ARTURO	7127 DEVON AVE	HIGHLAND	CA	92346
0273-141-55	6938 ELMWOOD RD	SAN BERNARDINO	CA	92404	NGUYEN, LANA THI	6938 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-141-68	6910 ELMWOOD RD	SAN BERNARDINO	CA	92404	VARIAS, RAUL TITO PALAMINE	6910 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-141-69		SAN BERNARDINO	CA	92404	EAST VALLEY WATER DISTRICT	PO BOX 3427	SAN BERNARDINO	CA	92413
0273-141-70	25257 ANSON ST	SAN BERNARDINO	CA	92404	DEAN, HARLAN	25257 ANSON ST	SAN BERNARDINO	CA	92404
0273-141-71	25253 ANSON ST	SAN BERNARDINO	CA	92404	RAWAL, MAHESH B	PO BOX 490	PATTON	CA	92369
0273-141-72	25255 ANSON ST	SAN BERNARDINO	CA	92404	MPSN PROPERTIES LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0273-142-01	7040 ELMWOOD RD	SAN BERNARDINO	CA	92404	SHAH, KALPNA	3239 SHADYLAWN DR	DUARTE	CA	91010
0273-142-02	7050 ELMWOOD RD	SAN BERNARDINO	CA	92404	BARRAGAN, DELFINO	7050 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-142-03	7060 ELMWOOD RD	SAN BERNARDINO	CA	92404	SIRYANI, JUNI	7060 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-142-04	7070 ELMWOOD RD	SAN BERNARDINO	CA	92404	MENDEZ, UBALDO C	25154 INDEPENDENT PL	SAN BERNARDINO	CA	92404
0273-142-05	7080 ELMWOOD RD	SAN BERNARDINO	CA	92404	SANDOVAL, BLANCA E	7080 ELMWOOD RD	SAN BERNARDINO	CA	92404

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0273-142-06	7086 ELMWOOD RD	SAN BERNARDINO	CA	92404	SKKR LLC	PO BOX 3785	PALOS VERDES PENINSULA	CA	90274
0273-142-08	25257 FISHER ST	SAN BERNARDINO	CA	92404	KELLER, RICHARD N	910 SEASIDE CT	VENTURA	CA	93001
0273-142-18		SAN BERNARDINO	CA	92404	GONZALEZ, ELPIDIO V	708 LE BORGNE AVE	LA PUENTE	CA	91746
0273-151-15	7015 ELMWOOD RD	SAN BERNARDINO	CA	92404	HOLDER, BRIAN	7015 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-151-16	7003 ELMWOOD RD	SAN BERNARDINO	CA	92404	BAEZA, HELEN	7003 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-151-17	6993 ELMWOOD RD	SAN BERNARDINO	CA	92404	PARKSIDE RENTALS LLC	4067 HARDWICK ST # 339	LAKEWOOD	CA	90712
0273-151-18	6985 ELMWOOD RD	SAN BERNARDINO	CA	92404	DENG, DAVID	6985 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-151-19	6975 ELMWOOD RD	SAN BERNARDINO	CA	92404	HEX LLC	2940 POPLAR DR	LYNWOOD	CA	90262
0273-151-20	6967 ELMWOOD RD	SAN BERNARDINO	CA	92404	ARMENTA, HUMBERTO	6967 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-151-21	6957 ELMWOOD RD	SAN BERNARDINO	CA	92404	CONTRERAS, MIRNA	6957 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-151-22	6947 ELMWOOD RD	SAN BERNARDINO	CA	92404	SILVA, FRANCISCO H	6947 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-151-23	6937 ELMWOOD RD	SAN BERNARDINO	CA	92404	NAVARRO, FRANCISCO	6937 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-151-24	6929 ELMWOOD RD	SAN BERNARDINO	CA	92404	SPSSM INVESTMENTS-II LP	4900 SANTA ANITA AVE # 26	EL MONTE	CA	91731
0273-151-25	6919 ELMWOOD RD	SAN BERNARDINO	CA	92404	SCHOURUP, JEREMY	509 W 5TH ST	SAN DIMAS	CA	91773
0273-151-26	6909 ELMWOOD RD	SAN BERNARDINO	CA	92404	SANCHEZ, JUANA	6909 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-151-27	7023 ELMWOOD RD	SAN BERNARDINO	CA	92404	MARTINEZ, FERNANDO ALVAREZ	7023 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-152-07	7097 ELMWOOD RD	SAN BERNARDINO	CA	92404	POLLARD, WILLIAM G	3931 CHIQUITA LN	SAN BERNARDINO	CA	92404
0273-152-08	7087 ELMWOOD RD	SAN BERNARDINO	CA	92404	POLLARD, JAMES N	PO BOX 122	PATTON	CA	92369
0273-152-09	7075 ELMWOOD RD	SAN BERNARDINO	CA	92404	RUIZ, JACOBO REGALADO	7075 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-152-10	7069 ELMWOOD RD	SAN BERNARDINO	CA	92404	FRUCHEY, DONALD S	7069 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-152-11	7059 ELMWOOD RD	SAN BERNARDINO	CA	92404	MC CAIN, ROLAND V	7059 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-152-12	7049 ELMWOOD RD	SAN BERNARDINO	CA	92404	MC CAIN, ROLAND	7059 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-152-13	7039 ELMWOOD RD	SAN BERNARDINO	CA	92404	BARAJAS, JUANA	PO BOX 2324	SAN BERNARDINO	CA	92406
0273-201-19	7282 TIPPECANOE AVE	SAN BERNARDINO	CA	92404	SALAJAN, JOHN I	7282 TIPPECANOE AVE	SAN BERNARDINO	CA	92404
0273-202-11	7274 GARDEN DR	SAN BERNARDINO	CA	92404	SEVEN SISTERS FAMILY LIMITED PARTNER	PO BOX 2121	OREM	UT	84059
0273-202-19	7239 TIPPECANOE AVE	SAN BERNARDINO	CA	92404	GUYETTE, DOUGLAS	7239 TIPPECANOE AVE	SAN BERNARDINO	CA	92404
0273-202-20		SAN BERNARDINO	CA	92404	GUYETTE, DOUGLAS	7239 TIPPECANOE AVE	RIVERSIDE	CA	92504
0273-202-42	7258 GARDEN DR	SAN BERNARDINO	CA	92404	LEE, TOUNG Q	7248 GARDEN DR	SAN BERNARDINO	CA	92404
0273-202-43	7236 GARDEN DR	SAN BERNARDINO	CA	92404	NGUYEN, BA VINH	11040 PLUM VIEW LN	YUCAIPA	CA	92399
0273-211-11	7238 CONEJO DR	SAN BERNARDINO	CA	92404	AGUAYO, ROSA	7238 CONEJO DR	SAN BERNARDINO	CA	92404
0273-211-12	CONEJO DR	SAN BERNARDINO	CA	92404	VATAVE FAMILY TRUST	175 PRIMROSE PASS	NEWMAN	GA	30265

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0273-211-27	7233 GARDEN DR	SAN BERNARDINO	CA	92404	MELSON, RICHARD H	7233 GARDEN DR	SAN BERNARDINO	CA	92404
0273-211-28	7255 GARDEN DR	SAN BERNARDINO	CA	92404	BUSH, KEVIN	7768 STERLING AVE	SAN BERNARDINO	CA	92410
0273-211-29	7245 GARDEN DR	SAN BERNARDINO	CA	92404	ANDA, DE J	7245 GARDEN DR	SAN BERNARDINO	CA	92404
0273-211-35	1229 GARDEN DR	SAN BERNARDINO	CA	92404	LANG, WEI	1005 HOLIDAY DR	WEST COVINA	CA	91791
0273-211-36	E BASELINE ST	SAN BERNARDINO	CA	92404	VATAVE FAMILY TRUST	175 PRIMROSE PASS	NEWNAN	GA	30265
0273-211-37	E BASELINE ST	SAN BERNARDINO	CA	92404	VATAVE FAMILY TRUST	175 PRIMROSE PASS	NEWNAN	GA	30265
0273-212-28	7263 CONEJO DR	SAN BERNARDINO	CA	92404	INIGUEZ, RAUL	9139 PARISE DR	WHITTIER	CA	90603
0273-212-29	7249 CONEJO DR	SAN BERNARDINO	CA	92404	BUI, BINH QUANG	7249 CONEJO DR	SAN BERNARDINO	CA	92404
0273-212-30	7243 CONEJO DR	SAN BERNARDINO	CA	92404	HERNANDEZ, FRANCO	2826 W ROSS AVE	ALHAMBRA	CA	91803
0273-212-31	7233 CONEJO DR	SAN BERNARDINO	CA	92404	JUNG, SANDRA DENISE	1113 S DEL MAR AVE	SAN GABRIEL	CA	91776
0273-212-46		SAN BERNARDINO	CA	92404	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0273-212-47	7246 FAIRFAX DR	SAN BERNARDINO	CA	92404	SAGASTUME, RONY	7246 FAIRFAX DR	SAN BERNARDINO	CA	92404
0273-212-64		SAN BERNARDINO	CA	92404	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0273-212-65	7238 FAIRFAX DR	SAN BERNARDINO	CA	92404	DIOURI, IMANE	PO BOX 81075	RSM	CA	92688
0273-212-68		SAN BERNARDINO	CA	92404	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0273-212-76		SAN BERNARDINO	CA	92404	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0273-212-77	7264 FAIRFAX DR	SAN BERNARDINO	CA	92404	SULAEMAN, WIJAYA	3307 VALENCIA AVE	SAN BERNARDINO	CA	92404
0273-212-82		SAN BERNARDINO	CA	92404	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0273-212-83	7254 FAIRFAX DR	SAN BERNARDINO	CA	92404	PEREZ, JUAN J	7254 FAIRFAX DR	SAN BERNARDINO	CA	92404
0273-221-18	7240 DWIGHT WAY	SAN BERNARDINO	CA	92404	MAGALLANES, MARIA DELOS ANGELES	1580 HOME AVE	SAN BERNARDINO	CA	92411
0273-221-19	7246 DWIGHT WAY	SAN BERNARDINO	CA	92404	KNOX, THOMAS E	7914 PEDLEY RD	SAN BERNARDINO	CA	92410
0273-221-20	7256 DWIGHT WAY	SAN BERNARDINO	CA	92404	FORD, GLENN	10853 LOCUST AVE	BLOOMINGTON	CA	92316
0273-221-21	7270 DWIGHT WAY	SAN BERNARDINO	CA	92404	PALM INVESTMENT GROUP LLC	PO BOX 24066	LOS ANGELES	CA	90024
0273-221-25	7263 FAIRFAX DR	SAN BERNARDINO	CA	92404	SHARK INVESTMENTS LLC	8282 WHITE OAK AVE STE 110	RANCHO CUCAMONGA	CA	91730
0273-221-26	7245 FAIRFAX DR	SAN BERNARDINO	CA	92404	MARQUEZ, SANTIAGO	7245 & 7253 FAIRFAX DR	SAN BERNARDINO	CA	92404
0273-221-43	7235 FAIRFAX DR	SAN BERNARDINO	CA	92404	JIMENEZ, IGNACIO	7235 FAIRFAX DR	SAN BERNARDINO	CA	92404
0273-224-02	7234 GLASGOW AVE	SAN BERNARDINO	CA	92404	NGO, ANDREW TAN	7234 GLASGOW AVE	SAN BERNARDINO	CA	92404
0273-224-03		SAN BERNARDINO	CA	92404	NGO, ANDREW TAN	7234 GLASGOW AVE	SAN BERNARDINO	CA	92404
0273-224-04	25176 ELMO DR	SAN BERNARDINO	CA	92404	DIAZ, JOSE DAVID	25176 ELMO DR	SAN BERNARDINO	CA	92404
0273-224-05	25170 ELMO DR	SAN BERNARDINO	CA	92404	RUANO, MIGUEL GOMEZ	6528 ESTRELLA AVE	LOS ANGELES	CA	90044
0273-224-06	25160 ELMO DR	SAN BERNARDINO	CA	92404	GARIBAY, XOCHITL	25160 ELMO DR	SAN BERNARDINO	CA	92404

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0273-224-07	25154 ELMO DR	SAN BERNARDINO	CA	92404	ZEPEDA, DAVID	PO BOX 5731	SAN BERNARDINO	CA	92412
0273-224-08	25144 ELMO DR	SAN BERNARDINO	CA	92404	DIAZ, JOSE DAVID	25180 BASE LINE ST	SAN BERNARDINO	CA	92410
0273-225-01	GLASGOW AVE	SAN BERNARDINO	CA	92404	ZARAGOZA, VICTOR H	25492 PACIFIC ST	SAN BERNARDINO	CA	92404
0273-225-08	25145 ELMO DR	SAN BERNARDINO	CA	92404	COBRA 28 #7 LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0273-225-09	25151 ELMO DR	SAN BERNARDINO	CA	92404	DIAZ, JOSE DAVID	25151 ELMO DR	SAN BERNARDINO	CA	92404
0273-225-10	25159 ELMO DR	SAN BERNARDINO	CA	92404	ARROYOS, MARIA DEL CARMEN	1656 N PRIMROSE AVE	RIALTO	CA	92376
0273-225-11	25169 ELMO DR	SAN BERNARDINO	CA	92404	DIAZ, JOSE DAVID	25169 ELMO DR	SAN BERNARDINO	CA	92404
0273-225-12	25177 ELMO DR	SAN BERNARDINO	CA	92404	SAN BERNARDINO REAL ESTATE VENTURES LLC	25180 BASE LINE ST	SAN BERNARDINO	CA	92410
0273-225-13	25185 ELMO DR	SAN BERNARDINO	CA	92404	VARGAS, JAIME	25185 ELMO DR	SAN BERNARDINO	CA	92404
0273-232-07	25260 BESSANT ST	SAN BERNARDINO	CA	92404	NEUHALFEN, JOHN F	7138 GLASGOW AVE	SAN BERNARDINO	CA	92404
0273-232-08	25270 BESSANT ST	SAN BERNARDINO	CA	92404	ZIMMERMAN, BRAD A	25270 BESSANT ST	SAN BERNARDINO	CA	92404
0273-232-09	25279 BESSANT ST	SAN BERNARDINO	CA	92404	SURDOW, JOANNE B	6121 ORANGE KNOLL AVE	SAN BERNARDINO	CA	92404
0273-232-10	BESSANT ST	SAN BERNARDINO	CA	92404	PHILLIPS, HAROLD B	7138 GLASGOW AVE	SAN BERNARDINO	CA	92404
0273-232-19	7223 YATES ST	SAN BERNARDINO	CA	92404	PRICE, ANGIE	7223 YATES ST	SAN BERNARDINO	CA	92404
0273-232-20	7229 YATES ST	SAN BERNARDINO	CA	92404	SAN JUAN INVESTMENT COMPANY LLC	7229 YATES ST	SAN BERNARDINO	CA	92404
0273-232-21	7239 YATES ST	SAN BERNARDINO	CA	92404	MEADOWS, JACK HOWARD	7239 YATES ST	SAN BERNARDINO	CA	92404
0273-232-22	7245 YATES ST	SAN BERNARDINO	CA	92404	GREEN, ROBERT	7245 YATES ST	SAN BERNARDINO	CA	92404
0273-232-23	7255 YATES ST	SAN BERNARDINO	CA	92404	QUESADA, MARGO	315 CONCOURSE AVE	MONTEBELLO	CA	90640
0273-232-24	7259 YATES ST	SAN BERNARDINO	CA	92404	RODRIGUEZ, IVAN RICARDO	7259 YATES ST	SAN BERNARDINO	CA	92404
0273-232-25	7269 YATES ST	SAN BERNARDINO	CA	92404	WYMER, FRANCES M	7269 YATES ST	SAN BERNARDINO	CA	92404
0273-232-31	7263 GLASGOW AVE	SAN BERNARDINO	CA	92404	DIAZ, JOSE DAVID	25180 BASE LINE ST	SAN BERNARDINO	CA	92410
0273-232-32	7253 GLASGOW AVE	SAN BERNARDINO	CA	92404	STARLITE MGMT-III LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0273-232-33	7245 GLASGOW AVE	SAN BERNARDINO	CA	92404	SORIA, ROGELIO	7245 GLASGOW AVE	SAN BERNARDINO	CA	92404
0273-232-42	7256 YATES ST	SAN BERNARDINO	CA	92404	HOLLAND, DAVID JOHN	7256 YATES ST	SAN BERNARDINO	CA	92404
0273-232-43	7262 YATES ST	SAN BERNARDINO	CA	92404	MEDINA, JORGE NEGRETE	44435 TOWN CENTER WAY STE B	PALM DESERT	CA	92260
0273-232-44	7270 YATES ST	SAN BERNARDINO	CA	92404	DELGADO, RICARDO	1248 N MOUNT VERNON AVE	SAN BERNARDINO	CA	92411
0273-232-50		SAN BERNARDINO	CA	92404	NGO, DONG	1667 LAURELWOOD AVE	COLTON	CA	92324
0273-232-51	E BASELINE ST	SAN BERNARDINO	CA	92404	NGO, DONG	23325 WESTWOOD ST	GRAND TERRACE	CA	92313
0273-232-52	ELMWOOD RD	SAN BERNARDINO	CA	92404	NGO, DONG	23325 WESTWOOD ST	GRAND TERRACE	CA	92313
0273-232-53	ELMWOOD RD	SAN BERNARDINO	CA	92404	NGO, DONG	23325 WESTWOOD ST	GRAND TERRACE	CA	92313

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0273-232-54		SAN BERNARDINO	CA	92404	AHD LIMITED PARTNERSHIP	29848 LIVE OAK CANYON RD	REDLANDS	CA	92373
0273-232-55	7222 ELMWOOD RD	SAN BERNARDINO	CA	92404	GODOY, JUVENTINO	7222 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-232-56		SAN BERNARDINO	CA	92404	AHD LIMITED PARTNERSHIP	29848 LIVE OAK CANYON RD	REDLANDS	CA	92373
0273-232-57	DEL ROSA DR	SAN BERNARDINO	CA	92404	AHD LIMITED PARTNERSHIP	29848 LIVE OAK CANYON RD	REDLANDS	CA	92373
0273-232-58	7182 ELMWOOD RD	SAN BERNARDINO	CA	92404	REBOLLAR, LEOBARDO REYES	7183 DEL ROSA DR	SAN BERNARDINO	CA	92404
0273-232-59	7170 ELMWOOD RD	SAN BERNARDINO	CA	92404	LOMA LINDA RENTALS INC	25612 BARTON RD # 326	LOMA LINDA	CA	92354
0273-232-60	7160 ELMWOOD RD	SAN BERNARDINO	CA	92404	VILLEGAS, JOSE	7160 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-232-61	7152 ELMWOOD RD	SAN BERNARDINO	CA	92404	CLANIN, ODOS III	7152 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-232-62	7142 ELMWOOD RD	SAN BERNARDINO	CA	92404	FRATES, DE A	7142 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-232-63	7134 ELMWOOD RD	SAN BERNARDINO	CA	92404	HODGE, THOMAS DUSHAWN	7134 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-232-64	7124 ELMWOOD RD	SAN BERNARDINO	CA	92404	TORRES, ENRIGUE	7124 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-232-65	7114 ELMWOOD RD	SAN BERNARDINO	CA	92404	ABREGO, JOE	7114 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-232-66	7106 ELMWOOD RD	SAN BERNARDINO	CA	92404	PARKER, CHARLIE M DEBOW	7106 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-232-67	7098 ELMWOOD RD	SAN BERNARDINO	CA	92404	GARCIA, JOSE LUIS	1321 E 23RD ST	LOS ANGELES	CA	90011
0273-241-30	7181 ELMWOOD RD	SAN BERNARDINO	CA	92404	GOMEZ, JAIME	7181 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-241-31	7169 ELMWOOD RD	SAN BERNARDINO	CA	92404	GALVEZ, MANUEL	7169 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-241-32	7161 ELMWOOD RD	SAN BERNARDINO	CA	92404	HAYES, LEROY	528 KENERLY ST	HENDERSON	NV	89015
0273-241-33	7151 ELMWOOD RD	SAN BERNARDINO	CA	92404	ROMO, ARMANDO	7151 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-241-34	7141 ELMWOOD RD	SAN BERNARDINO	CA	92404	MAYORGA, HERLINDA	15110 VALEDA DR	LA MIRADA	CA	90638
0273-241-35	7133 ELMWOOD RD	SAN BERNARDINO	CA	92404	VA	7133 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-241-36	7125 ELMWOOD RD	SAN BERNARDINO	CA	92404	JEFFRIES, EDWARD ADDISON	7125 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-241-37	7113 ELMWOOD RD	SAN BERNARDINO	CA	92404	GARCIA, EDGAR J	7113 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-241-38	7103 ELMWOOD RD	SAN BERNARDINO	CA	92404	SOTO, MARIA D	7103 ELMWOOD RD	SAN BERNARDINO	CA	92404
0273-271-07	6578 MONTE VISTA DR	SAN BERNARDINO	CA	92404	PORRAS, DONALD M	6578 MONTE VISTA DR	SAN BERNARDINO	CA	92404
0273-271-30	MONTE VISTA DR	SAN BERNARDINO	CA	92404	PODSKALAN, JUDY	6595 MONTE VISTA DR	SAN BERNARDINO	CA	92404
0273-271-31	MONTE VISTA DR	SAN BERNARDINO	CA	92404	PODSKALAN, JUDY	6595 MONTE VISTA DR	SAN BERNARDINO	CA	92404
0273-321-01	DEL ROSA AVE	SAN BERNARDINO	CA	92404	WALLERIUS, ROBERT L	PO BOX 9463	SAN BERNARDINO	CA	92427
0273-321-02	6682 DEL ROSA DR	SAN BERNARDINO	CA	92404	WALLERIUS, CAROLYN M	PO BOX 9463	SAN BERNARDINO	CA	92427
0273-321-03	6692 DEL ROSA DR	SAN BERNARDINO	CA	92404	GOMEZ, ANTHONY	2046 N G ST	SAN BERNARDINO	CA	92405
0273-321-04	6702 DEL ROSA DR	SAN BERNARDINO	CA	92404	FERNANDEZ, JOSE R	6702 DEL ROSA DR	SAN BERNARDINO	CA	92404
0273-321-06	25270 19TH ST	SAN BERNARDINO	CA	92404	HERNANDEZ, FELIX	25270 19TH ST	SAN BERNARDINO	CA	92404
0273-321-07	25258 19TH ST	SAN BERNARDINO	CA	92404	CAMACHO, RODOLFO	7995 TOKAY AVE	FONTANA	CA	92336

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0273-321-19	25250 19TH ST	SAN BERNARDINO	CA	92404	MANNING, DORIS E	25250 19TH ST	SAN BERNARDINO	CA	92404
0273-321-21	6719 YATES ST	SAN BERNARDINO	CA	92404	BRINKLEY, TIMOTHY R	6719 YATES ST	SAN BERNARDINO	CA	92404
0273-321-22	6725 YATES ST	SAN BERNARDINO	CA	92404	MONTES, ANTONIO	6725 YATES ST	SAN BERNARDINO	CA	92404
0273-321-23	6737 YATES ST	SAN BERNARDINO	CA	92404	WALKER, GERALD D	6737 YATES ST	SAN BERNARDINO	CA	92404
0273-321-24	6745 YATES ST	SAN BERNARDINO	CA	92404	OSORIO, CARLOS	140 S 2ND ST	MONTEBELLO	CA	90640
0273-321-25	6755 YATES ST	SAN BERNARDINO	CA	92404	JACKSON HAROLD G TR	6755 YATES ST	SAN BERNARDINO	CA	92404
0273-321-26	6763 YATES ST	SAN BERNARDINO	CA	92404	KOHFELDT, WALTER F	6763 YATES ST	SAN BERNARDINO	CA	92404
0273-321-27	25270 18TH ST	SAN BERNARDINO	CA	92404	CASTELLANOS, THOMAS DEAN	25270 18TH ST	SAN BERNARDINO	CA	92404
0273-321-28	6772 DEL ROSA DR	SAN BERNARDINO	CA	92404	MENDOZA, PATRICIA	6772 DEL ROSA DR	SAN BERNARDINO	CA	92404
0273-321-29	6764 DEL ROSA DR	SAN BERNARDINO	CA	92404	MACIAS, JOHN GONZALEZ	6764 DEL ROSA DR	SAN BERNARDINO	CA	92404
0273-321-30	6758 DEL ROSA DR	SAN BERNARDINO	CA	92404	RODRIGUEZ, MARCIANO P	PO BOX 3398	SAN BERNARDINO	CA	92413
0273-321-31	6746 DEL ROSA DR	SAN BERNARDINO	CA	92404	SERRANO, CRISOSTO	11705 IVERSON ST	VICTORVILLE	CA	92392
0273-321-32	6736 DEL ROSA DR	SAN BERNARDINO	CA	92404	RIVERA, JOSE	6736 DEL ROSA DR	SAN BERNARDINO	CA	92404
0273-321-33	6728 DEL ROSA DR	SAN BERNARDINO	CA	92404	WEST, RAYMOND J	6728 DEL ROSA DR	SAN BERNARDINO	CA	92404
0273-321-34	6718 DEL ROSA DR	SAN BERNARDINO	CA	92404	HARP, LEEANN MARIE	160 E PARKDALE DR APT 233	SAN BERNARDINO	CA	92404
0273-321-35	6710 DEL ROSA DR	SAN BERNARDINO	CA	92404	ROMERO, MICHAEL JR	6710 DEL ROSA DR	SAN BERNARDINO	CA	92404
0273-321-37	6709 YATES ST	SAN BERNARDINO	CA	92404	LUONG, DUNG ANH	6709 YATES ST	SAN BERNARDINO	CA	92404
0273-323-06	25257 18TH ST	SAN BERNARDINO	CA	92404	BRADY, QUOVONNA L	25257 18TH ST	SAN BERNARDINO	CA	92404
0273-323-07	25267 18TH ST	SAN BERNARDINO	CA	92404	CISNEROS, ANA B	25267 18TH ST	SAN BERNARDINO	CA	92404
0273-323-08	25275 18TH ST	SAN BERNARDINO	CA	92404	KASABIAN, GEVORG G	2141 E CRARY ST	PASADENA	CA	91104
0273-323-09	25285 18TH ST	SAN BERNARDINO	CA	92404	NGUYEN, KEVIN	11011 STALLION AVE	MONTCLAIR	CA	91763
0273-323-10	6790 DEL ROSA DR	SAN BERNARDINO	CA	92404	HERNANDEZ, ELFREGO	6790 DEL ROSA DR	SAN BERNARDINO	CA	92404
0273-371-24	1631 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	ELLAHI, SHIEKH S	1777 S VINTAGE AVE	ONTARIO	CA	91761
0273-371-25	1631 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	ELLAHI, SHIEKH S	4083 E AIRPORT DR	ONTARIO	CA	91761
0273-371-26	1895 DEL ROSA DR	SAN BERNARDINO	CA	92404	BOCHNER, DAN Z	PO BOX 10809	BEVERLY HILLS	CA	90213
0273-371-27	1605 E HIGHLAND AVE	SAN BERNARDINO	CA	92404	LEDASOR PARTNERS LLC	10877 WILSHIRE BLVD STE 1105	LOS ANGELES	CA	90024
0154-261-05	3969 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92405	SHIDLER, ROBIN W	180 W HIGHLAND AVE	SAN BERNARDINO	CA	92405
0154-261-06	3975 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92405	LUNA, DANIEL	3975 N MOUNTAIN VW	SAN BERNARDINO	CA	92404
0154-261-12		SAN BERNARDINO	CA	92405	SOUTHERN CALIFORNIA EDISON COMPANY	PO BOX 800	ROSEMEAD	CA	91770
0154-261-14		SAN BERNARDINO	CA	92405	HOFER GEORGE W TR	653 OCEAN VIEW DR	CAMARILLO	CA	93010

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0154-261-15		SAN BERNARDINO	CA	92405	HOUSING AUTHORITY OF THE CO SAN BDNO	715 E BRIER DR	SAN BERNARDINO	CA	92408
0154-261-21	3987 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92405	MATHIS, DIANA	3987 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92405
0154-261-25	3982 GENEVIEVE ST	SAN BERNARDINO	CA	92405	MODEH LLC	8950 W OLYMPIC BLVD STE 240	BEVERLY HILLS	CA	90211
0154-262-05	3969 GENEVIEVE ST	SAN BERNARDINO	CA	92405	TECKER, SHERYL S	3126 VALENCIA AVE	SAN BERNARDINO	CA	92404
0154-262-06	3975 GENEVIEVE ST	SAN BERNARDINO	CA	92405	SAVAGE, PHILIP M	3126 VALENCIA AVE	SAN BERNARDINO	CA	92404
0154-262-07	3981 GENEVIEVE ST	SAN BERNARDINO	CA	92405	SAVAGE, LYNDA K	3126 VALENCIA AVE	SAN BERNARDINO	CA	92404
0154-262-12	3990 N SIERRA WAY	SAN BERNARDINO	CA	92405	PHAN, NGOC CHENG THI	330 N D ST STE 325	SAN BERNARDINO	CA	92401
0154-262-13	3970 N SIERRA WAY	SAN BERNARDINO	CA	92405	PHAN, NGOC CHENG THI	330 N D ST STE 325	SAN BERNARDINO	CA	92401
0154-262-14	3970 N SIERRA WAY	SAN BERNARDINO	CA	92405	PHAN, NGOC CHENG THI	330 N D ST STE 325	SAN BERNARDINO	CA	92401
0154-262-15	3970 N SIERRA WAY	SAN BERNARDINO	CA	92405	PHAN, NGOC CHENG THI	1115 S BARRINGTON AVE APT 1	LOS ANGELES	CA	90049
0154-263-11	3969 N SIERRA WAY	SAN BERNARDINO	CA	92405	TEUNISSEN, DONALD H	4075 MIRADA ST	HIGHLAND	CA	92346
0154-263-12	3993 N SIERRA WAY	SAN BERNARDINO	CA	92405	SIERRA WAY PLAZA LLC	9123 CHARLEVILLE BLVD	BEVERLY HILLS	CA	90212
0262-041-12	CAJON BLVD	SAN BERNARDINO	CA	92405	CARABAJAL, LEO ALBERT	15466 MISSION ST	HESPERIA	CA	92345
0266-221-01	F ST	SAN BERNARDINO	CA	92405	VCA REAL PROPERTY ACQUISITION CORPORATIO	12401 W OLYMPIC BLVD	LOS ANGELES	CA	90064
0271-041-01		SAN BERNARDINO	CA	92405	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0271-041-05	3970 ACRE LN	SAN BERNARDINO	CA	92405	TOVAR, JOSEPHINE	3970 ACRE LN	SAN BERNARDINO	CA	92405
0271-041-06	3980 ACRE LN	SAN BERNARDINO	CA	92405	MENDOZA, HECTOR	3980 ACRE LN	SAN BERNARDINO	CA	92405
0271-041-08		SAN BERNARDINO	CA	92405	KADDOUR, FAWAZ	3559 BELVEDERE CIR	CORONA	CA	92882
0271-041-09	3960 ACRE LN	SAN BERNARDINO	CA	92405	EALEY, WILLIAM J	3960 ACRE LN	SAN BERNARDINO	CA	92405
0271-041-11		SAN BERNARDINO	CA	92405	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0271-042-08	3936 NEWMARK AVE	SAN BERNARDINO	CA	92405	GILMORE, NICHOLAS	3936 NEWMARK AVE	SAN BERNARDINO	CA	92405
0271-042-09	3965 ACRE LN	SAN BERNARDINO	CA	92405	WALLERIUS, CAROLYN	PO BOX 9463	SAN BERNARDINO	CA	92427
0271-042-10	3942 NEWMARK AVE	SAN BERNARDINO	CA	92405	BAYON, ALBERTO	3942 NEWMARK AVE	SAN BERNARDINO	CA	92405
0271-042-11	3977 ACRE LN	SAN BERNARDINO	CA	92405	FERNANDES, MARGUERITE	PO BOX 390280	ANZA	CA	92539
0271-042-12	3950 NEWMARK AVE	SAN BERNARDINO	CA	92405	NAVARRO, ARTURO	3950 NEWMARK AVE	SAN BERNARDINO	CA	92405
0271-051-06	3941 NEWMARK AVE	SAN BERNARDINO	CA	92405	MORGAN, RICHARD D	3941 NEWMARK AVE	SAN BERNARDINO	CA	92405
0271-051-07	3947 NEWMARK AVE	SAN BERNARDINO	CA	92405	RAMOS, GEORGE H	5360 CARNELIAN ST	ALTA LOMA	CA	91701
0271-051-08		SAN BERNARDINO	CA	92405	MARTINEZ, LISA	9908 ASPEN KNOLL CT	LAS VEGAS	NV	89117
0271-051-09		SAN BERNARDINO	CA	92405	MARTINEZ, LISA	9908 ASPEN KNOLL CT	LAS VEGAS	NV	89117
0271-051-10		SAN BERNARDINO	CA	92405	MARTINEZ, LISA	9908 ASPEN KNOLL CT	LAS VEGAS	NV	89117

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0271-051-13	3996 SEVERENCE AVE	SAN BERNARDINO	CA	92405	HENLEY, BRYAN	21155 FELIPA RD	YORBA LINDA	CA	92887
0271-051-14		SAN BERNARDINO	CA	92405	REYNOLDS, JERRY E	27025 CAMINO DE ESTRELLA	DANA POINT	CA	92624
0271-051-15	3950 SEVERENCE AVE	SAN BERNARDINO	CA	92405	BOGGUST, JOHN H	3950 SEVERENCE AVE	SAN BERNARDINO	CA	92405
0271-051-16	3946 SEVERENCE AVE	SAN BERNARDINO	CA	92405	CASTANEDA, ADAM	5823 GREEN PINE CT	RANCHO CUCAMONGA	CA	91739
0271-052-07	3949 SEVERENCE AVE	SAN BERNARDINO	CA	92405	PARTNERS RENTAL INCOME RETURN LLC	3595-1 INLAND EMPIRE BLVD STE 1100	ONTARIO	CA	91764
0271-052-08	3959 SEVERENCE AVE	SAN BERNARDINO	CA	92405	STRINGER, DESHONA L	3959 SEVERENCE AVE	SAN BERNARDINO	CA	92405
0271-052-09	3969 SEVERENCE AVE	SAN BERNARDINO	CA	92405	CIRIGO, SHEYLA	3969 SEVERENCE AVE	SAN BERNARDINO	CA	92405
0271-052-14	3990 ELECTRIC AVE	SAN BERNARDINO	CA	92405	EL-AAWART SHAB, TRUST	3998 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92405
0271-052-15	3986 ELECTRIC AVE	SAN BERNARDINO	CA	92405	EL AAWAR SHAB TRUST	3998 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92405
0271-052-16	3980 ELECTRIC AVE	SAN BERNARDINO	CA	92405	EL-AAWAR SHAB TRUST	3998 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92405
0271-052-17	3970 ELECTRIC AVE	SAN BERNARDINO	CA	92405	WOOLARD, JAMES A	3950 ELECTRIC AVE	SAN BERNARDINO	CA	92405
0271-052-30	3979 SEVERENCE AVE	SAN BERNARDINO	CA	92405	LOUDEN LLC	1999 HARRISON ST STE 2200	OAKLAND	CA	94612
0271-062-04	3990 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92405	EL-AAWAR SHAB TRUST	3998 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92405
0271-062-05	3985 PALM DR	SAN BERNARDINO	CA	92405	EL-AAWAR SHAB TRUST	3998 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92405
0271-062-06	3986 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92405	POLANSKY, MARY ANN	PO BOX 938	UPLAND	CA	91785
0271-062-07	3982 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92405	BROWN, SHIRLEY LEE	3982 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92405
0271-062-08	3976 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92405	WILMINGTON TRUST NATIONAL ASSOCIATION	7255 BAYMEADOWS WAY	JACKSONVILLE	FL	32256
0271-062-09		SAN BERNARDINO	CA	92405	MILLER, BRANDON	1924 N ARROWHEAD AVE	RIALTO	CA	92376
0271-062-29	3998 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92405	SHAB EL-AAWAR TRUST	3998 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92405
0151-181-09	3981 N H ST	SAN BERNARDINO	CA	92407	ROJO, JOHNNY	PO BOX 556	ETIWANDA	CA	91739
0151-181-10	795 W 40TH ST	SAN BERNARDINO	CA	92407	KHAUO, HEANG	2037 SAINT LOUIS AVE	SIGNAL HILL	CA	90755
0151-181-13		SAN BERNARDINO	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0151-181-14		SAN BERNARDINO	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0151-181-21	3975 N H ST	SAN BERNARDINO	CA	92407	COBRA 28 NO 2 LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0151-181-24	3981 N H ST	SAN BERNARDINO	CA	92407	ROJO, JOHNNY	PO BOX 556	ETIWANDA	CA	91739
0151-181-25	753 W 40TH ST	SAN BERNARDINO	CA	92407	PHAM, TIEN MINH	1794 ARDEN AVE	SAN BERNARDINO	CA	92404

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0151-191-01	3RD AVE	SAN BERNARDINO	CA	92407	SHARPE, WILLIAM W	3202 TIGERTAIL DR	LOS ALAMITOS	CA	90720
0151-191-02	3RD AVE	SAN BERNARDINO	CA	92407	SHARPE, WILLIAM W	3202 TIGERTAIL DR	LOS ALAMITOS	CA	90720
0151-191-03		SAN BERNARDINO	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0151-191-07		SAN BERNARDINO	CA	92407	VCA REAL PROPERTY ACQUISITION CORPORATIO	12401 W OLYMPIC BLVD	LOS ANGELES	CA	90064
0151-191-08		SAN BERNARDINO	CA	92407	VCA REAL PROPERTY ACQUISITION CORPORATIO	12401 W OLYMPIC BLVD	LOS ANGELES	CA	90064
0151-191-09	939 W 40TH ST	SAN BERNARDINO	CA	92407	VCA REAL PROPERTY ACQUISITION CORPORATIO	12401 W OLYMPIC BLVD	LOS ANGELES	CA	90064
0151-191-10		SAN BERNARDINO	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0151-192-07	895 W 40TH ST	SAN BERNARDINO	CA	92407	NORTH END ASSEMBLY OF GOD, SAN BDNO	PO BOX 3693	SAN BERNARDINO	CA	92413
0151-193-03	40TH ST	SAN BERNARDINO	CA	92407	KIM, MYUNG SOON	2601 TELEGRAPH AVE	OAKLAND	CA	94612
0151-193-04	40TH ST	SAN BERNARDINO	CA	92407	KIM, MYUNG SOON	2601 TELEGRAPH AVE	OAKLAND	CA	94612
0151-193-05	40TH ST	SAN BERNARDINO	CA	92407	KIM, MYUNG SOON	2601 TELEGRAPH AVE	OAKLAND	CA	94612
0151-201-01		SAN BERNARDINO	CA	92407	ANDERSEN, HAROLD D	2387 FOOTHILL DR	VISTA	CA	92084
0151-201-02		SAN BERNARDINO	CA	92407	ANDERSEN, HAROLD D	2387 FOOTHILL DR	VISTA	CA	92084
0151-201-03		SAN BERNARDINO	CA	92407	MCCLINTIC, GWEN G	6318 IDYLLWILD CT	RIALTO	CA	92377
0151-201-04		SAN BERNARDINO	CA	92407	VONDEAUXPLETTE, LORRAINE A D	26246 KALMIA AVE	MORENO VALLEY	CA	92555
0151-201-05		SAN BERNARDINO	CA	92407	ANDERSEN, HAROLD D	2387 FOOTHILL DR	VISTA	CA	92084
0151-201-06		SAN BERNARDINO	CA	92407	VANGARI, ANAND	13638 FELSON ST	CERRITOS	CA	90703
0151-201-07	1058 KENDALL DR	SAN BERNARDINO	CA	92407	BRADA, LA G	3348 BESWICK ST	LOS ANGELES	CA	90023
0151-201-08		SAN BERNARDINO	CA	92407	ANDERSEN, HAROLD D	2387 FOOTHILL DR	VISTA	CA	92084
0151-201-09	KENDALL DR	SAN BERNARDINO	CA	92407	ALLEN MICHAEL SR & BRENDA FAM TR 5	PO BOX 5411	SAN BERNARDINO	CA	92412
0151-201-10	4TH AVE	SAN BERNARDINO	CA	92407	ALLEN MICHAEL SR & BRENDA FAM TR 5	PO BOX 5411	SAN BERNARDINO	CA	92412
0151-202-01		SAN BERNARDINO	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0151-202-02	1040 W 40TH ST	SAN BERNARDINO	CA	92407	SAYEGH, MARK	4165 ROBBY CIR	CORONA	CA	92881
0151-202-05	1040 W 40TH ST	SAN BERNARDINO	CA	92407	SAYEGH, MARK	4165 ROBBY CIR	CORONA	CA	92881
0151-202-14	1050 KENDALL DR	SAN BERNARDINO	CA	92407	PACIFIC 1050 KENDALL LLC	1850 S SEPULVEDA BLVD	LOS ANGELES	CA	90025
0151-203-01	40TH ST	SAN BERNARDINO	CA	92407	ZAKNOUN, NIDAL E	5242 NOTNIL CT	SAN BERNARDINO	CA	92407
0151-211-01	1200 KENDALL DR	SAN BERNARDINO	CA	92407	FOXDALE ASSOCIATES LTD	851 BURLWAY RD STE 520	BURLINGAME	CA	94010
0151-211-08	KENDALL DR	SAN BERNARDINO	CA	92407	ALLEN, MICHAEL P	PO BOX 5411	SAN BERNARDINO	CA	92412
0151-211-09	KENDALL DR	SAN BERNARDINO	CA	92407	ALLEN, MICHAEL P	PO BOX 5411	SAN BERNARDINO	CA	92412
0151-211-11	KENDALL DR	SAN BERNARDINO	CA	92407	ALLEN, MICHAEL P	PO BOX 5411	SAN BERNARDINO	CA	92412
0151-211-12	KENDALL DR	SAN BERNARDINO	CA	92407	ALLEN, MICHAEL P	PO BOX 5411	SAN BERNARDINO	CA	92412
0151-221-18		SAN BERNARDINO	CA	92407	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0151-221-19		SAN BERNARDINO	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0151-301-01		SAN BERNARDINO	CA	92407	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0151-301-03		SAN BERNARDINO	CA	92407	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0154-211-15	4076 N PERSHING AVE	SAN BERNARDINO	CA	92407	RUCAREAN, DOROTHY L	4076 N PERSHING AVE	SAN BERNARDINO	CA	92407
0154-211-16	4054 N PERSHING AVE	SAN BERNARDINO	CA	92407	QUINTANILLA, MARGOTH	3761 W MEYERS RD	SAN BERNARDINO	CA	92407
0154-211-17		SAN BERNARDINO	CA	92407	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0154-211-18	4055 N PERSHING AVE	SAN BERNARDINO	CA	92407	MARMOLEJO, GEORGE	4055 N PERSHING AVE	SAN BERNARDINO	CA	92407
0154-211-19	4075 N PERSHING AVE	SAN BERNARDINO	CA	92407	WRIGHT, MARVIN L	223 ARMSLEY SQ	ONTARIO	CA	91762
0154-211-41	4082 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92407	FEDERAL NATIONAL MORTGAGE ASSOCIATION	888 E WALNUT ST	PASADENA	CA	91101
0154-211-42	4068 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92407	DODSON, TAUNYA	4068 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92407
0154-211-43	4054 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92407	PADILLA, MARYANN	15765 PATRICIA ST	MORENO VALLEY	CA	92551
0154-241-15	4053 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92407	LUNA, MARK A	866 N RANCHO AVE	COLTON	CA	92324
0154-241-16	4067 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92407	CHISM, ANNE ELIZABETH	4067 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92407
0154-241-26	4000 N SIERRA WAY	SAN BERNARDINO	CA	92407	KRITIKOS, GEORGE	3579 N ORANGEWOOD AVE	RIALTO	CA	92377
0154-241-38	150 W 40TH ST	SAN BERNARDINO	CA	92407	PACSIERRA LLC	12100 WILSHIRE BLVD STE 1025	LOS ANGELES	CA	90025
0154-241-39	140 W 40TH ST	SAN BERNARDINO	CA	92407	PACSIERRA LLC	12100 WILSHIRE BLVD STE 1025	LOS ANGELES	CA	90025
0154-241-49	40TH ST	SAN BERNARDINO	CA	92407	KRITIKOS, GEORGE	3579 N ORANGEWOOD AVE	RIALTO	CA	92377
0154-241-50	N SIERRA WAY	SAN BERNARDINO	CA	92407	PACSIERRA LLC	12100 WILSHIRE BLVD STE 1025	LOS ANGELES	CA	90025
0154-242-49	4041 N SIERRA WAY	SAN BERNARDINO	CA	92407	HIGHFIELD WEST ASSOCIATES LLC	4929 WILSHIRE BLVD STE 910	LOS ANGELES	CA	90010
0154-261-26	171 W 40TH ST	SAN BERNARDINO	CA	92407	KIM, KYUNG HO	11204 SALERNO WAY	NORTHRIDGE	CA	91326
0154-262-21	127 W 40TH ST	SAN BERNARDINO	CA	92407	MARTINEZ, LISA	9908 ASPEN KNOLL CT	LAS VEGAS	NV	89117
0154-641-02	4026 ELECTRIC AVE	SAN BERNARDINO	CA	92407	STURROCK, ADEN T	8409 PICKWICK LN # 215	DALLAS	TX	75225
0154-641-03	4018 ELECTRIC AVE	SAN BERNARDINO	CA	92407	CHIRITA, MIHAI	817 FEATHER PEAK DR	CORONA	CA	92882
0154-641-04	4004 ELECTRIC AVE	SAN BERNARDINO	CA	92407	RAMIREZ, JUAN LUIS	16255 PICK PL	RIVERSIDE	CA	92504
0154-641-05	316 W 40TH ST	SAN BERNARDINO	CA	92407	STARLITE MGMT VIII LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0154-641-06	320 W 40TH ST	SAN BERNARDINO	CA	92407	RAYDON, AMBER L	3998 MT VIEW AVE	SAN BERNARDINO	CA	92407
0154-641-07		SAN BERNARDINO	CA	92407	CHIRITA, MIHAI	817 FEATHER PEAK DR	CORONA	CA	92882
0154-641-08	4025 LORRAINE DR	SAN BERNARDINO	CA	92407	EIGHT AT EIGHT REVOCABLE LIV TR	PO BOX 8494	RANCHO CUCAMONGA	CA	91701
0154-641-09	4029 LORRAINE DR	SAN BERNARDINO	CA	92407	FRUEHAN, FRED	1375 E BASE LINE ST	SAN BERNARDINO	CA	92410
0154-641-10	4032 ELECTRIC AVE	SAN BERNARDINO	CA	92407	FRUEHAN, FRED	1375 E BASE LINE ST	SAN BERNARDINO	CA	92410
0154-642-04		SAN BERNARDINO	CA	92407	COMMUNITY BIBLE CHURCH	324 W 40TH ST	SAN BERNARDINO	CA	92407
0154-642-05	324 W 40TH ST	SAN BERNARDINO	CA	92407	COMMUNITY BIBLE CHURCH	324 W 40TH ST	SAN BERNARDINO	CA	92407
0154-642-06		SAN BERNARDINO	CA	92407	COMMUNITY BIBLE CH IND AND FUNDAMENT	324 W 40TH ST	SAN BERNARDINO	CA	92407
0154-642-07	340 W 40TH ST	SAN BERNARDINO	CA	92407	HENLEY, BRYAN	21155 FELIPA RD	YORBA LINDA	CA	92887
0154-643-01	NEWMARK AVE	SAN BERNARDINO	CA	92407	SECURED INCOME GROUP INC	17592 17TH ST STE 100	TUSTIN	CA	92780
0154-643-03	4019 ACRE LN	SAN BERNARDINO	CA	92407	WARREN, DON LIVING TRUST	PO BOX 5021	BLUE JAY	CA	92317
0154-643-04	4007 ACRE LN	SAN BERNARDINO	CA	92407	MAX MAR HOLDINGS LLC	13681 NEWPORT AVE # 8328	TUSTIN	CA	92780
0154-643-05	4008 NEWMARK AVE	SAN BERNARDINO	CA	92407	JORDAN, GREG	PO BOX 15443	IRVINE	CA	92623
0261-111-04	19464 KENDALL DR	SAN BERNARDINO	CA	92407	CACTUS 5.5 LLC	1 LIME ORCH	LAGUNA NIGUEL	CA	92677
0261-111-05	19440 KENDALL DR	SAN BERNARDINO	CA	92407	SHOFFEITT, DIANA	19440 KENDALL DR	SAN BERNARDINO	CA	92407
0261-111-08	19346 KENDALL DR	SAN BERNARDINO	CA	92407	KHAN, SHAGUFTA S	1788 W HIGHLAND AVE	SAN BERNARDINO	CA	92411
0261-111-12		SAN BERNARDINO	CA	92407	HILL, MELVIN H	4243 N F ST	SAN BERNARDINO	CA	92407
0261-111-13	19262 KENDALL DR	SAN BERNARDINO	CA	92407	YORK, DONALD E JR	19262 KENDALL DR	SAN BERNARDINO	CA	92407
0261-111-20	19264 KENDALL DR	SAN BERNARDINO	CA	92407	NELSON, MICHAEL J	6321 PUMALO CT	HIGHLAND	CA	92346
0261-111-22	19438 KENDALL DR	SAN BERNARDINO	CA	92407	MENDOZA, MAGDA CERVANTES	19438 KENDALL DR	SAN BERNARDINO	CA	92407
0261-111-24	CAJON BLVD	SAN BERNARDINO	CA	92407	ALIAGA, ARCADIO	19314 KENDALL DR	SAN BERNARDINO	CA	92407
0261-111-31	19314 KENDALL DR	SAN BERNARDINO	CA	92407	ALIAGA, ROGER A	19314 KENDALL DR	SAN BERNARDINO	CA	92407
0261-111-32	19216 KENDALL DR	SAN BERNARDINO	CA	92407	KIM, YOUNG	4028 HWY 138	PHELAN	CA	92371
0261-111-34	19302 KENDALL DR	SAN BERNARDINO	CA	92407	WATKINS, ROY J	19302 KENDALL DR	SAN BERNARDINO	CA	92407
0261-111-36	CAJON BLVD	SAN BERNARDINO	CA	92407	ALIAGA, ARCADIO	19314 KENDALL DR	SAN BERNARDINO	CA	92407
0261-111-38	19346 KENDALL DR	SAN BERNARDINO	CA	92407	POTTER, PHILLIP S	19346 KENDALL DR	SAN BERNARDINO	CA	92407
0261-111-39	19284 KENDALL DR	SAN BERNARDINO	CA	92407	CRP PLUMBING COMPANY INC TIERED 401K PRO	665 BRADBURY DR	REDLANDS	CA	92374
0261-111-41	19384 KENDALL DR	SAN BERNARDINO	CA	92407	FALLON, DONNA	211 LONETREE	IRVINE	CA	92603
0261-111-42	19366 KENDALL DR	SAN BERNARDINO	CA	92407	HERNANDEZ, DELIA	19366 KENDALL DR	SAN BERNARDINO	CA	92407
0261-161-01	19486 KENDALL DR	SAN BERNARDINO	CA	92407	HERNANDEZ, MARK ONEAL	13959 GUIDERA DR	RANCHO CUCAMONGA	CA	91739
0261-161-03	19512 KENDALL DR	SAN BERNARDINO	CA	92407	DOROUGH, THOMAS S	5738 JASPER ST	ALTA LOMA	CA	91701

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0261-161-04	KENDALL DR	SAN BERNARDINO	CA	92407	CASTANON, J CONRADO	1115 S FERRIS AVE	LOS ANGELES	CA	90022
0261-161-05	19532 KENDALL DR	SAN BERNARDINO	CA	92407	HODGSON, MARTHA FAY	19532 KENDALL DR	SAN BERNARDINO	CA	92407
0261-161-06	19544 KENDALL DR	SAN BERNARDINO	CA	92407	KELLEY, JOHN ERNEST	18264 PINECONE LN	RIVERSIDE	CA	92504
0261-161-07	19552 KENDALL DR	SAN BERNARDINO	CA	92407	RAMIREZ, MOISES LERMA	PO BOX 4416	EL MONTE	CA	91734
0261-161-08	19568 KENDALL DR	SAN BERNARDINO	CA	92407	RAMIREZ, MOISES LERMA	PO BOX 4416	EL MONTE	CA	91734
0261-161-09	19576 KENDALL DR	SAN BERNARDINO	CA	92407	VALDEZ, BARRY D	19576 KENDALL DR	SAN BERNARDINO	CA	92407
0261-161-10	19588 KENDALL DR	SAN BERNARDINO	CA	92407	VALDEZ, BARRY	19576 KENDALL DR	SAN BERNARDINO	CA	92407
0261-161-11	19600 KENDALL DR	SAN BERNARDINO	CA	92407	DAMRON, JAMES E	1415 DILLSON RD	SAN BERNARDINO	CA	92404
0261-161-12	19612 KENDALL DR	SAN BERNARDINO	CA	92407	LEWIS, G F	19612 KENDALL DR	SAN BERNARDINO	CA	92407
0261-161-13		SAN BERNARDINO	CA	92407	LEWIS, G F	19612 KENDALL DR	SAN BERNARDINO	CA	92407
0261-161-14		SAN BERNARDINO	CA	92407	SINGH, SURINDER PAL	2001 DINERS CT	SAN BERNARDINO	CA	92408
0261-161-15	19642 KENDALL DR	SAN BERNARDINO	CA	92407	PIEDRA, JUAN R	19642 KENDALL DR	SAN BERNARDINO	CA	92407
0261-161-16	19658 KENDALL DR	SAN BERNARDINO	CA	92407	DAVIS, GLENN P	19658 KENDALL DR	SAN BERNARDINO	CA	92407
0261-161-17	19672 KENDALL DR	SAN BERNARDINO	CA	92407	OLIVIER, HENRY	2989 SPLIT MOUNTAIN LN	SAN BERNARDINO	CA	92407
0261-161-18	19686 KENDALL DR	SAN BERNARDINO	CA	92407	WOODRING, JANET MARIE	8306 BELLA VISTA DR	ALTA LOMA	CA	91701
0261-161-19	KENDALL DR	SAN BERNARDINO	CA	92407	WOODRING, JANET M	8306 BELLA VISTA DR	ALTA LOMA	CA	91701
0261-161-20	19708 KENDALL DR	SAN BERNARDINO	CA	92407	BARNETT, SCOTT STEVEN	19708 KENDALL DR	SAN BERNARDINO	CA	92407
0261-161-21	19708 KENDALL DR	SAN BERNARDINO	CA	92407	BARNETT, SCOTT STEVEN	19708 KENDALL DR	SAN BERNARDINO	CA	92407
0261-161-22	19708 KENDALL DR	SAN BERNARDINO	CA	92407	BARNETT, SCOTT STEVEN	19708 KENDALL DR	SAN BERNARDINO	CA	92407
0261-161-23	19708 KENDALL DR	SAN BERNARDINO	CA	92407	BARNETT, SCOTT STEVEN	19708 KENDALL DR	SAN BERNARDINO	CA	92407
0261-161-24		SAN BERNARDINO	CA	92407	SNB WB LLC	16392 CORAL CAY WAY	HUNTINGTON BEACH	CA	92649
0261-161-25	19768 KENDALL DR	SAN BERNARDINO	CA	92407	SNB WB LLC	16392 CORAL CAY WAY	HUNTINGTON BEACH	CA	92649
0261-161-27	1950 KENDALL DR	SAN BERNARDINO	CA	92407	KELLEY, JOHN E	18264 PINECONE LN	RIVERSIDE	CA	92504
0261-171-05	19768 KENDALL DR	SAN BERNARDINO	CA	92407	SNB WB LLC	16392 CORAL CAY WAY	HUNTINGTON BEACH	CA	92649
0261-172-01	KENDALL DR	SAN BERNARDINO	CA	92407	LIN, JACKSON CHEN	93 MORNING GLORY RD	WARREN	NJ	7059
0261-172-02	19842 KENDALL DR	SAN BERNARDINO	CA	92407	MALDONADO, SALVADOR	19842 KENDALL DR	SAN BERNARDINO	CA	92407
0261-172-06	19904 KENDALL DR	SAN BERNARDINO	CA	92407	JERNIGAN, KENNETH	19904 KENDALL DR	SAN BERNARDINO	CA	92407
0261-172-07		SAN BERNARDINO	CA	92407	JERNIGAN, KENNETH	19904 KENDALL DR	SAN BERNARDINO	CA	92407
0261-172-08	19924 KENDALL DR	SAN BERNARDINO	CA	92407	FERGUSON, DAVID	19924 KENDALL DR	SAN BERNARDINO	CA	92407
0261-172-09		SAN BERNARDINO	CA	92407	MC REYNOLDS, JAMES	1939 N OAKDALE AVE	RIALTO	CA	92376

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0261-172-10		SAN BERNARDINO	CA	92407	MC REYNOLDS, JAMES	1939 N OAKDALE AVE	RIALTO	CA	92376
0261-172-11	19960 KENDALL DR	SAN BERNARDINO	CA	92407	PLEITEZ CORTEZ, AMANDA	10616 DANUBE AVE	GRANADA HILLS	CA	91344
0261-172-12	19976 KENDALL DR	SAN BERNARDINO	CA	92407	MILLER, EDDIE D	19976 KENDALL DR	SAN BERNARDINO	CA	92407
0261-172-13		SAN BERNARDINO	CA	92407	BAKER, AARON MICHAEL	4456 TREASURE VLY	CLAREMONT	CA	91711
0261-172-20	19870 KENDALL DR	SAN BERNARDINO	CA	92407	BAILEY CALIFORNIA PROPERTIES LLC	3421 GATO CT STE C	RIVERSIDE	CA	92507
0261-172-22		SAN BERNARDINO	CA	92407	BAILEY CALIFORNIA PROPERTIES LLC	3421 GATO CT STE C	RIVERSIDE	CA	92507
0261-172-24	19870 KENDALL DR	SAN BERNARDINO	CA	92407	BAILEY CALIFORNIA PROPERTIES LLC	3421 GATO CT STE C	RIVERSIDE	CA	92507
0261-181-12		SAN BERNARDINO	CA	92407	BAKER, AARON MICHAEL	4456 TREASURE VLY	CLAREMONT	CA	91711
0261-181-13	LITTLE LEAGUE	SAN BERNARDINO	CA	92407	HOPROCK 2 VERDEMONT LLC	2 EMBARCADERO CTR STE 2360	SAN FRANCISCO	CA	94111
0261-181-14	LITTLE LEAGUE	SAN BERNARDINO	CA	92407	HOPROCK 2 VERDEMONT LLC	2 EMBARCADERO CTR STE 2360	SAN FRANCISCO	CA	94111
0261-181-15	LITTLE LEAGUE	SAN BERNARDINO	CA	92407	HOPROCK 2 VERDEMONT LLC	2 EMBARCADERO CTR STE 2360	SAN FRANCISCO	CA	94111
0261-182-07		SAN BERNARDINO	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0261-182-10	LITTLE LEAGUE	SAN BERNARDINO	CA	92407	HOPROCK 2 VERDEMONT LLC	2 EMBARCADERO CTR STE 2360	SAN FRANCISCO	CA	94111
0261-182-35		SAN BERNARDINO	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0261-182-36	3225 LITTLE LEAGUE DR	SAN BERNARDINO	CA	92407	SATER, MEHDI ABDUL	1235 FOXFORD RD	LA VERNE	CA	91750
0261-182-37	3235 LITTLE LEAGUE DR	SAN BERNARDINO	CA	92407	STEIN, BARBARA B	2275 SAMPSON AVE STE 201	CORONA	CA	92879
0261-182-38	3245 LITTLE LEAGUE DR	SAN BERNARDINO	CA	92407	DAVILA, ALVARO U	911 APPLEWILDE DR	SAN MARCOS	CA	92078
0261-191-04	6155 PALM AVE	SAN BERNARDINO	CA	92407	VTSD LLC	2900 ADAMS ST STE C200	RIVERSIDE	CA	92504
0261-191-06	PALM AVE	SAN BERNARDINO	CA	92407	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0261-191-07	KENDALL AND PALM	SAN BERNARDINO	CA	92407	SAN, BERNARDINO-JACOBSEN HOLDINGS	21800 BURBANK BLVD STE 330	WOODLAND HILLS	CA	91367
0261-191-08	3154 KENDALL DR	SAN BERNARDINO	CA	92407	YAMANISHI, MIHOKO	12161 OAK LEAF DR	LOS ALAMITOS	CA	90720
0261-191-09	3144 KENDALL DR	SAN BERNARDINO	CA	92407	MACK, TIMOTHY H	3144 KENDALL DR	SAN BERNARDINO	CA	92407
0261-191-12		SAN BERNARDINO	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0261-191-14	3205 KENDALL DR STE 11	SAN BERNARDINO	CA	92407	INSHALLAH TRUST	5505 GARDEN GROVE BLVD STE 150	WESTMINSTER	CA	92683
0261-191-18	3086 KENDALL DR	SAN BERNARDINO	CA	92407	UNIVERSAL SELF STORAGE SAN, BERNARDIN	PO BOX 8008	NEWPORT BEACH	CA	92658
0261-191-19	KENDALL DR	SAN BERNARDINO	CA	92407	KELLEY, LAURI E	1701 MARTIN RANCH RD	SAN BERNARDINO	CA	92407
0261-221-01	2640 KENDALL DR	SAN BERNARDINO	CA	92407	BELLINGER, BREANNE K	2640 KENDALL DR	SAN BERNARDINO	CA	92407

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0261-221-02	2622 KENDALL DR	SAN BERNARDINO	CA	92407	PAULK, HERMAN A	PO BOX 90535	SAN BERNARDINO	CA	92427
0261-221-03	2604 KENDALL DR	SAN BERNARDINO	CA	92407	TOAILOA, FALA SIAOSI	2588 KENDALL DR	SAN BERNARDINO	CA	92407
0261-221-04	2588 KENDALL DR	SAN BERNARDINO	CA	92407	TOAILOA, FALA SIAOSI	2588 KENDALL DR	SAN BERNARDINO	CA	92407
0261-221-07	2564 KENDALL DR	SAN BERNARDINO	CA	92407	GIDCUMB, YOLANDA L	2564 KENDALL DR	SAN BERNARDINO	CA	92407
0261-221-08	2552 KENDALL DR	SAN BERNARDINO	CA	92407	WINCHESTER FUNDING GRP LLC	323 N COAST HWY STE A	OCEANSIDE	CA	92054
0261-221-09	2552 KENDALL DR	SAN BERNARDINO	CA	92407	WINCHESTER FUNDING GRP LLC	323 N COAST HWY STE A	OCEANSIDE	CA	92054
0261-221-10	2546 KENDALL DR	SAN BERNARDINO	CA	92407	NIEMEYER, CLARENCE W	2546 KENDALL DR	SAN BERNARDINO	CA	92407
0261-221-13	2524 KENDALL DR	SAN BERNARDINO	CA	92407	HUERTA, RAYMOND J	4595 DAVID WAY	SAN BERNARDINO	CA	92404
0261-221-14	2516 KENDALL DR	SAN BERNARDINO	CA	92407	NGUYEN, GIAU N	13391 LAUX CIR	GARDEN GROVE	CA	92840
0261-221-15	2510 KENDALL DR	SAN BERNARDINO	CA	92407	RAMIREZ, JAEL	2510 KENDALL DR	SAN BERNARDINO	CA	92407
0261-221-16	2504 KENDALL DR	SAN BERNARDINO	CA	92407	SALAZAR, ANTONIO R	2504 KENDALL DR	SAN BERNARDINO	CA	92407
0261-221-17	2494 KENDALL DR	SAN BERNARDINO	CA	92407	COUNTRY HOLDINGS LLC	439 ENCLAVE CIR APT 301	COSTA MESA	CA	92626
0261-221-20	2490 KENDALL DR	SAN BERNARDINO	CA	92407	HPI PROPERTY ACQUISITIONS LLC	715 E BRIER DR	SAN BERNARDINO	CA	92408
0261-221-21	2574 KENDALL DR	SAN BERNARDINO	CA	92407	LUNA, ARTURO E	1810 DALEY CANYON RD	SAN BERNARDINO	CA	92404
0261-221-22	2532 KENDALL DR	SAN BERNARDINO	CA	92407	HALE, PATRICIA	2532 KENDALL DR	SAN BERNARDINO	CA	92407
0261-231-03		SAN BERNARDINO	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0261-231-04		SAN BERNARDINO	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0261-231-07	2340 KENDALL DR	SAN BERNARDINO	CA	92407	HAENSLY, DENNIS	2340 KENDALL DR	SAN BERNARDINO	CA	92407
0261-231-11	2272 KENDALL DR	SAN BERNARDINO	CA	92407	MCLEOD, FRANCES J	1753 LOMAS PRIVADAS DR	SAN BERNARDINO	CA	92404
0261-231-12	2250 KENDALL DR	SAN BERNARDINO	CA	92407	LEE, WILLIAM R	2250 KENDALL DR	SAN BERNARDINO	CA	92407
0261-231-13	2196 KENDALL DR	SAN BERNARDINO	CA	92407	SB HILLSIDE PROPERTIES LLC	24155 LODGE POLE RD	DIAMOND BAR	CA	91765
0261-231-14	2196 KENDALL DR	SAN BERNARDINO	CA	92407	SB HILLSIDE PROPERTIES LLC	24155 LODGE POLE RD	DIAMOND BAR	CA	91765
0261-231-15	2196 KENDALL DR	SAN BERNARDINO	CA	92407	SB HILLSIDE PROPERTIES LLC	24155 LODGE POLE RD	DIAMOND BAR	CA	91765
0261-231-16	2196 KENDALL DR	SAN BERNARDINO	CA	92407	SB HILLSIDE PROPERTIES LLC	24155 LODGE POLE RD	DIAMOND BAR	CA	91765
0261-231-17	2156 KENDALL DR	SAN BERNARDINO	CA	92407	SB HILLSIDE PROPERTIES LLC	24155 LODGE POLE RD	DIAMOND BAR	CA	91765
0261-231-18	2140 KENDALL DR	SAN BERNARDINO	CA	92407	LIGHT, WALTER B	1642 W 27TH ST	SAN BERNARDINO	CA	92407
0261-231-22	2424 KENDALL DR	SAN BERNARDINO	CA	92407	E VELAZQUEZ & ASSOCIATES LLC	2424 KENDALL DR	SAN BERNARDINO	CA	92407
0261-231-26	KENDALL DR	SAN BERNARDINO	CA	92407	SB HILLSIDE PROPERTIES LLC	24155 LODGE POLE RD	DIAMOND BAR	CA	91765
0261-231-27	2294 KENDALL DR	SAN BERNARDINO	CA	92407	SEHREMELIS, ATHENA A	3221 LILLY AVE	LONG BEACH	CA	90808
0261-231-28	KENDALL DR	SAN BERNARDINO	CA	92407	SB HILLSIDE PROPERTIES LLC	24155 LODGE POLE RD	DIAMOND BAR	CA	91765
0261-231-33	2276 KENDALL DR	SAN BERNARDINO	CA	92407	HAPPY FACE COURT LLC	2288 KENDALL DR	SAN BERNARDINO	CA	92407
0261-231-34	2278 KENDALL DR	SAN BERNARDINO	CA	92407	HAPPY FACE COURT LLC	2288 KENDALL DR	SAN BERNARDINO	CA	92407

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0261-231-35	2280 KENDALL DR	SAN BERNARDINO	CA	92407	HAPPY FACE COURT LLC	2288 KENDALL DR	SAN BERNARDINO	CA	92407
0261-231-36	2282 KENDALL DR	SAN BERNARDINO	CA	92407	HAPPY FACE COURT LLC	2288 KENDALL DR	SAN BERNARDINO	CA	92407
0261-231-37	2284 KENDALL DR	SAN BERNARDINO	CA	92407	HAPPY FACE COURT LLC	2288 KENDALL DR	SAN BERNARDINO	CA	92407
0261-231-42		SAN BERNARDINO	CA	92407	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0261-231-43		SAN BERNARDINO	CA	92407	SAN BERNARDINO COUNTY FLOOD CTRL DIS	825 E 3RD ST	SAN BERNARDINO	CA	92415
0261-241-79	12308 MWD	SAN BERNARDINO	CA	92407	METROPOLITAN WATER DIST OF, SO CALIF	PO BOX 54153	LOS ANGELES	CA	90054
0261-371-31	2652 SHADOW HILLS DR APT 31	SAN BERNARDINO	CA	92407	L2 GROUP LLC	9978 CATHERWOOD DR	ALTA LOMA	CA	91737
0261-371-32	2652 SHADOW HILLS DR APT 32	SAN BERNARDINO	CA	92407	SIMMONS, SYLVIA	30 KENMORE AVE # 1R	NEWARK	NJ	7106
0261-371-33	2652 SHADOW HILLS DR APT 33	SAN BERNARDINO	CA	92407	L2 GROUP LLC	9978 CATHERWOOD DR	ALTA LOMA	CA	91737
0261-371-34	2652 SHADOW HILLS DR APT 34	SAN BERNARDINO	CA	92407	L2 GROUP LLC	9978 CATHERWOOD DR	ALTA LOMA	CA	91737
0261-371-35	2652 SHADOW HILLS DR APT 35	SAN BERNARDINO	CA	92407	APARICIO, DAN	3824 N REEDER AVE	COVINA	CA	91724
0261-371-36	2652 SHADOW HILLS DR APT 36	SAN BERNARDINO	CA	92407	CANHOTO, CINDY	2652 SHADOW HILLS DR APT 36	SAN BERNARDINO	CA	92407
0261-371-37	2663 SHADOW HILLS DR APT 37	SAN BERNARDINO	CA	92407	RANDOLPH, DAVID A	PO BOX 3941	SAN BERNARDINO	CA	92413
0261-371-38	2663 SHADOW HILLS DR APT 38	SAN BERNARDINO	CA	92407	THE BASS FAMILY TRUST OF 2013	11276 GUNSMOKE LN	MORENO VALLEY	CA	92557
0261-371-44	2675 SHADOW HILLS DR # 1	SAN BERNARDINO	CA	92407	JIMENEZ, MADONNA SHARLENE	2655 SHADOW HILLS DR APT 37	SAN BERNARDINO	CA	92407
0261-371-45	2655 SHADOW HILLS DR APT 38	SAN BERNARDINO	CA	92407	GUTIERREZ, EDUARDO L	3553 VINELAND AVE	BALDWIN PARK	CA	91706
0261-371-46	2675 SHADOW HILLS DR # 3	SAN BERNARDINO	CA	92407	TRINITY CAPITAL LLC	PO BOX 413	SAN BERNARDINO	CA	92402
0261-371-47	2675 SHADOW HILLS DR # 4	SAN BERNARDINO	CA	92407	MARTINEZ, BOBBIE W	1935 N OMALLEY WAY	UPLAND	CA	91784
0261-371-48	2675 SHADOW HILLS DR # 5	SAN BERNARDINO	CA	92407	WILLIAMS, YOLAND V	13658 PAGEANTRY PL	CHINO HILLS	CA	91709
0261-371-49	2655 SHADOW HILLS DR APT 42	SAN BERNARDINO	CA	92407	SPERBER, PAULINE	2655 SHADOW HILLS DR APT 42	SAN BERNARDINO	CA	92407
0261-371-50	2675 SHADOW HILLS DR #	SAN BERNARDINO	CA	92407	IH3 PROPERTY WEST L P	291 CORPORATE TERRACE	CORONA	CA	92879

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
	7					CIR			
0261-371-51	2675 SHADOW HILLS DR # 8	SAN BERNARDINO	CA	92407	DOAKES, KEITH	2655 SHADOW HILLS DR # 8	SAN BERNARDINO	CA	92407
0261-371-52	2655 SHADOW HILLS DR STE 45	SAN BERNARDINO	CA	92407	FISHER, CINDY	15115 BANDERA WAY	VICTORVILLE	CA	92394
0261-371-53	2675 SHADOW HILLS DR # 10	SAN BERNARDINO	CA	92407	ARCINIEGA, ALFREDO L	2655 SHADOW HILLS DR APT 46	SAN BERNARDINO	CA	92407
0261-371-54	2675 SHADOW HILLS DR # 11	SAN BERNARDINO	CA	92407	DC BROTHERS LLC	28940 GREENSPOT RD # 222	HIGHLAND	CA	92346
0261-371-55	2675 SHADOW HILLS DR # 12	SAN BERNARDINO	CA	92407	JIMENEZ, CARLOS M	2655 SHADOW HILLS DR APT 48	SAN BERNARDINO	CA	92407
0261-371-56	2665 SHADOW HILLS DR APT 49	SAN BERNARDINO	CA	92407	WU, YUXIANG	2665 SHADOW HILLS DR APT 49	SAN BERNARDINO	CA	92407
0261-371-57	2675 SHADOW HILLS DR # 14	SAN BERNARDINO	CA	92407	DURAN, RUBEN	15573 EASTWIND AVE	FONTANA	CA	92336
0261-371-58	2665 SHADOW HILLS DR APT 51	SAN BERNARDINO	CA	92407	TOMA, YOUSRI	2665 SHADOW HILLS DR APT 51	SAN BERNARDINO	CA	92407
0261-371-59	2665 SHADOW HILLS DR APT 52	SAN BERNARDINO	CA	92407	CALVILLO, ALBERTO	3273 IRVINGTON AVE	SAN BERNARDINO	CA	92407
0261-371-60	2665 SHADOW HILLS DR APT 53	SAN BERNARDINO	CA	92407	HERRERA, MARGARITA	2319 E GLENOAKS BLVD	GLENDALE	CA	91206
0261-371-61	2675 SHADOW HILLS DR # 18	SAN BERNARDINO	CA	92407	IVANOFF, LAURA	7810 VILLAGE LAKES RD	HIGHLAND	CA	92346
0261-371-62	2675 SHADOW HILLS DR # 19	SAN BERNARDINO	CA	92407	CHEN, BAOLIN	3861 STEWART AVE	BALDWIN PARK	CA	91706
0261-371-63	2675 SHADOW HILLS DR # 20	SAN BERNARDINO	CA	92407	LOPEZ, IRENE	2665 SHADOW HILLS DR APT 56	SAN BERNARDINO	CA	92407
0261-371-64	2675 SHADOW HILLS DR # 57	SAN BERNARDINO	CA	92407	SP ASSETS LLC	8628 HILLSIDE RD	ALTA LOMA	CA	91701
0261-371-65	2675 SHADOW HILLS DR # 22	SAN BERNARDINO	CA	92407	DOAKES, KEITH	2665 SHADOW HILLS DR APT 58	SAN BERNARDINO	CA	92407
0261-371-66	2675 SHADOW HILLS DR # 23	SAN BERNARDINO	CA	92407	MAGDALENO, YOLANDA ARMIDA LOZOYA	PO BOX 745	ONTARIO	CA	91762
0261-371-67	2675 SHADOW HILLS DR # 24	SAN BERNARDINO	CA	92407	HUANG, XIN	16511 WAIN PL	HACIENDA HEIGHTS	CA	91745

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0261-371-68	2675 SHADOW HILLS DR # 25	SAN BERNARDINO	CA	92407	SALISTEAN, MARIA	18630 SANTA ISADORA ST	FOUNTAIN VALLEY	CA	92708
0261-371-69	2675 SHADOW HILLS DR # 26	SAN BERNARDINO	CA	92407	GREENE HOUSE LLC	PO BOX 1654	RANCHO CUCAMONGA	CA	91729
0261-371-70	2675 SHADOW HILLS DR APT 63	SAN BERNARDINO	CA	92407	LOGSTON, CHRISTOPHER ALLEN	2675 SHADOW HILLS DR APT 63	SAN BERNARDINO	CA	92407
0261-371-71	2675 SHADOW HILLS DR # 28	SAN BERNARDINO	CA	92407	KAHLER, CHAY	7863 SANTA PAULA ST	HIGHLAND	CA	92346
0261-371-72	2675 SHADOW HILLS DR # 29	SAN BERNARDINO	CA	92407	MEIN, GRACE A	2675 SHADOW HILLS DR APT 65	SAN BERNARDINO	CA	92407
0261-371-73	2675 SHADOW HILLS DR # 30	SAN BERNARDINO	CA	92407	SP ASSETS LLC	8628 HILLSIDE RD	ALTA LOMA	CA	91701
0261-371-74	2675 SHADOW HILLS DR # 31	SAN BERNARDINO	CA	92407	VERRETT, ZELDA M	5704 N CRESCENT ST	SAN BERNARDINO	CA	92407
0261-371-75	2675 SHADOW HILLS DR # 32	SAN BERNARDINO	CA	92407	ESTRELLA, MARIA G	6908 DINAH CT	SAN BERNARDINO	CA	92407
0261-371-76	2675 SHADOW HILLS DR APT 69	SAN BERNARDINO	CA	92407	SANCHEZ, DHARA LOIDA	408 N IMPERIAL AVE # 408E	ONTARIO	CA	91764
0261-371-77	2675 SHADOW HILLS DR APT 70	SAN BERNARDINO	CA	92407	SP ASSETS LLC	8628 HILLSIDE RD	ALTA LOMA	CA	91701
0261-371-78	2675 SHADOW HILLS DR # 35	SAN BERNARDINO	CA	92407	LOPEZ, RANDY T	2675 SHADOW HILLS DR # 35	SAN BERNARDINO	CA	92407
0261-371-79	2675 SHADOW HILLS DR # 36	SAN BERNARDINO	CA	92407	NAVARRO, FERNANDO	3405 PASEO FLAMENCO	SAN CLEMENTE	CA	92672
0261-371-80	2675 SHADOW HILLS DR	SAN BERNARDINO	CA	92407	CAPITAL SALVAGE	2665 SHADOW HILLS DR APT 52	SAN BERNARDINO	CA	92407
0261-521-01	2741 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	HERNADEZ, ELIZABETH	2741 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-02	2749 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	BUESING, DIRK	2749 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-03	2759 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	SORENSEN, TROY	2759 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-04	2769 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	DURAN, EZEQUIEL	2769 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-05	2785 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	CASTELLON, ALFREDO	2785 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-06	2795 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	BALL, TIMOTHY A	2795 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-07	2794 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	CHLEF INVESTMENTS INC	2794 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-08	2784 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	PANNONE, MICHELE	2784 W WHITE PINE AVE	SAN BERNARDINO	CA	92407

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0261-521-09	2776 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	CALHOUN, BRIAN C	2776 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-10	2768 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	FRUTOS, ANTONIO G	2768 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-11	2758 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	DIAZ, JILBERTO	2758 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-12	2748 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	COCHEA, RICHARD JUSTO	2748 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-13	2740 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	MANGOLD, ADAM	2740 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-14	2730 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	PENUEL PROPERTIES LLC	27372 ALISO CREEK RD # 310	ALISO VIEJO	CA	92656
0261-521-15	2722 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	ALEMAN, MIGUEL ANGEL	2722 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-16	2712 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	RICO, ERNESTO	2712 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-22	5815 SCOTCH PINE WAY	SAN BERNARDINO	CA	92407	DOMINGUEZ, MARIA	5815 SCOTCH PINE WAY	SAN BERNARDINO	CA	92407
0261-521-23	5809 SCOTCH PINE WAY	SAN BERNARDINO	CA	92407	MILLER, THOMAS JOHN	5809 SCOTCH PINE WAY	SAN BERNARDINO	CA	92407
0261-521-24	5805 SCOTCH PINE WAY	SAN BERNARDINO	CA	92407	SCHULTZ, ALLEN	5805 SCOTCH PINE WAY	SAN BERNARDINO	CA	92407
0261-521-25	2635 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	ALAIMO, GREG	2635 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-26	2645 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	TANKSLEY, BRENDA J	2645 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-27	2655 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	HANNA, MARK B	2655 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-28	2665 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	HARRIS, ALLEN	2665 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-29	2675 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	BLANCO, CARLOS	2675 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-30	2685 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	ZERMENO, STEVEN	2685 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-31	2695 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	WOODS, JEREMY G	2695 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-32	2705 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	MAESTAS, LAWRENCE J	2705 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-33	2709 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	VASQUEZ, DOLORES M	2709 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-34	2694 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	OCAMPO, ROBERTO ORDIALES	12655 WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-35	2684 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	BERTAUD, ALFREDO N	2684 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-36	2674 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	ARDON, NAIN	2674 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-37	2664 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	RUSSELL, JOE	2664 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-521-38	2654 W WHITE PINE AVE	SAN BERNARDINO	CA	92407	D AGOSTINO SR, DANIEL R	2654 W WHITE PINE AVE	SAN BERNARDINO	CA	92407
0261-551-07	6141 VERDEMONT RANCH RD	SAN BERNARDINO	CA	92407	GUILLEN, MARY R	12626 SCOTCH LN	COLTON	CA	92324
0262-011-02	CAJON BLVD	SAN BERNARDINO	CA	92407	EWING, MICHAEL T	34773 SANTA ROSA DR	YUCAIPA	CA	92399
0262-011-03	19191 CAJON BLVD	SAN BERNARDINO	CA	92407	MAUDSLEY, ALAN R	10911 CORONEL RD	SANTA ANA	CA	92705
0262-011-04		SAN BERNARDINO	CA	92407	STAKES, DONALD R	34773 SANTA ROSA DR	YUCAIPA	CA	92399
0262-011-05		SAN BERNARDINO	CA	92407	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0262-011-48	7240 CAJON BLVD	SAN BERNARDINO	CA	92407	IE LOGISTICS INC	610 NEWPORT CENTER DR STE 420	NEWPORT BEACH	CA	92660

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0262-011-49		SAN BERNARDINO	CA	92407	IE LOGISTICS INC	610 NEWPORT CENTER DR STE 420	NEWPORT BEACH	CA	92660
0262-011-51	7010 CAJON BLVD	SAN BERNARDINO	CA	92407	IE LOGISTICS INC	610 NEWPORT CENTER DR STE 420	NEWPORT BEACH	CA	92660
0262-021-03		SAN BERNARDINO	CA	92407	BNSF RAILWAY	2650 LOU MENK DR	FORT WORTH	TX	76131
0262-021-09	CAJON BLVD	SAN BERNARDINO	CA	92407	RAZAVIAN, PARVIZ	3799 ELMIRA AVE	CLAREMONT	CA	91711
0262-022-03		SAN BERNARDINO	CA	92407	BNSF RAILWAY	2650 LOU MENK DR	FORT WORTH	TX	76131
0262-022-04		SAN BERNARDINO	CA	92407	WAI, KI NAM	2565 SKYFARM DR	HILLSBOROUGH	CA	94010
0262-022-06		SAN BERNARDINO	CA	92407	BNSF RAILWAY CO	PO BOX 961089	FORT WORTH	TX	76161
0262-022-07		SAN BERNARDINO	CA	92407	BOJORQUEZ, JESSE	10722 ARROW RTE STE 706	RANCHO CUCAMONGA	CA	91730
0262-022-08		SAN BERNARDINO	CA	92407	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0262-041-04	19770 CAJON BLVD	SAN BERNARDINO	CA	92407	HERITAGE OPERATING LP	PO BOX 965	VALLEY FORGE	PA	19482
0262-041-05		SAN BERNARDINO	CA	92407	BNSF RAILWAY	2650 LOU MENK DR	FORT WORTH	TX	76131
0262-041-09		SAN BERNARDINO	CA	92407	PAGE, RICHARD E	PO BOX 1512	TOPOCK	AZ	86436
0262-041-11		SAN BERNARDINO	CA	92407	BNSF RAILWAY	2650 LOU MENK DR	FORT WORTH	TX	76131
0262-041-13		SAN BERNARDINO	CA	92407	PAGE, RICHARD E	PO BOX 1512	TOPOCK	AZ	86436
0262-041-15	19684 CAJON BLVD	SAN BERNARDINO	CA	92407	CARGILL, INCORPORATED	PO BOX 5626	MINNEAPOLIS	MN	55440
0262-041-16	19760 CAJON BLVD	SAN BERNARDINO	CA	92407	J & R SPECIALTY METALS CORP	PO BOX 90490	SAN BERNARDINO	CA	92427
0265-211-01		SAN BERNARDINO	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0265-211-18		SAN BERNARDINO	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0265-221-12		SAN BERNARDINO	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0265-221-13		SAN BERNARDINO	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0265-231-17	4020 N 3RD AVE	SAN BERNARDINO	CA	92407	ALFEREZ, MARIA D	4020 N 3RD AVE	SAN BERNARDINO	CA	92407
0265-231-18	4014 N 3RD AVE	SAN BERNARDINO	CA	92407	ALVI, MUHAMMAD	872 GLENWICK AVE	WALNUT	CA	91789
0265-231-19	4004 N 3RD AVE	SAN BERNARDINO	CA	92407	FLEMONS, LEROY	4004 N 3RD AVE	SAN BERNARDINO	CA	92407
0265-231-20		SAN BERNARDINO	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0265-241-14	4018 N F ST	SAN BERNARDINO	CA	92407	BERNABE, JUAN	4018 N F ST	SAN BERNARDINO	CA	92407
0265-241-15	4014 N F ST	SAN BERNARDINO	CA	92407	WAHRER, SHELLY	4014 N F ST	SAN BERNARDINO	CA	92407
0265-241-17	4004 N F ST	SAN BERNARDINO	CA	92407	FILIPPINI, LANETTE	4004 N F ST	SAN BERNARDINO	CA	92407
0265-241-18	4006 N F ST	SAN BERNARDINO	CA	92407	NYANTEKYI JR, PHILIP K	4006 N F ST	SAN BERNARDINO	CA	92407
0265-241-19	4008 N F ST	SAN BERNARDINO	CA	92407	PEREZ, JOSE L	4008 N F ST	SAN BERNARDINO	CA	92407
0265-241-20	902 W 40TH ST	SAN BERNARDINO	CA	92407	IBARRA, JUAN	902 W 40TH ST	SAN BERNARDINO	CA	92407

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0265-241-21	934 W 40TH ST	SAN BERNARDINO	CA	92407	NATL ASSOC OF LETTER CARRIERS/BR411	934 W 40TH ST	SAN BERNARDINO	CA	92407
0265-241-22	946 W 40TH ST	SAN BERNARDINO	CA	92407	PICO, LENIN W	946 W 40TH ST	SAN BERNARDINO	CA	92407
0265-241-23	958 W 40TH ST	SAN BERNARDINO	CA	92407	EVANS, LU	PO BOX 9304	SAN BERNARDINO	CA	92427
0265-241-24	964 W 40TH ST	SAN BERNARDINO	CA	92407	WADE, ROBERT J	964 W 40TH ST	SAN BERNARDINO	CA	92407
0265-241-25	978 W 40TH ST	SAN BERNARDINO	CA	92407	FRENCH, PAMELA P	4019 COTTAGE DR	SAN BERNARDINO	CA	92407
0265-241-26	986 W 40TH ST	SAN BERNARDINO	CA	92407	KIM, JOHN	986 W 40TH ST # 207	SAN BERNARDINO	CA	92407
0265-241-27	996 W 40TH ST	SAN BERNARDINO	CA	92407	HOLCOMB, W R	2040 MANNING AVE	LOS ANGELES	CA	90025
0265-241-29	4013 N 3RD AVE	SAN BERNARDINO	CA	92407	TAVERA, GUSTAVO	10536 HORSESHOE DR	BLOOMINGTON	CA	92316
0265-241-30	4017 N 3RD AVE	SAN BERNARDINO	CA	92407	STARLITE MGMT-III LP	7313 # 2C	EL MONTE	CA	91732
0265-241-58		SAN BERNARDINO	CA	92407	SWETKOVICH, MARVIN R	26576 WARD ST	HIGHLAND	CA	92346
0265-241-59	4009 N 3RD AVE	SAN BERNARDINO	CA	92407	YEN, TOM	3145 EVELYN AVE	ROSEMEAD	CA	91770
0265-251-14	4030 N H ST	SAN BERNARDINO	CA	92407	POWELL, EDWARD M	PO BOX 90037	SAN BERNARDINO	CA	92427
0265-251-15	4028 N H ST	SAN BERNARDINO	CA	92407	POWELL, EDWARD M	PO BOX 90037	SAN BERNARDINO	CA	92427
0265-251-16	802 W 40TH ST	SAN BERNARDINO	CA	92407	CUBESMART LP	460 E SWEDES FORD RD STE 3000	WAYNE	PA	19087
0265-251-17	802 W 40TH ST	SAN BERNARDINO	CA	92407	CUBESMART LP	460 E SWEDES FORD RD STE 3000	WAYNE	PA	19087
0265-251-18	828 W 40TH ST	SAN BERNARDINO	CA	92407	JERO, ALAN	828 W 40TH ST	SAN BERNARDINO	CA	92407
0265-251-19	858 W 40TH ST	SAN BERNARDINO	CA	92407	NGO, TRUNG THANH	1284 E ROSEWOOD DR	SAN BERNARDINO	CA	92408
0265-251-20	898 W 40TH ST STE A	SAN BERNARDINO	CA	92407	HERZBERG, GEORG	PO BOX 2432	CRESTLINE	CA	92325
0265-251-21	LEUZINGER DR	SAN BERNARDINO	CA	92407	SUN QUEST DEVELOPMENT INC	PO BOX 90113	SAN BERNARDINO	CA	92427
0265-251-22	4021 N F ST	SAN BERNARDINO	CA	92407	GUTHREL, JAMES V	4756 N MAYFIELD AVE	SAN BERNARDINO	CA	92407
0265-271-02	4025 N E ST	SAN BERNARDINO	CA	92407	GROUP IV POMONA PROPERTIES LTD	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0265-271-03	4027 N H ST	SAN BERNARDINO	CA	92407	HANSON, THOMAS DALE	4027 N E ST	SAN BERNARDINO	CA	92407
0265-271-13	4026 COTTAGE DR	SAN BERNARDINO	CA	92407	SANCHEZ, RAMONA	4026 COTTAGE DR	SAN BERNARDINO	CA	92407
0265-271-14	640 W 40TH ST	SAN BERNARDINO	CA	92407	MILLER, CHRISTOPHER J	4394 SCRIPPS DR	SAN BERNARDINO	CA	92407
0265-271-25	680 W 40TH ST	SAN BERNARDINO	CA	92407	LEWIS & PATEL LLC	680 W 40TH ST	SAN BERNARDINO	CA	92407
0265-271-26	700 W 40TH ST	SAN BERNARDINO	CA	92407	CUBESMART LP	460 E SWEDES FORD RD STE 3000	WAYNE	PA	19087
0265-271-27	794 W 40TH ST	SAN BERNARDINO	CA	92407	FRENCH, RONDY N	4019 COTTAGE DR	SAN BERNARDINO	CA	92407
0265-272-08	4026 N F ST	SAN BERNARDINO	CA	92407	OKERSON, KENNETH W	4026 N 1ST AVE	SAN BERNARDINO	CA	92407
0265-272-09	4022 N 1ST AVE	SAN BERNARDINO	CA	92407	HENSEL, BONNIE A	4022 N 1ST AVE	SAN BERNARDINO	CA	92407

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0265-272-10	4018 N 1ST AVE	SAN BERNARDINO	CA	92407	LIANG, WEI	1005 HOLIDAY DR	WEST COVINA	CA	91791
0265-272-11	604 W 40TH ST	SAN BERNARDINO	CA	92407	NAZARIYAN, ANOUSHIRAVAN H	1700 W FOOTHILL BLVD STE A	UPLAND	CA	91786
0265-272-12		SAN BERNARDINO	CA	92407	FRENCH, RONDY N	4019 COTTAGE DR	SAN BERNARDINO	CA	92407
0265-272-13	4017 COTTAGE DR	SAN BERNARDINO	CA	92407	FRENCH, RONDY N	4019 COTTAGE DR	SAN BERNARDINO	CA	92407
0265-272-14	4019 COTTAGE DR	SAN BERNARDINO	CA	92407	FRENCH, RONDY N	4019 COTTAGE DR	SAN BERNARDINO	CA	92407
0265-272-15	4029 COTTAGE DR	SAN BERNARDINO	CA	92407	LENT, BETTY L	4029 COTTAGE DR	SAN BERNARDINO	CA	92407
0265-281-08		SAN BERNARDINO	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0266-011-13		SAN BERNARDINO	CA	92407	BNSF RAILWAY	2650 LOU MENK DR	FORT WORTH	TX	76131
0266-011-14	19829 KENDALL DR	SAN BERNARDINO	CA	92407	R AND A FAMILY TRUST (3/15/10)	PO BOX 9943	SAN BERNARDINO	CA	92427
0266-011-19	19939 KENDALL DR	SAN BERNARDINO	CA	92407	PINE, CHARLES R	665 BRADBURY DR	REDLANDS	CA	92374
0266-011-20	19835 KENDALL DR STE A	SAN BERNARDINO	CA	92407	PINE, CHARLES R	665 BRADBURY DR	REDLANDS	CA	92374
0266-011-21	19949 KENDALL DR	SAN BERNARDINO	CA	92407	OGA LLC	19949 KENDALL DR	SAN BERNARDINO	CA	92407
0266-012-02	20107 KENDALL DR	SAN BERNARDINO	CA	92407	PILLING, JAMES K	20111 KENDALL DR	SAN BERNARDINO	CA	92407
0266-012-03	20125 KENDALL DR	SAN BERNARDINO	CA	92407	MUMEY, MICHAEL R	PO BOX 1435	LAKE ARROWHEAD	CA	92352
0266-012-04	20151 KENDALL DR	SAN BERNARDINO	CA	92407	GUNTER, MARLIN D	20151 KENDALL DR	SAN BERNARDINO	CA	92407
0266-012-05	20151 KENDALL DR	SAN BERNARDINO	CA	92407	GUNTER, MARLIN D	20151 KENDALL DR	SAN BERNARDINO	CA	92407
0266-012-06	20175 KENDALL DR	SAN BERNARDINO	CA	92407	MUMEY, MICHAEL R	PO BOX 1435	LAKE ARROWHEAD	CA	92352
0266-012-10	KENDALL DR	SAN BERNARDINO	CA	92407	BRIDGEWATER, LONNIE D	1459 NEVIN RD	SAN BERNARDINO	CA	92407
0266-012-11	KENDALL DR	SAN BERNARDINO	CA	92407	LYNCH, TIMOTHY D	2741 N WHITE AVE	LA VERNE	CA	91750
0266-012-12		SAN BERNARDINO	CA	92407	LOVELAND, MARY ELIZABETH	2847 HARVARD DR	PRESCOTT	AZ	86301
0266-021-23	20231 KENDALL DR	SAN BERNARDINO	CA	92407	MILHOUSE, BERTHA MAE	PO BOX 354	APPLE VALLEY	CA	92307
0266-021-24		SAN BERNARDINO	CA	92407	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0266-021-27		SAN BERNARDINO	CA	92407	S B UNIVERSAL SELF STORAGE LLC	PO BOX 8008	NEWPORT BEACH	CA	92658
0266-021-33	KENDALL DR	SAN BERNARDINO	CA	92407	S B UNIVERSAL SELF STORAGE LLC	PO BOX 8008	NEWPORT BEACH	CA	92658
0266-021-34	KENDALL DR	SAN BERNARDINO	CA	92407	S B UNIVERSAL SELF STORAGE LLC	PO BOX 8008	NEWPORT BEACH	CA	92658
0266-021-36	KENDALL DR	SAN BERNARDINO	CA	92407	MILHOUSE, BERTHA MAE	PO BOX 354	APPLE VALLEY	CA	92307
0266-021-38	20301 KENDALL DR	SAN BERNARDINO	CA	92407	S B UNIVERSAL SELF STORAGE LLC	PO BOX 8008	NEWPORT BEACH	CA	92658
0266-021-39	KENDALL DR	SAN BERNARDINO	CA	92407	S B UNIVERSAL SELF STORAGE LLC	PO BOX 8008	NEWPORT BEACH	CA	92658
0266-021-40	KENDALL DR	SAN BERNARDINO	CA	92407	S B UNIVERSAL SELF STORAGE LLC	PO BOX 8008	NEWPORT BEACH	CA	92658
0266-021-41	KENDALL DR	SAN BERNARDINO	CA	92407	S B UNIVERSAL SELF STORAGE LLC	PO BOX 8008	NEWPORT BEACH	CA	92658

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0266-021-45	20207 KENDALL DR	SAN BERNARDINO	CA	92407	PILLING, LUCILLE	5479 ELECTRIC AVE	SAN BERNARDINO	CA	92407
0266-021-46		SAN BERNARDINO	CA	92407	TUMEY SANDRA J TR	PO BOX 90273	SAN BERNARDINO	CA	92427
0266-031-04		SAN BERNARDINO	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0266-031-11		SAN BERNARDINO	CA	92407	METROPOLITAN WATER DIST OF, SO CALIF	PO BOX 54153	LOS ANGELES	CA	90054
0266-031-14	2999 KENDALL DR	SAN BERNARDINO	CA	92407	KENDALL PLAZA LLC	PO BOX 8008	NEWPORT BEACH	CA	92658
0266-041-01		SAN BERNARDINO	CA	92407	KENDALL PLAZA LLC	PO BOX 8008	NEWPORT BEACH	CA	92658
0266-041-69	5985 PALM AVE	SAN BERNARDINO	CA	92407	GAELE II LLC	433 S SPRING ST # 8TH	LOS ANGELES	CA	90013
0266-061-10		SAN BERNARDINO	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0266-061-11		SAN BERNARDINO	CA	92407	SOUTHERN CALIFORNIA EDISON COMPANY	PO BOX 800	ROSEMEAD	CA	91770
0266-061-12		SAN BERNARDINO	CA	92407	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0266-072-57		SAN BERNARDINO	CA	92407	SOUTHERN CALIFORNIA EDISON COMPANY	PO BOX 800	ROSEMEAD	CA	91770
0266-086-01	5376 REVERE AVE	SAN BERNARDINO	CA	92407	GUTIERREZ, LIDIA	5376 REVERE AVE	SAN BERNARDINO	CA	92407
0266-086-02	5360 REVERE AVE	SAN BERNARDINO	CA	92407	IP, STEPHEN SING CHEUNG	723 E FLORENCE AVE	WEST COVINA	CA	91790
0266-086-03	5354 REVERE AVE	SAN BERNARDINO	CA	92407	IP, STEPHEN SING CHEUNG	723 E FLORENCE AVE	WEST COVINA	CA	91790
0266-086-04		SAN BERNARDINO	CA	92407	HENSEL, CAROLYNE	2801 MESA DR	OCEANSIDE	CA	92054
0266-086-42	1995 SHERIDAN RD	SAN BERNARDINO	CA	92407	MERRILL, EDWARD L	1995 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-086-43	1965 SHERIDAN RD	SAN BERNARDINO	CA	92407	TORRES, GINA	1965 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-086-44	1935 SHERIDAN RD	SAN BERNARDINO	CA	92407	GONZALEZ, HERBERT M	1935 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-086-45	1905 SHERIDAN RD	SAN BERNARDINO	CA	92407	MENDOZA, BENEDETTO JR	1905 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-086-46	1895 SHERIDAN RD	SAN BERNARDINO	CA	92407	HOCH, RONALD L	2182 MALLORY ST	SAN BERNARDINO	CA	92407
0266-086-47	1879 SHERIDAN RD	SAN BERNARDINO	CA	92407	KIDD, SHARON A	1879 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-086-48	1865 SHERIDAN RD	SAN BERNARDINO	CA	92407	LUNA, JAIME	1865 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-086-49	1849 SHERIDAN RD	SAN BERNARDINO	CA	92407	WEST, DAVID	1849 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-086-50	1835 SHERIDAN RD	SAN BERNARDINO	CA	92407	MCCLINTOCK, SEAN P	1835 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-086-51	1834 SHERIDAN RD	SAN BERNARDINO	CA	92407	DAVIS-LOWE, MARY	1834 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-086-52	1848 SHERIDAN RD	SAN BERNARDINO	CA	92407	MARS, RUSSELL J	1848 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-086-53	1864 SHERIDAN RD	SAN BERNARDINO	CA	92407	MERREL, MICHAEL	1864 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-086-54	1878 SHERIDAN RD	SAN BERNARDINO	CA	92407	THR CALIFORNIA LLC	410 N MAIN ST	CORONA	CA	92880
0266-086-55	1894 SHERIDAN RD	SAN BERNARDINO	CA	92407	HOWELL, ELLEN	1894 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-086-56	1904 SHERIDAN RD	SAN BERNARDINO	CA	92407	GLAUS, PAUL E	1904 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-086-57	1934 SHERIDAN RD	SAN BERNARDINO	CA	92407	EVANS, SADIE	PO BOX 9265	SAN BERNARDINO	CA	92427
0266-086-58	1964 SHERIDAN RD	SAN BERNARDINO	CA	92407	AUGUSTUS, KEVIN L	1964 SHERIDAN RD	SAN BERNARDINO	CA	92407

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0266-086-59	1994 SHERIDAN RD	SAN BERNARDINO	CA	92407	HEDGCOCK DIANNE-MARGARET	PO BOX 8413	REDLANDS	CA	92375
0266-086-60	2004 SHERIDAN RD	SAN BERNARDINO	CA	92407	LAKE PLACE HOMES LLC	13405 INGLEWOOD AVE STE 5	HAWTHORNE	CA	90250
0266-086-61	2014 SHERIDAN RD	SAN BERNARDINO	CA	92407	GILDAY, JAMES T	2014 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-086-62	2024 SHERIDAN RD	SAN BERNARDINO	CA	92407	COMPTON, CHERYL LYNN	2024 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-091-29	1930 W COLLEGE AVE	SAN BERNARDINO	CA	92407	STRATA SERRANO LLC	4370 LA JOLLA VILLAGE DR STE 960	SAN DIEGO	CA	92122
0266-131-17		SAN BERNARDINO	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0266-132-06	4575 LITTLE MOUNTAIN DR	SAN BERNARDINO	CA	92407	4575 LITTLE MOUNTAIN DRIVE INC	2016 RIVERSIDE DR	LOS ANGELES	CA	90039
0266-141-09	1679 KENDALL DR	SAN BERNARDINO	CA	92407	VARGAS, JUAN R	1679 KENDALL DR	SAN BERNARDINO	CA	92407
0266-141-10	1671 KENDALL DR	SAN BERNARDINO	CA	92407	AYALA, ZULEMA	1671 KENDALL DR	SAN BERNARDINO	CA	92407
0266-141-11	1667 KENDALL DR	SAN BERNARDINO	CA	92407	VELASQUEZ, DANIEL	1667 KENDALL DR	SAN BERNARDINO	CA	92407
0266-141-12	1663 KENDALL DR	SAN BERNARDINO	CA	92407	MITTAL, RAHUL	20913 ALBURTIS AVE	LAKEWOOD	CA	90715
0266-141-13	1657 KENDALL DR	SAN BERNARDINO	CA	92407	SMALLEY, CLARA L	1657 KENDALL DR	SAN BERNARDINO	CA	92407
0266-141-14	1653 KENDALL DR	SAN BERNARDINO	CA	92407	HOCH, RONALD L	2182 MALLORY	SAN BERNARDINO	CA	92405
0266-141-15	1645 KENDALL DR	SAN BERNARDINO	CA	92407	TURNER, DOROTHY LEE	1645 KENDALL DR	SAN BERNARDINO	CA	92407
0266-141-16	1641 KENDALL DR	SAN BERNARDINO	CA	92407	HOCH, RONALD L	2182 MALLORY ST	SAN BERNARDINO	CA	92407
0266-141-17	1635 KENDALL DR	SAN BERNARDINO	CA	92407	SMITH, JIMMY O	1635 KENDALL DR	SAN BERNARDINO	CA	92407
0266-141-18	1629 KENDALL DR	SAN BERNARDINO	CA	92407	CROWE, WILLIAM C	1629 KENDALL DR	SAN BERNARDINO	CA	92407
0266-141-19	1625 KENDALL DR	SAN BERNARDINO	CA	92407	GARCIA, GRACE MARIE FRY	1625 KENDALL DR	SAN BERNARDINO	CA	92407
0266-141-20	1621 KENDALL DR	SAN BERNARDINO	CA	92407	GARNER, LOUIS P	3529 SNOW LINE DR	PINON HILLS	CA	92372
0266-141-21	1617 KENDALL DR	SAN BERNARDINO	CA	92407	CHANG, WEI YIE	3843 MUSCATEL AVE	ROSEMEAD	CA	91770
0266-141-22	1611 KENDALL DR	SAN BERNARDINO	CA	92407	ZARATE, OCTAVIO	1611 KENDALL DR	SAN BERNARDINO	CA	92407
0266-141-23	1607 KENDALL DR	SAN BERNARDINO	CA	92407	BEARD III, ROBERT JOHN	1607 KENDALL DR	SAN BERNARDINO	CA	92407
0266-141-24	1601 KENDALL DR	SAN BERNARDINO	CA	92407	SANCHEZ, RIGOBERTO C	5661 HESS RD	PHELAN	CA	92371
0266-141-25	1602 SHERIDAN RD	SAN BERNARDINO	CA	92407	ELLIOTT, CHRISTEL	1602 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-141-26	1608 SHERIDAN RD	SAN BERNARDINO	CA	92407	AVILA, RICARDO	1608 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-141-27	1612 SHERIDAN RD	SAN BERNARDINO	CA	92407	MARTIN, TAHNI	1612 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-141-28	1618 SHERIDAN RD	SAN BERNARDINO	CA	92407	TBI PROPERTIES CORP	1618 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-141-29	1622 SHERIDAN RD	SAN BERNARDINO	CA	92407	ODOM, LANITA	PO BOX 3976	RANCHO CUCAMONGA	CA	91729
0266-141-30	1626 SHERIDAN RD	SAN BERNARDINO	CA	92407	HUGHES, CARLOS R	1626 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-141-31	1630 SHERIDAN RD	SAN BERNARDINO	CA	92407	NAVARRO, LEVI	1630 SHERIDAN RD	SAN BERNARDINO	CA	92407

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0266-141-32	1636 SHERIDAN RD	SAN BERNARDINO	CA	92407	CHANSOMPPOU, CHRIST	1636 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-141-33	1642 SHERIDAN RD	SAN BERNARDINO	CA	92407	SKAGGS, BRETT FRANKLIN	127 W HACIENDA DR	CORONA	CA	92882
0266-141-34	1646 SHERIDAN RD	SAN BERNARDINO	CA	92407	BLACKMON, TONY E	1646 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-141-35	1652 SHERIDAN RD	SAN BERNARDINO	CA	92407	GIBSON, SIDNEY C	1652 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-141-36	1658 SHERIDAN RD	SAN BERNARDINO	CA	92407	JERO, ALAN	1658 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-141-37	1664 SHERIDAN RD	SAN BERNARDINO	CA	92407	2012-B PROPERTY HOLDINGS LLC	3200 E GUASTI RD STE 100	ONTARIO	CA	91761
0266-141-38	1670 SHERIDAN RD	SAN BERNARDINO	CA	92407	BASULTO, VIVIANA	1670 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-141-39	1676 SHERIDAN RD	SAN BERNARDINO	CA	92407	GUTHREL, JAMES V	4756 N MAYFIELD AVE	SAN BERNARDINO	CA	92407
0266-141-40	1684 SHERIDAN RD	SAN BERNARDINO	CA	92407	BLAKE, KELLY E	38524 BRUTUS WAY	BEAUMONT	CA	92223
0266-141-47	1695 KENDALL DR	SAN BERNARDINO	CA	92407	MAGNIFICENT SEVEN TRUST	14765 MAIN ST	HESPERIA	CA	92345
0266-141-48	1685 KENDALL DR	SAN BERNARDINO	CA	92407	ABDOLRAHIMI, KAMALEDDIN	1580 CRESTVIEW RD	REDLANDS	CA	92374
0266-141-49	1689 KENDALL DR	SAN BERNARDINO	CA	92407	VOSOUGHI, MARY	1580 CRESTVIEW RD	REDLANDS	CA	92374
0266-151-01	1592 SHERIDAN RD	SAN BERNARDINO	CA	92407	VUKELIC, AUGUSTIN J	1592 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-151-02	1594 SHERIDAN RD	SAN BERNARDINO	CA	92407	RUIZ, MARIA GUADALUPE	1594 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-151-03	1596 SHERIDAN RD	SAN BERNARDINO	CA	92407	GOSSETT, MAXIE	1596 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-151-04	1598 SHERIDAN RD	SAN BERNARDINO	CA	92407	PEREZ, JOSE R	1598 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-151-05	1597 KENDALL DR	SAN BERNARDINO	CA	92407	NEMRI, BASSAM A	1597 KENDALL DR	SAN BERNARDINO	CA	92407
0266-151-06	1595 KENDALL DR	SAN BERNARDINO	CA	92407	RUVALCABA, JORGE J	1595 KENDALL DR	SAN BERNARDINO	CA	92407
0266-151-07	1593 KENDALL DR	SAN BERNARDINO	CA	92407	LEMUS JR, JOSEPH	1593 KENDALL DR	SAN BERNARDINO	CA	92407
0266-151-08	1591 KENDALL DR	SAN BERNARDINO	CA	92407	AVILA, JOSE L	1591 KENDALL DR	SAN BERNARDINO	CA	92407
0266-151-09	1589 KENDALL DR	SAN BERNARDINO	CA	92407	ASTORGA, MONIQUE	1589 KENDALL DR	SAN BERNARDINO	CA	92407
0266-151-11	1570 SHERIDAN RD	SAN BERNARDINO	CA	92407	MENJIVAR, MANUEL	1570 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-151-12	1568 SHERIDAN RD	SAN BERNARDINO	CA	92407	DANH, OVERLAND	2530 N GARDENA ST	SAN BERNARDINO	CA	92407
0266-151-13	1564 SHERIDAN RD	SAN BERNARDINO	CA	92407	REYES, JOSE R	1564 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-151-14	1560 SHERIDAN RD	SAN BERNARDINO	CA	92407	GONZALEZ, MIGUEL	1560 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-151-17	1578 SHERIDAN RD	SAN BERNARDINO	CA	92407	FRIZZELL, CARL B	1578 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-151-18	1580 SHERIDAN RD	SAN BERNARDINO	CA	92407	MUNOZ, JOSE	1580 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-151-19	1582 SHERIDAN RD	SAN BERNARDINO	CA	92407	DOTY, REBECCA ROND	1582 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-151-20	1584 SHERIDAN RD	SAN BERNARDINO	CA	92407	AUSTIN, DAVID J	18530 PLUMAS ST	HESPERIA	CA	92345
0266-151-21	1586 SHERIDAN RD	SAN BERNARDINO	CA	92407	PEREZ, RAUL	1586 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-151-22	1588 SHERIDAN RD	SAN BERNARDINO	CA	92407	SERNA, ALEX	1588 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-151-23	1585 KENDALL DR	SAN BERNARDINO	CA	92407	VELAZQUEZ, DULCE IVETH	1585 KENDALL DR	SAN BERNARDINO	CA	92407

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0266-151-24	1583 KENDALL DR	SAN BERNARDINO	CA	92407	SILVA, VIRGINIA	1583 KENDALL DR	SAN BERNARDINO	CA	92407
0266-151-25	1581 KENDALL DR	SAN BERNARDINO	CA	92407	DUMAS MALONE, LORETTA A	7549 VISTA RIO	HIGHLAND	CA	92346
0266-151-26	1579 KENDALL DR	SAN BERNARDINO	CA	92407	OLMOS, MICHAEL A	1579 KENDALL DR	SAN BERNARDINO	CA	92407
0266-151-27	1577 KENDALL DR	SAN BERNARDINO	CA	92407	WRIGHT, HOWARD A	1577 KENDALL DR	SAN BERNARDINO	CA	92407
0266-151-28	1575 KENDALL DR	SAN BERNARDINO	CA	92407	ACETO, LISA	1575 KENDALL DR	SAN BERNARDINO	CA	92407
0266-151-29	1573 KENDALL DR	SAN BERNARDINO	CA	92407	JOHNSON, STEPHEN L	1573 KENDALL DR	SAN BERNARDINO	CA	92407
0266-151-30	1571 KENDALL DR	SAN BERNARDINO	CA	92407	GOODERMONT, RICHARD C	1571 KENDALL DR	SAN BERNARDINO	CA	92407
0266-151-31	1569 KENDALL DR	SAN BERNARDINO	CA	92407	WHITE, ELIZABETH ROSALIA	5639 ARGYLE AVE	SAN BERNARDINO	CA	92404
0266-151-32	1567 KENDALL DR	SAN BERNARDINO	CA	92407	MARTIN, KATHRYN P	1567 KENDALL DR	SAN BERNARDINO	CA	92407
0266-151-33	1565 KENDALL DR	SAN BERNARDINO	CA	92407	CORNEJO, BLANCA ROSA	1411 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-151-34	1574 SHERIDAN RD	SAN BERNARDINO	CA	92407	POTOSME, AURA	1574 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-151-35	1576 SHERIDAN RD	SAN BERNARDINO	CA	92407	SANCHEZ, EBERARDO R	1576 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-161-01	1555 KENDALL DR	SAN BERNARDINO	CA	92407	KEENE, PAULETTA FERGUSON	1555 KENDALL DR	SAN BERNARDINO	CA	92407
0266-161-02	1551 KENDALL DR	SAN BERNARDINO	CA	92407	HANKINS, PATRICIA	1551 KENDALL DR	SAN BERNARDINO	CA	92407
0266-161-03	1547 KENDALL DR	SAN BERNARDINO	CA	92407	ARROW STREET CAPITAL LLC	8721 SANTA MONICA BLVD # 407	LOS ANGELES	CA	90069
0266-161-04	1543 KENDALL DR	SAN BERNARDINO	CA	92407	SPSSM INVESTMENTS LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0266-161-05	1539 KENDALL DR	SAN BERNARDINO	CA	92407	ORTIZ, ALEXIS	1539 KENDALL DR	SAN BERNARDINO	CA	92407
0266-161-06	1535 KENDALL DR	SAN BERNARDINO	CA	92407	RIOS, JOSE G	1535 KENDALL DR	SAN BERNARDINO	CA	92407
0266-161-07	1531 KENDALL DR	SAN BERNARDINO	CA	92407	KELLY, BARBARA	2421 BLAKE ST	SAN BERNARDINO	CA	92407
0266-161-08	1527 KENDALL DR	SAN BERNARDINO	CA	92407	FEISTNER, ARNOLD	1527 KENDALL DR	SAN BERNARDINO	CA	92407
0266-161-09	1523 KENDALL DR	SAN BERNARDINO	CA	92407	SPSSM INVESTMENTS VI LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0266-161-10	1519 KENDALL DR	SAN BERNARDINO	CA	92407	WIRTH, ANA ODALIS	1519 KENDALL DR	SAN BERNARDINO	CA	92407
0266-161-11	1515 KENDALL DR	SAN BERNARDINO	CA	92407	ERE INVESTMENTS LLC	4242 LOUISE AVE	ENCINO	CA	91316
0266-161-12	1511 KENDALL DR	SAN BERNARDINO	CA	92407	CHOLID, SANDY	1511 KENDALL DR	SAN BERNARDINO	CA	92407
0266-161-13	1509 KENDALL DR	SAN BERNARDINO	CA	92407	ZELLER ANCHARD F TR	927 W CLIFTON AVE	REDLANDS	CA	92373
0266-161-14	1505 KENDALL DR	SAN BERNARDINO	CA	92407	MORALES, LEAH	6719 N OFELIA DR	SAN BERNARDINO	CA	92407
0266-161-15	1503 KENDALL DR	SAN BERNARDINO	CA	92407	DIOURI, MOHCINE	PO BOX 81075	RSM	CA	92688
0266-161-16	1504 SHERIDAN RD	SAN BERNARDINO	CA	92407	DIAZ, JOSE ARMANDO	1504 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-161-17	1506 SHERIDAN RD	SAN BERNARDINO	CA	92407	MARCINIAK, RICHARD B	5496 KATHERINE AVE	SHERMAN OAKS	CA	91401
0266-161-18	1510 SHERIDAN RD	SAN BERNARDINO	CA	92407	GAUTREAU, LARRY	6754 OLIVE AVE	SAN BERNARDINO	CA	92407

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0266-161-19	1512 SHERIDAN RD	SAN BERNARDINO	CA	92407	VOORHIES, JEFFREY	1512 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-161-20	1516 SHERIDAN RD	SAN BERNARDINO	CA	92407	CHANG, SAMUEL CHUNHAO	2032 VICTORIA DR	FULLERTON	CA	92831
0266-161-21	1520 SHERIDAN RD	SAN BERNARDINO	CA	92407	DUARTE, DAVID	1520 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-161-22	1524 SHERIDAN RD	SAN BERNARDINO	CA	92407	AULAKH HOMES INC	PO BOX 310540	FONTANA	CA	92331
0266-161-23	1528 SHERIDAN RD	SAN BERNARDINO	CA	92407	KING, CHARLOTTE	6585 FRANK AVE	MIRA LOMA	CA	91752
0266-161-24	1532 SHERIDAN RD	SAN BERNARDINO	CA	92407	REYNA, LUIS E	1532 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-161-25	1536 SHERIDAN RD	SAN BERNARDINO	CA	92407	TRUJILLO, JOSE M	1536 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-161-26	1540 SHERIDAN RD	SAN BERNARDINO	CA	92407	AGUIRRE, RICHARD	1540 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-161-27	1544 SHERIDAN RD	SAN BERNARDINO	CA	92407	REGALADO, ANTONIO	1544 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-161-28	1548 SHERIDAN RD	SAN BERNARDINO	CA	92407	AGUILAR, HILARIO	1548 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-161-29	1552 SHERIDAN RD	SAN BERNARDINO	CA	92407	AREVALO, BELINDA	1552 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-161-30	1556 SHERIDAN RD	SAN BERNARDINO	CA	92407	GARCIA, HOMERO LOPEZ	1556 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-171-01	1499 KENDALL DR	SAN BERNARDINO	CA	92407	CORNEJO, BLANCA ROSA	1411 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-171-02	1497 KENDALL DR	SAN BERNARDINO	CA	92407	PEREZ, ART E	1497 KENDALL DR	SAN BERNARDINO	CA	92407
0266-171-03	1493 KENDALL DR	SAN BERNARDINO	CA	92407	GARCIA, SOLEDAD	1493 KENDALL DR	SAN BERNARDINO	CA	92407
0266-171-04	1491 KENDALL DR	SAN BERNARDINO	CA	92407	VALLEJO, BENJAMIN ALEJANDRE	1491 KENDALL DR	SAN BERNARDINO	CA	92407
0266-171-05	1487 KENDALL DR	SAN BERNARDINO	CA	92407	RHODES, PAULA J	11436 SAN JUAN ST	LOMA LINDA	CA	92354
0266-171-06	1483 KENDALL DR	SAN BERNARDINO	CA	92407	URIBE, MELISSA	3464 N SIERRA WAY	SAN BERNARDINO	CA	92405
0266-171-07	1481 KENDALL DR	SAN BERNARDINO	CA	92407	MORRISON, QUINT	1481 KENDALL DR	SAN BERNARDINO	CA	92407
0266-171-08	1477 KENDALL DR	SAN BERNARDINO	CA	92407	WILES, JAMES R	5837 MAGNOLIA AVE	RIALTO	CA	92377
0266-171-09	1473 KENDALL DR	SAN BERNARDINO	CA	92407	GAUTREAU, LARRY N	1473 KENDALL DR	SAN BERNARDINO	CA	92407
0266-171-10	1469 KENDALL DR	SAN BERNARDINO	CA	92407	MCCULLOUGH, PAUL	24992 5TH ST STE B	SAN BERNARDINO	CA	92410
0266-171-11	1465 KENDALL DR	SAN BERNARDINO	CA	92407	TENORIO, PATRICIA	1465 KENDALL DR	SAN BERNARDINO	CA	92407
0266-171-12	1461 KENDALL DR	SAN BERNARDINO	CA	92407	DAVIS, JAMES E	1461 KENDALL DR	SAN BERNARDINO	CA	92407
0266-171-13	1457 KENDALL DR	SAN BERNARDINO	CA	92407	PINE PHYLLIS M LIVING TR	1457 KENDALL DR	SAN BERNARDINO	CA	92407
0266-171-14	1453 KENDALL DR	SAN BERNARDINO	CA	92407	MIECHOWIZ, ROBERT A	1453 KENDALL DR	SAN BERNARDINO	CA	92407
0266-171-15	1449 KENDALL DR	SAN BERNARDINO	CA	92407	REYES, OTHONIEL LEAL	17454 SEVILLE CT	FONTANA	CA	92335
0266-171-16	1445 KENDALL DR	SAN BERNARDINO	CA	92407	ANDRADE, TERESA	1445 KENDALL DR	SAN BERNARDINO	CA	92407
0266-171-17	1441 KENDALL DR	SAN BERNARDINO	CA	92407	BLECKERT, WILLIAM	1441 KENDALL DR	SAN BERNARDINO	CA	92407
0266-171-18	1437 KENDALL DR	SAN BERNARDINO	CA	92407	GONZALEZ, IRMA	PO BOX 90776	SAN BERNARDINO	CA	92427
0266-171-19	1433 KENDALL DR	SAN BERNARDINO	CA	92407	PRESZLER, TELFINUES	1433 KENDALL DR	SAN BERNARDINO	CA	92407
0266-171-20	1429 KENDALL DR	SAN BERNARDINO	CA	92407	MARQUEZ, RAMON	1429 KENDALL DR	SAN BERNARDINO	CA	92407

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0266-171-21	1425 KENDALL DR	SAN BERNARDINO	CA	92407	MARQUEZ, RAMON D	1425 KENDALL DR	SAN BERNARDINO	CA	92407
0266-171-22	1421 KENDALL DR	SAN BERNARDINO	CA	92407	HOCH, RONALD L	2182 MALLORY ST	SAN BERNARDINO	CA	92407
0266-171-23	1422 SHERIDAN RD	SAN BERNARDINO	CA	92407	MAYHEW, JAMES BENNETT	839 S PROSPERO DR	GLENDORA	CA	91740
0266-171-24	1426 SHERIDAN RD	SAN BERNARDINO	CA	92407	ARDON, NAIN MARTIN	1426 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-171-25	1430 SHERIDAN RD	SAN BERNARDINO	CA	92407	MEJIA, JAVIER	1430 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-171-26	1434 SHERIDAN RD	SAN BERNARDINO	CA	92407	SB SHERIDAN LLC	8211 ROCHESTER AVE STE 101	RANCHO CUCAMONGA	CA	91730
0266-171-27	1438 SHERIDAN RD	SAN BERNARDINO	CA	92407	DINH, PHONG XUAN	2327 NORTE VISTA DR	CHINO HILLS	CA	91709
0266-171-28	1442 SHERIDAN RD	SAN BERNARDINO	CA	92407	ALVARA, LUCINA	1442 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-171-29	1446 SHERIDAN RD	SAN BERNARDINO	CA	92407	121ST LANE INVESTMENTS LLC	6037 LOMA AVE	TEMPLE CITY	CA	91780
0266-171-30	1450 SHERIDAN RD	SAN BERNARDINO	CA	92407	GARCIA, ANA MARIA	1450 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-171-31	1454 SHERIDAN RD	SAN BERNARDINO	CA	92407	SSJ HOLDINGS COMPANY LLC	10589 BOULDER CANYON RD	RANCHO CUCAMONGA	CA	91737
0266-171-32	1458 SHERIDAN RD	SAN BERNARDINO	CA	92407	SIERRA, YADIRA	1458 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-171-33	1462 SHERIDAN RD	SAN BERNARDINO	CA	92407	BARELA, JOSE P	1462 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-171-34	1466 SHERIDAN RD	SAN BERNARDINO	CA	92407	PATTERSON, ANTHONY L	1466 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-171-35	1470 SHERIDAN RD	SAN BERNARDINO	CA	92407	RENO, KEITH E	1400 W EDGEHILL RD APT 38	SAN BERNARDINO	CA	92405
0266-171-36	1474 SHERIDAN RD	SAN BERNARDINO	CA	92407	BERRIEL, CHUE	5931 HONEYSUCKLE LN	SAN BERNARDINO	CA	92407
0266-171-37	1478 SHERIDAN RD	SAN BERNARDINO	CA	92407	MCKAY, DAWN MARIE	PO BOX 2548	LAKE ARROWHEAD	CA	92352
0266-171-38	1482 SHERIDAN RD	SAN BERNARDINO	CA	92407	GREY FOX PROPERTIES LLC	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0266-171-39	1484 SHERIDAN RD	SAN BERNARDINO	CA	92407	PRADO, JUDITH L	1484 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-171-40	1488 SHERIDAN RD	SAN BERNARDINO	CA	92407	MURO, ALFONSO	1488 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-171-41	1490 SHERIDAN RD	SAN BERNARDINO	CA	92407	PINEDA, MARTHA	1048 LESLIE CT	COLTON	CA	92324
0266-171-42	1494 SHERIDAN RD	SAN BERNARDINO	CA	92407	CEA PROPERTY INVESTMENTS LLC	5931 HONEYSUCKLE LN	SAN BERNARDINO	CA	92407
0266-171-43	1496 SHERIDAN RD	SAN BERNARDINO	CA	92407	MARTINEZ, ANGEL A	1496 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-171-44	1498 SHERIDAN RD	SAN BERNARDINO	CA	92407	MCKAY, DAWN MARIE	PO BOX 2548	LAKE ARROWHEAD	CA	92352
0266-181-01	1417 KENDALL DR	SAN BERNARDINO	CA	92407	REYES, EMILIO	7112 STONEY CREEK DR	HIGHLAND	CA	92346
0266-181-02	1413 KENDALL DR	SAN BERNARDINO	CA	92407	JOHNSTON, MICHAEL L	1413 KENDALL DR	SAN BERNARDINO	CA	92407
0266-181-03	1409 KENDALL DR	SAN BERNARDINO	CA	92407	ASGHAR, MOHAMMAD	2135 N TIMBERGROVE RD	ORANGE	CA	92867
0266-181-04	1405 KENDALL DR	SAN BERNARDINO	CA	92407	MARTINEZ, GAUDENCIO GAMBOA	1405 KENDALL DR	SAN BERNARDINO	CA	92407

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0266-181-05	1401 KENDALL DR	SAN BERNARDINO	CA	92407	MELCHOR, SANTIAGO A	1401 KENDALL DR	SAN BERNARDINO	CA	92407
0266-181-06	1402 SHERIDAN RD	SAN BERNARDINO	CA	92407	KHATUN, SHILPI	387 W 29TH ST	SAN BERNARDINO	CA	92405
0266-181-07	1406 SHERIDAN RD	SAN BERNARDINO	CA	92407	BERG, RONALD A	1406 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-181-08	1410 SHERIDAN RD	SAN BERNARDINO	CA	92407	WALBORN, TIMOTHY	1410 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-181-09	1414 SHERIDAN RD	SAN BERNARDINO	CA	92407	MENDIETA, MARTHA ELIZABETH	1414 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-181-10	1418 SHERIDAN RD	SAN BERNARDINO	CA	92407	LIU, FOOK F	2821 LADERA RD	SAN BERNARDINO	CA	92405
0266-183-01	1395 KENDALL DR	SAN BERNARDINO	CA	92407	7 ELEVEN INC	1722 ROUTH ST STE 1000	DALLAS	TX	75201
0266-183-02	1395 KENDALL DR	SAN BERNARDINO	CA	92407	7 ELEVEN INC	1722 ROUTH ST STE 1000	DALLAS	TX	75201
0266-183-06	KENDALL DR	SAN BERNARDINO	CA	92407	NEAL T BAKER ENTERPRISES INC	1875 BUSINESS CENTER DR	SAN BERNARDINO	CA	92408
0266-183-07	KENDALL DR	SAN BERNARDINO	CA	92407	NEAL T BAKER ENTERPRISES INC	1875 BUSINESS CENTER DR	SAN BERNARDINO	CA	92408
0266-183-08	KENDALL DR	SAN BERNARDINO	CA	92407	NEAL T BAKER ENTERPRISES INC	1875 BUSINESS CENTER DR	SAN BERNARDINO	CA	92408
0266-183-09	KENDALL DR	SAN BERNARDINO	CA	92407	NEAL T BAKER ENTERPRISES INC	1875 BUSINESS CENTER DR	SAN BERNARDINO	CA	92408
0266-183-10	1331 KENDALL DR	SAN BERNARDINO	CA	92407	YOUNAN, NAIM	2011 CARTAGO CT	ROWLAND HEIGHTS	CA	91748
0266-183-11	KENDALL DR	SAN BERNARDINO	CA	92407	YOUNAN NAIM & NOFA LIV TR	2011 CARTAGO CT	ROWLAND HEIGHTS	CA	91748
0266-183-12	1331 KENDALL DR	SAN BERNARDINO	CA	92407	YOUNAN NAIM & NOFA LIV TR	2011 CARTAGO CT	ROWLAND HEIGHTS	CA	91748
0266-183-13	KENDALL DR	SAN BERNARDINO	CA	92407	YOUNAN NAIM & NOFA LIV TR	2011 CARTAGO CT	ROWLAND HEIGHTS	CA	91748
0266-183-14	KENDALL DR	SAN BERNARDINO	CA	92407	ESTELLE NEAL FAMILY LIMITED PARTNERS	PO BOX 2513	RANCHO CUCAMONGA	CA	91729
0266-183-15	KENDALL DR	SAN BERNARDINO	CA	92407	ESTELLE NEAL FAMILY LIMITED PARTNERS	PO BOX 2513	RANCHO CUCAMONGA	CA	91729
0266-183-16	1381 KENDALL DR	SAN BERNARDINO	CA	92407	NEAL T BAKER ENTERPRISES	1875 BUSINESS CENTER DR	SAN BERNARDINO	CA	92408
0266-191-28		SAN BERNARDINO	CA	92407	SAN BERNARDINO CITY UNIFIED SCH DIST	777 N F ST	SAN BERNARDINO	CA	92410
0266-211-22	1095 KENDALL DR	SAN BERNARDINO	CA	92407	SAN BERNARDINO 611 LP	2440 PROFESSIONAL DR	ROSEVILLE	CA	95661
0266-221-05	950 KENDALL DR	SAN BERNARDINO	CA	92407	KENDALL TRADE INC	950 KENDALL DR	SAN BERNARDINO	CA	92407
0266-221-06	950 KENDALL DR	SAN BERNARDINO	CA	92407	KENDALL TRADE INC	950 KENDALL DR	SAN BERNARDINO	CA	92407
0266-221-07	950 KENDALL DR	SAN BERNARDINO	CA	92407	KENDALL TRADE INC	950 KENDALL DR	SAN BERNARDINO	CA	92407
0266-221-08	950 KENDALL DR	SAN BERNARDINO	CA	92407	KENDALL TRADE INC	950 KENDALL DR	SAN BERNARDINO	CA	92407
0266-221-09	950 KENDALL DR	SAN BERNARDINO	CA	92407	KENDALL TRADE INC	950 KENDALL DR	SAN BERNARDINO	CA	92407
0266-221-10	974 KENDALL DR	SAN BERNARDINO	CA	92407	SHARPE, WILLIAM W	3202 TIGERTAIL DR	LOS ALAMITOS	CA	90720

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0266-221-11	3RD AVE	SAN BERNARDINO	CA	92407	SHARPE, WILLIAM W	3202 TIGERTAIL DR	LOS ALAMITOS	CA	90720
0266-221-12	950 KENDALL DR	SAN BERNARDINO	CA	92407	KENDALL TRADE INC	950 KENDALL DR	SAN BERNARDINO	CA	92407
0266-222-05		SAN BERNARDINO	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0266-222-15		SAN BERNARDINO	CA	92407	NORTH END ASSEMBLY OF GOD, SAN BDNO	PO BOX 3693	SAN BERNARDINO	CA	92413
0266-222-18	877 W 40TH ST	SAN BERNARDINO	CA	92407	JEHOVAHS WITNESSES CENTRAL UNIT, SNB	1380 W 48TH ST UNIT 21	SAN BERNARDINO	CA	92407
0266-223-01	3980 N H ST	SAN BERNARDINO	CA	92407	WANG, MICHAEL XIANGNAN	2830 E VIRGINIA AVE	WEST COVINA	CA	91791
0266-223-02	3978 N H ST	SAN BERNARDINO	CA	92407	PLATA, GUADALUPE	3978 N H ST	SAN BERNARDINO	CA	92407
0266-223-03	3968 N H ST	SAN BERNARDINO	CA	92407	U S BANK NATIONAL ASSOCIATION	350 HIGHLAND DR	LEWISVILLE	TX	75067
0266-223-14	40TH ST	SAN BERNARDINO	CA	92407	KIM, MYUNG SOON	2601 TELEGRAPH AVE	OAKLAND	CA	94612
0266-223-15	40TH ST	SAN BERNARDINO	CA	92407	KIM, MYUNG SOON	2601 TELEGRAPH AVE	OAKLAND	CA	94612
0266-223-16	40TH ST	SAN BERNARDINO	CA	92407	KIM, MYUNG SOON	2601 TELEGRAPH AVE	OAKLAND	CA	94612
0266-261-17	5659 SURREY LN	SAN BERNARDINO	CA	92407	KINNEY, TODD	5659 SURREY LN	SAN BERNARDINO	CA	92407
0266-261-18	5677 SURREY LN	SAN BERNARDINO	CA	92407	VALDOVINOS, ELIZABETH A	5677 SURREY LN	SAN BERNARDINO	CA	92407
0266-261-19	5695 SURREY LN	SAN BERNARDINO	CA	92407	LEE, WEN AN	9674 TELSTAR AVE STE C	EL MONTE	CA	91731
0266-262-01	2467 KENDALL WAY	SAN BERNARDINO	CA	92407	QUIROZ, VICENTE GABRIEL	2467 KENDALL WAY	SAN BERNARDINO	CA	92407
0266-262-02	5678 SURREY LN	SAN BERNARDINO	CA	92407	HAMILTON, JANILEE E	5678 SURREY LN	SAN BERNARDINO	CA	92407
0266-262-03	5664 SURREY LN	SAN BERNARDINO	CA	92407	ESQUIVEL, EVERARDO	5664 SURREY LN	SAN BERNARDINO	CA	92407
0266-262-25	5673 WAGONWHEEL RD	SAN BERNARDINO	CA	92407	CABRERA, JUAN	5673 WAGONWHEEL RD	SAN BERNARDINO	CA	92407
0266-262-26	5683 WAGONWHEEL RD	SAN BERNARDINO	CA	92407	HERMAN, HERBERT MICHAEL	5683 WAGONWHEEL RD	SAN BERNARDINO	CA	92407
0266-262-27	5695 WAGONWHEEL RD	SAN BERNARDINO	CA	92407	ADMIRE, CHARLES E	5695 WAGONWHEEL RD	SAN BERNARDINO	CA	92407
0266-263-01	2505 KENDALL WAY	SAN BERNARDINO	CA	92407	CEBALLOS, LINDA ESTRADA	2505 KENDALL WAY	SAN BERNARDINO	CA	92407
0266-263-02	5682 WAGONWHEEL RD	SAN BERNARDINO	CA	92407	SCHERMERHORN LIVING TRUST	5682 WAGONWHEEL RD	SAN BERNARDINO	CA	92407
0266-263-03	5672 WAGONWHEEL RD	SAN BERNARDINO	CA	92407	DCI INVESTMENTS LLC	3595-1 INLAND EMPIRE BLVD # 100	ONTARIO	CA	91764
0266-263-22	5679 BUCKBOARD DR	SAN BERNARDINO	CA	92407	SON, PHIRUN	5679 BUCKBOARD DR	SAN BERNARDINO	CA	92407
0266-263-23	5687 BUCKBOARD DR	SAN BERNARDINO	CA	92407	HALE, GILBERT M	5687 BUCKBOARD DR	SAN BERNARDINO	CA	92407
0266-263-24	2533 KENDALL WAY	SAN BERNARDINO	CA	92407	TINBLE LLC	5440 TRABUCO RD # H200	IRVINE	CA	92620
0266-291-11	5194 CHAPARRAL CIR	SAN BERNARDINO	CA	92407	ENCISO, JIMMIE A	5172 CHAPARRAL CIR	SAN BERNARDINO	CA	92407
0266-291-12	5172 CHAPARRAL CIR	SAN BERNARDINO	CA	92407	ENCISO, JIMMIE A	5172 CHAPARRAL CIR	SAN BERNARDINO	CA	92407
0266-291-13	5150 CHAPARRAL CIR	SAN BERNARDINO	CA	92407	NEILSEN, LARRY	5150 CHAPARRAL CIR	SAN BERNARDINO	CA	92407
0266-291-14	5128 CHAPARRAL CIR	SAN BERNARDINO	CA	92407	SULLIVAN, STEPHEN F	1920 SANDY LN	BAKERSFIELD	CA	93306
0266-291-15	5104 CHAPARRAL CIR	SAN BERNARDINO	CA	92407	VALADEZ, ADRIAN	5104 CHAPARRAL CIR	SAN BERNARDINO	CA	92407

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0266-291-16	5105 CHAPARRAL CIR	SAN BERNARDINO	CA	92407	VOUZIER, BRUCE	5105 CHAPARRAL CIR	SAN BERNARDINO	CA	92407
0266-291-17	5151 CHAPARRAL CIR	SAN BERNARDINO	CA	92407	MERRITT, RAYMOND D	4234 CYPRESS DR	SAN BERNARDINO	CA	92407
0266-291-18	1597 TUMBLEWEED WAY	SAN BERNARDINO	CA	92407	1H2 PROPERTY WEST LP	291 CORPORATE TERRACE CIR	CORONA	CA	92879
0266-291-19	1595 TUMBLEWEED WAY	SAN BERNARDINO	CA	92407	GARRETT, ANTHONY R	1593 TUMBLEWEED WAY	SAN BERNARDINO	CA	92407
0266-291-25	5150 LAKEWOOD DR	SAN BERNARDINO	CA	92407	BRISENO, CARLOS	1205 S LARK ELLEN AVE	WEST COVINA	CA	91791
0266-291-26	5128 LAKEWOOD DR	SAN BERNARDINO	CA	92407	ISOM, DONALD M	6041 SHEPHERD DR	SAN BERNARDINO	CA	92407
0266-291-27	5104 LAKEWOOD DR	SAN BERNARDINO	CA	92407	NGUYEN, TAM VAN	3216 SUNFLOWER AVE	SAN BERNARDINO	CA	92407
0266-311-12	5004 COYOTE DR	SAN BERNARDINO	CA	92407	CRUZ, MICAELA	5004 COYOTE DR	SAN BERNARDINO	CA	92407
0266-311-13	5059 SAGUARO ST	SAN BERNARDINO	CA	92407	SHAW, MICHAEL R	5059 SAGUARO ST	SAN BERNARDINO	CA	92407
0266-311-24	5060 SAGUARO ST	SAN BERNARDINO	CA	92407	MYERS, BEVERLIE J	5060 SAGUARO ST	SAN BERNARDINO	CA	92407
0266-311-25	5105 SAGEBRUSH TER	SAN BERNARDINO	CA	92407	LOPEZ, FLORA A	5105 SAGEBRUSH TER	SAN BERNARDINO	CA	92407
0266-311-38	5104 SAGEBRUSH TER	SAN BERNARDINO	CA	92407	RIZO, RAFAEL PEREZ	5104 SAGEBRUSH TER	SAN BERNARDINO	CA	92407
0266-311-39	5141 LAKEWOOD DR	SAN BERNARDINO	CA	92407	PRATT, BEN	5141 LAKEWOOD DR	SAN BERNARDINO	CA	92407
0266-311-50	5172 LAKEWOOD DR	SAN BERNARDINO	CA	92407	PARADA, EDWIN O	5172 LAKEWOOD DR	SAN BERNARDINO	CA	92407
0266-311-51	1597 WILD PONY PATH	SAN BERNARDINO	CA	92407	OEY, YAYANG	1597 WILD PONY PATH	SAN BERNARDINO	CA	92407
0266-311-52	1595 WILD PONY PATH	SAN BERNARDINO	CA	92407	MAREK, GENE R	1595 WILD PONY PATH	SAN BERNARDINO	CA	92407
0266-311-53	1593 WILD PONY PATH	SAN BERNARDINO	CA	92407	GOMEZ, RITA A	1593 WILD PONY PATH	SAN BERNARDINO	CA	92407
0266-311-54	1591 WILD PONY PATH	SAN BERNARDINO	CA	92407	SIRIRUX, NARIS	1591 WILD PONY PATH	SAN BERNARDINO	CA	92407
0266-311-55	1589 WILD PONY PATH	SAN BERNARDINO	CA	92407	MYERS AND LEWIS-MYERS FAM TR 5-05	1589 WILD PONY PATH	SAN BERNARDINO	CA	92407
0266-311-56	1585 WILD PONY PATH	SAN BERNARDINO	CA	92407	FRENCH, JON W	1585 WILD PONY PATH	SAN BERNARDINO	CA	92407
0266-311-57	1583 WILD PONY PATH	SAN BERNARDINO	CA	92407	BIRT, SHIRLEY A	2131 SYCAMORE AVE	RIALTO	CA	92376
0266-311-58	1581 WILD PONY PATH	SAN BERNARDINO	CA	92407	KHACHERIAN, KURT B	22616 DE SOTO ST	GRAND TERRACE	CA	92313
0266-311-59	1579 WILD PONY PATH	SAN BERNARDINO	CA	92407	KOHR, ROBYN R	1579 WILD PONY PATH	SAN BERNARDINO	CA	92407
0266-321-01	1577 WILD PONY PATH	SAN BERNARDINO	CA	92407	BOOKER, JANICE	1577 WILD PONY PATH	SAN BERNARDINO	CA	92407
0266-321-02	1575 WILD PONY PATH	SAN BERNARDINO	CA	92407	OLVERA, AURORA SABRINA	1575 WILD PONY PATH	SAN BERNARDINO	CA	92407
0266-321-03	1573 WILD PONY PATH	SAN BERNARDINO	CA	92407	WILMOTH, SAMUEL R	1573 WILD PONY PATH	SAN BERNARDINO	CA	92407
0266-321-04	1571 WILD PONY PATH	SAN BERNARDINO	CA	92407	NASSIOM, JOSHUA B	1571 WILD PONY PATH	SAN BERNARDINO	CA	92407
0266-321-05	1563 WILD PONY PATH	SAN BERNARDINO	CA	92407	FLORES, ALMA	1563 WILD PONY PATH	SAN BERNARDINO	CA	92407
0266-321-06	1559 WILD PONY PATH	SAN BERNARDINO	CA	92407	VANDER, BERNARD A	1559 WILD PONY PATH	SAN BERNARDINO	CA	92407
0266-321-07	1555 WILD PONY PATH	SAN BERNARDINO	CA	92407	CASTILLO, JULIO C	1555 WILD PONY PATH	SAN BERNARDINO	CA	92407
0266-321-08	1551 INDIAN TRL	SAN BERNARDINO	CA	92407	NEBLINA, FRANCISCO	1551 INDIAN TRL	SAN BERNARDINO	CA	92407

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0266-321-09	1543 INDIAN TRL	SAN BERNARDINO	CA	92407	RUIZ, MARTIN	1543 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-321-10	1539 INDIAN TRL	SAN BERNARDINO	CA	92407	MITCHELL, ZACHARY	1539 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-321-11	1535 INDIAN TRL	SAN BERNARDINO	CA	92407	JOHNSON, VIRGINIA MAE	1535 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-321-12	1529 INDIAN TRL	SAN BERNARDINO	CA	92407	TOWNSEND, CLINTON A	1529 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-321-13	1527 INDIAN TRL	SAN BERNARDINO	CA	92407	GREWAL, DEVINDER S	1527 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-321-14	1523 INDIAN TRL	SAN BERNARDINO	CA	92407	DIEHL, JEFFREY A	28831 TERRACE DR	HIGHLAND	CA	92346
0266-321-15	1519 INDIAN TRL	SAN BERNARDINO	CA	92407	CANNON, MOMI	1055 W COLUMBIA WAY STE 105	LANCASTER	CA	93534
0266-321-16	1524 INDIAN TRL	SAN BERNARDINO	CA	92407	HERNANDEZ, JEREMY	1524 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-321-17	1528 INDIAN TRL	SAN BERNARDINO	CA	92407	LEFEVRE, THOMAS J	1528 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-321-18	1534 INDIAN TRL	SAN BERNARDINO	CA	92407	BROWN, JULIA	PO BOX 119	LOMA LINDA	CA	92354
0266-321-19	1538 INDIAN TRL	SAN BERNARDINO	CA	92407	KAZALUNAS, KURT THOMAS	1538 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-321-20	1542 INDIAN TRL	SAN BERNARDINO	CA	92407	KAZALUNAS, LISA MARIE	1542 INDIAN TRAIL DR	SAN BERNARDINO	CA	92402
0266-321-21	1546 INDIAN TRL	SAN BERNARDINO	CA	92407	VASQUEZ, JOSE PABLO	1546 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-321-22	1548 INDIAN TRL	SAN BERNARDINO	CA	92407	VALADEZ, CLAUDIA V	1548 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-321-23	1550 INDIAN TRL	SAN BERNARDINO	CA	92407	PETERSON, GARY C	1550 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-331-01	1480 INDIAN TRL	SAN BERNARDINO	CA	92407	MARTINEZ, ROSE MARY	1480 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-331-02	1486 INDIAN TRL	SAN BERNARDINO	CA	92407	WARREN, DAVID J	1486 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-331-03	1490 INDIAN TRL	SAN BERNARDINO	CA	92407	WILLIAMSON, MICHAEL J	PO BOX 9935	SAN BERNARDINO	CA	92427
0266-331-04	1494 INDIAN TRL	SAN BERNARDINO	CA	92407	MORALES, JANIE LYNETTE	1494 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-331-05	1504 INDIAN TRL	SAN BERNARDINO	CA	92407	WELCH, DAVID H	1504 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-331-06	1508 INDIAN TRL	SAN BERNARDINO	CA	92407	VANDEVER, TERRY R	1508 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-331-07	1512 INDIAN TRL	SAN BERNARDINO	CA	92407	REYNOLDS, GAIL D	1512 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-331-08	1516 INDIAN TRL	SAN BERNARDINO	CA	92407	CANTU, GREGORY	1516 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-331-09	1520 INDIAN TRL	SAN BERNARDINO	CA	92407	ROSALES, WILLIAM ADAM	1520 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-331-10	1515 INDIAN TRL	SAN BERNARDINO	CA	92407	MILLER, JIM T	1515 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-331-11	1511 INDIAN TRL	SAN BERNARDINO	CA	92407	PETERSON, RONALD D	264 E MAIN ST	RIVERSIDE	CA	92507
0266-331-12	1507 INDIAN TRL	SAN BERNARDINO	CA	92407	CASTNER, LINDA KAY SMITH	1507 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-331-13	1503 INDIAN TRL	SAN BERNARDINO	CA	92407	ORTEGA, HUGO E	1503 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-331-14	1493 INDIAN TRL	SAN BERNARDINO	CA	92407	FONTENOT, JOHN	2550 RED HILL AVE	SANTA ANA	CA	92705
0266-331-15	1491 INDIAN TRL	SAN BERNARDINO	CA	92407	SIORDIA, ROBERT A	1491 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-331-16	1489 INDIAN TRL	SAN BERNARDINO	CA	92407	SIMONEAUX, MARTHA P	1489 INDIAN TRL	SAN BERNARDINO	CA	92407

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0266-331-17	1487 INDIAN TRL	SAN BERNARDINO	CA	92407	SIMMONS, ZAKIA	PO BOX 482	RIALTO	CA	92377
0266-331-18	1483 INDIAN TRL	SAN BERNARDINO	CA	92407	CULVERSON, REGINA	1483 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-331-19	1481 INDIAN TRL	SAN BERNARDINO	CA	92407	WILLIAMSON, MARJORIE A	1481 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-331-20	1479 INDIAN TRL	SAN BERNARDINO	CA	92407	GERRY, ALEC CRUICKSHANK	6017 CANNICH RD	RIVERSIDE	CA	92507
0266-331-21	1477 INDIAN TRL	SAN BERNARDINO	CA	92407	HOMAYONINEJAD, FARHAD	1477 INDIAN TRL	SAN BERNARDINO	CA	92407
0266-411-42	1416 KENDALL DR	SAN BERNARDINO	CA	92407	HPI PROPERTY ACQUISITIONS LLC	715 E BRIER DR	SAN BERNARDINO	CA	92408
0266-412-01	1460 KENDALL DR UNIT 1	SAN BERNARDINO	CA	92407	RAI, SAMIR	2729 SATURN ST STE A	BREA	CA	92821
0266-412-02	1460 KENDALL DR UNIT 2	SAN BERNARDINO	CA	92407	KDSC168 LLC	3592 ROSEMEAD BLVD # 517	ROSEMEAD	CA	91770
0266-412-03	1460 KENDALL DR UNIT 3	SAN BERNARDINO	CA	92407	SALAS, LISED	1460 KENDALL DR UNIT 3	SAN BERNARDINO	CA	92407
0266-412-04	1460 KENDALL DR UNIT 4	SAN BERNARDINO	CA	92407	BOCKA, JARED ANDREW	1460 KENDALL DR UNIT 4	SAN BERNARDINO	CA	92407
0266-412-05	1460 KENDALL DR UNIT 5	SAN BERNARDINO	CA	92407	581 ACQUISITION PROPERTIES LLC	3592 ROSEMEAD BLVD # 858	ROSEMEAD	CA	91770
0266-412-06	1460 KENDALL DR UNIT 6	SAN BERNARDINO	CA	92407	581 ACQUISITION PROPERTIES LLC	3592 ROSEMEAD BLVD # 858	ROSEMEAD	CA	91770
0266-412-07	1460 KENDALL DR UNIT 7	SAN BERNARDINO	CA	92407	ANDREWS, CHRISTY JEAN	1460 KENDALL DR UNIT 7	SAN BERNARDINO	CA	92407
0266-412-08	1460 KENDALL DR UNIT 8	SAN BERNARDINO	CA	92407	RAI, SAMIR	2729 SATURN ST STE A	BREA	CA	92821
0266-412-09	1460 KENDALL DR UNIT 9	SAN BERNARDINO	CA	92407	JACKSON, ERNEST L	2255 AUTO CENTRE DR	GLENDORA	CA	91740
0266-412-10	1460 KENDALL DR UNIT 10	SAN BERNARDINO	CA	92407	JACKSON, ERNEST LEE	2255 AUTO CENTRE DR	GLENDORA	CA	91740
0266-412-11	1460 KENDALL DR UNIT 11	SAN BERNARDINO	CA	92407	NORTHGATE EQUITY GROUP	767 N HILL ST STE 102	LOS ANGELES	CA	90012
0266-412-12	1460 KENDALL DR UNIT 12	SAN BERNARDINO	CA	92407	AHAJJAR, HIFA	23398 BADGER CREEK LN	QUAIL VALLEY	CA	92587
0266-412-13	1460 KENDALL DR UNIT 13	SAN BERNARDINO	CA	92407	BROWN, DAVID A	231 ORCHARD LN	UPLAND	CA	91786
0266-412-14	1460 KENDALL DR UNIT 14	SAN BERNARDINO	CA	92407	LEE, ANDY CHOU	429 E MISSION RD UNIT 46	ALHAMBRA	CA	91801
0266-412-15	1460 KENDALL DR UNIT 15	SAN BERNARDINO	CA	92407	CHEN, CHI TING	6383 DALTON ST	CHINO	CA	91710
0266-412-16	1460 KENDALL DR UNIT 16	SAN BERNARDINO	CA	92407	YU, YI MEI	1460 KENDALL DR UNIT 16	SAN BERNARDINO	CA	92407
0266-412-17	1460 KENDALL DR UNIT 17	SAN BERNARDINO	CA	92407	PIEROOTH, PAUL	417 B W FOOTHILL BLVD # 331	GLENDORA	CA	91741
0266-412-19	1460 KENDALL DR UNIT 19	SAN BERNARDINO	CA	92407	FORD, JAMES	1460 KENDALL DR UNIT 19	SAN BERNARDINO	CA	92407
0266-412-20	1460 KENDALL DR UNIT 20	SAN BERNARDINO	CA	92407	YU, YI MEI	PO BOX 7775	SAN FRANCISCO	CA	94120
0266-412-21	1460 KENDALL DR UNIT 21	SAN BERNARDINO	CA	92407	TORRES, STEVE	1460 KENDALL DR UNIT 21	SAN BERNARDINO	CA	92407
0266-412-22	1460 KENDALL DR UNIT 22	SAN BERNARDINO	CA	92407	AFRA INVESTMENTS GROUP INC	9598 HEATHERBROOK PL	RANCHO CUCAMONGA	CA	91730
0266-412-25	1460 KENDALL DR UNIT 25	SAN BERNARDINO	CA	92407	VO, MICHAEL	12520 CELEBRATION DR	MIRA LOMA	CA	91752
0266-412-26	1460 KENDALL DR UNIT 26	SAN BERNARDINO	CA	92407	AGUIRRE, VICTOR ABRAHAM	1460 KENDALL DR UNIT 26	SAN BERNARDINO	CA	92407
0266-412-27	1460 KENDALL DR UNIT 27	SAN BERNARDINO	CA	92407	CHANDAR, DEEPAK	2408 WATERMARKE PL	IRVINE	CA	92612
0266-412-28	1460 KENDALL DR UNIT 28	SAN BERNARDINO	CA	92407	WALTON, RODNEY D	10945 SANTA BARBARA PL	ALTA LOMA	CA	91701

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0266-412-31	1460 KENDALL DR UNIT 31	SAN BERNARDINO	CA	92407	FEDERAL HOME LOAN MORTGAGE CORPORATION	8200 JONES BRANCH DR	MCLEAN	VA	22102
0266-412-32	1460 KENDALL DR UNIT 32	SAN BERNARDINO	CA	92407	AGRAWAL, GAURAV	34 E COURT LN	FOSTER CITY	CA	94404
0266-412-33	1460 KENDALL DR UNIT 33	SAN BERNARDINO	CA	92407	MENDOZA, LUIS B	1460 KENDALL DR UNIT 33	SAN BERNARDINO	CA	92407
0266-412-34	1460 KENDALL DR UNIT 34	SAN BERNARDINO	CA	92407	THE PANKAJ PATEL & PRYTAMDA PATEL REVOCA	6693 DI CARLO PL	RANCHO CUCAMONGA	CA	91739
0266-412-35	1460 KENDALL DR UNIT 35	SAN BERNARDINO	CA	92407	DAVID, CHRISTOPHER	1460 KENDALL DR UNIT 35	SAN BERNARDINO	CA	92407
0266-412-36	1460 KENDALL DR UNIT 36	SAN BERNARDINO	CA	92407	WALTON, RODNEY D	10945 SANTA BARBARA PL	ALTA LOMA	CA	91701
0266-412-37	1460 KENDALL DR UNIT 37	SAN BERNARDINO	CA	92407	CHANG, CHIH HUANG	503 W LEMON AVE	ARCADIA	CA	91007
0266-412-38	1460 KENDALL DR UNIT 38	SAN BERNARDINO	CA	92407	KATIYAR, KIRTI	16583 CORIANDER PL	FONTANA	CA	92337
0266-412-39	1460 KENDALL DR UNIT 39	SAN BERNARDINO	CA	92407	FILADELFIA, DANIEL W	1460 KENDALL DR UNIT 39	SAN BERNARDINO	CA	92407
0266-412-40	1460 KENDALL DR UNIT 40	SAN BERNARDINO	CA	92407	HSU, POLO SHU SHENG	703 CHARLESTON DR	CLAREMONT	CA	91711
0266-412-41	1460 KENDALL DR UNIT 41	SAN BERNARDINO	CA	92407	VAZQUEZ, MARCELINO	1460 KENDALL DR UNIT 41	SAN BERNARDINO	CA	92407
0266-412-42	1460 KENDALL DR UNIT 42	SAN BERNARDINO	CA	92407	TURNER, CHEREE D	9 SILVERWOOD CIR APT 7	ANNAPOLIS	MD	21403
0266-412-43	1460 KENDALL DR UNIT 43	SAN BERNARDINO	CA	92407	EMISHYAN, MARIAM	1460 KENDALL DR UNIT 43	SAN BERNARDINO	CA	92407
0266-412-44	1460 KENDALL DR UNIT 44	SAN BERNARDINO	CA	92407	COBO, JUAN A	1809 COCHISE CIR	WALNUT	CA	91789
0266-412-45	1460 KENDALL DR UNIT 45	SAN BERNARDINO	CA	92407	THE JAYSHRIBEN P PATEL LIVING TRUST	800 S MAIN ST	LAS CRUCES	NM	88005
0266-412-46	1460 KENDALL DR UNIT 46	SAN BERNARDINO	CA	92407	SERNA, JESSE	1460 KENDALL DR UNIT 46	SAN BERNARDINO	CA	92407
0266-412-47	1460 KENDALL DR UNIT 47	SAN BERNARDINO	CA	92407	DAHLAN PROPERTIES LLC	26574 EVERGREEN AVE	MURRIETA	CA	92563
0266-412-48	1460 KENDALL DR UNIT 48	SAN BERNARDINO	CA	92407	KEYSTONE EQUITY GROUP INC	2729 SATURN ST STE A	BREA	CA	92821
0266-412-49	1460 KENDALL DR UNIT 49	SAN BERNARDINO	CA	92407	NAKKU, ANNETTE	1460 KENDALL DR UNIT 49	SAN BERNARDINO	CA	92407
0266-412-50	1460 KENDALL DR UNIT 50	SAN BERNARDINO	CA	92407	JOHN, MATTHEW EDMOND	229 LAKE ESTATES DR	MONTGOMERY	TX	77356
0266-412-51	1460 KENDALL DR UNIT 51	SAN BERNARDINO	CA	92407	DAHLAN PROPERTIES LLC	26574 EVERGREEN AVE	MURRIETA	CA	92563
0266-412-52	1460 KENDALL DR UNIT 52	SAN BERNARDINO	CA	92407	BAEZA, TONY	1460 KENDALL DR UNIT 52	SAN BERNARDINO	CA	92407
0266-412-53	1460 KENDALL DR UNIT 53	SAN BERNARDINO	CA	92407	SINGH, BALWANT	1460 KENDALL DR UNIT 53	SAN BERNARDINO	CA	92407
0266-412-54	1460 KENDALL DR UNIT 54	SAN BERNARDINO	CA	92407	NORTHGATE EQUITY GROUP LLC	767 N HILL ST STE 102	LOS ANGELES	CA	90012
0266-412-55	1460 KENDALL DR UNIT 55	SAN BERNARDINO	CA	92407	SCHAFFER, JAMES	PO BOX 2904	LAKE ARROWHEAD	CA	92352
0266-412-56	1460 KENDALL DR UNIT 56	SAN BERNARDINO	CA	92407	ZUMBRO, SARAH	1460 KENDALL DR UNIT 56	SAN BERNARDINO	CA	92407
0266-412-57	1460 KENDALL DR UNIT 57	SAN BERNARDINO	CA	92407	ROSEBERG, RONI GAY	1460 KENDALL DR UNIT 57	SAN BERNARDINO	CA	92407
0266-412-58	1460 KENDALL DR UNIT 58	SAN BERNARDINO	CA	92407	PITTMAN, MICHAEL S	1460 KENDALL DR UNIT 58	SAN BERNARDINO	CA	92407
0266-412-59	1460 KENDALL DR UNIT 59	SAN BERNARDINO	CA	92407	LOPEZ, CARMEN	1460 KENDALL DR UNIT 59	SAN BERNARDINO	CA	92407
0266-412-60	1460 KENDALL DR UNIT 60	SAN BERNARDINO	CA	92407	ALVARADO, SONIA	13434 CURTIS AND KING RD	NORWALK	CA	90650
0266-412-61	1460 KENDALL DR UNIT 61	SAN BERNARDINO	CA	92407	AFRA INVESTMENTS GROUP INC	9588 HEATHERBROOK PL	RANCHO	CA	91730

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
							CUCAMONGA		
0266-412-62	1460 KENDALL DR UNIT 62	SAN BERNARDINO	CA	92407	GREENE, LINDA	3631 W MYRA AVE	ANAHEIM	CA	92804
0266-412-63	1460 KENDALL DR UNIT 63	SAN BERNARDINO	CA	92407	SANCHEZ, HERCILIS C	1460 KENDALL DR UNIT 63	SAN BERNARDINO	CA	92407
0266-412-64	1460 KENDALL DR UNIT 64	SAN BERNARDINO	CA	92407	PAYNE, PATRICK	1460 KENDALL DR UNIT 64	SAN BERNARDINO	CA	92407
0266-412-65	1460 KENDALL DR UNIT 65	SAN BERNARDINO	CA	92407	SALAS, CYNTHIA	1460 KENDALL DR UNIT 65	SAN BERNARDINO	CA	92407
0266-412-66	1460 KENDALL DR UNIT 66	SAN BERNARDINO	CA	92407	DOHM, JOHN	1460 KENDALL DR UNIT 66	SAN BERNARDINO	CA	92407
0266-412-67	1460 KENDALL DR UNIT 67	SAN BERNARDINO	CA	92407	ACOSTA, FRANCES	1460 KENDALL DR UNIT 67	SAN BERNARDINO	CA	92407
0266-412-68	1460 KENDALL DR UNIT 68	SAN BERNARDINO	CA	92407	CONNELLY, NICHOLAS J	PO BOX 50-315	LAKE ARROWHEAD	CA	92352
0266-412-69	1460 KENDALL DR UNIT 69	SAN BERNARDINO	CA	92407	CUI, JIA	1460 KENDALL DR UNIT 69	SAN BERNARDINO	CA	92407
0266-412-70	1460 KENDALL DR UNIT 70	SAN BERNARDINO	CA	92407	WALTERS, JOHN M	1460 KENDALL DR UNIT 70	SAN BERNARDINO	CA	92407
0266-412-71	1460 KENDALL DR UNIT 71	SAN BERNARDINO	CA	92407	YU, CHENG	260 SHARON RD	ARCADIA	CA	91007
0266-412-72	1460 KENDALL DR UNIT 72	SAN BERNARDINO	CA	92407	SILVER RIDGE CONDOMINIUM ASSOCIATION	2900 ADAMS ST STE C200	RIVERSIDE	CA	92504
0266-412-73	1460 KENDALL DR UNIT 73	SAN BERNARDINO	CA	92407	ROBINSON, MYRNA	15624 COLE POINT LN	FONTANA	CA	92336
0266-412-74	1460 KENDALL DR UNIT 74	SAN BERNARDINO	CA	92407	KHAN, DENNINE LYNN	1460 KENDALL DR UNIT 74	SAN BERNARDINO	CA	92407
0266-412-75	1460 KENDALL DR UNIT 75	SAN BERNARDINO	CA	92407	PENG, MINYEN	2063 DACIAN ST	WALNUT	CA	91789
0266-412-76	1460 KENDALL DR	SAN BERNARDINO	CA	92407	SILVER, RIDGE ASSN	5505 CANCHA DE GOLF	RANCHO SANTA FE	CA	92091
0266-421-01	1795 SHERIDAN RD	SAN BERNARDINO	CA	92407	GURSSLIN, MICHAEL D	1795 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-421-02	1775 SHERIDAN RD	SAN BERNARDINO	CA	92407	OGAZ, CHRIS	1775 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-421-03	1763 SHERIDAN RD	SAN BERNARDINO	CA	92407	TAPIA, ANTONIO	1763 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-421-04	1733 SHERIDAN RD	SAN BERNARDINO	CA	92407	MARQUEZ, MARIA TERESA	1733 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-421-05	1730 SHERIDAN RD	SAN BERNARDINO	CA	92407	GARIBAY, SALVADOR	1730 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-421-06	1742 SHERIDAN RD	SAN BERNARDINO	CA	92407	VALI LLC	620 NEWPORT CENTER DR STE 800	NEWPORT BEACH	CA	92660
0266-421-07	1756 SHERIDAN RD	SAN BERNARDINO	CA	92407	ESCAMILLIA, DANIEL	1756 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-421-08	1768 SHERIDAN RD	SAN BERNARDINO	CA	92407	GALLAGHER, COLIN	1768 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-421-09	1782 SHERIDAN RD	SAN BERNARDINO	CA	92407	ZELLNER, BEVERLY J	1782 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-421-10	1794 SHERIDAN RD	SAN BERNARDINO	CA	92407	SHOFFNER, AMANDA	1794 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-421-11	1804 SHERIDAN RD	SAN BERNARDINO	CA	92407	WENCLEWICZ, RICHARD WALTER	1804 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-421-12	1818 SHERIDAN RD	SAN BERNARDINO	CA	92407	EMERY, MICHAEL G	1818 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-421-13	1819 SHERIDAN RD	SAN BERNARDINO	CA	92407	HEDDY, DAVID-GALLEY D	1819 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-421-14	1805 SHERIDAN RD	SAN BERNARDINO	CA	92407	HALLBERG, FRANKLIN B	PO BOX 9308	ALTA LOMA	CA	91701

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0266-441-10	5459 JASMINE ST	SAN BERNARDINO	CA	92407	BARSCHOW, MARGARET C	5459 JASMINE ST	SAN BERNARDINO	CA	92407
0266-441-11	5477 JASMINE ST	SAN BERNARDINO	CA	92407	HEASLEY, LARRY A	5477 JASMINE ST	SAN BERNARDINO	CA	92407
0266-441-12	2134 SHERIDAN RD	SAN BERNARDINO	CA	92407	GARCIA, HECTOR M	2134 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-441-13	2144 SHERIDAN RD	SAN BERNARDINO	CA	92407	FRIEDMAN, HOWARD	12961 LUPINE CT	YUCAIPA	CA	92399
0266-441-14	2154 SHERIDAN RD	SAN BERNARDINO	CA	92407	RIOS, ALFONSO	2154 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-441-15	2164 SHERIDAN RD	SAN BERNARDINO	CA	92407	THOMPSON, MICHAEL	2164 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-441-16	2174 SHERIDAN RD	SAN BERNARDINO	CA	92407	WEAVER, BRIAN KEITH	2174 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-441-17	2184 SHERIDAN RD	SAN BERNARDINO	CA	92407	OLGUIN, HOPE	2184 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-441-18	2194 SHERIDAN RD	SAN BERNARDINO	CA	92407	MARTIN, GEORGE ARTHUR	2194 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-441-19	2204 SHERIDAN RD	SAN BERNARDINO	CA	92407	HARUTUNIAN, KATHERINE	543 CUESTA DR	SAN LUIS OBISPO	CA	93405
0266-441-20	2214 SHERIDAN RD	SAN BERNARDINO	CA	92407	NELSEN, DONNA M	2214 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-441-21	2224 SHERIDAN RD	SAN BERNARDINO	CA	92407	SWITZER, SARAH A	2224 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-441-22	2235 SHERIDAN RD	SAN BERNARDINO	CA	92407	BRISCOE ROY E TR	2235 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-441-23	2225 SHERIDAN RD	SAN BERNARDINO	CA	92407	ATKINS, VINCENT	2225 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-441-24	2215 SHERIDAN RD	SAN BERNARDINO	CA	92407	ALVAREZ, ROY	2215 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-441-25	2205 SHERIDAN RD	SAN BERNARDINO	CA	92407	MC FARLAND, DEENA R	2205 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-441-26	2195 SHERIDAN RD	SAN BERNARDINO	CA	92407	LAMOUREUX, MARK S	426 SAGE PL	GLENDORA	CA	91741
0266-441-27	2185 SHERIDAN RD	SAN BERNARDINO	CA	92407	KLEITZ, MICHAEL K	2185 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-441-29	5440 JASMINE ST	SAN BERNARDINO	CA	92407	BERRIOS, ELSY K	5440 JASMINE ST	SAN BERNARDINO	CA	92407
0266-441-48	2137 SHERIDAN RD	SAN BERNARDINO	CA	92407	FINNESETH, PAULETTE M	7357 GREENBRIER PL	HIGHLAND	CA	92346
0266-441-49	2127 SHERIDAN RD	SAN BERNARDINO	CA	92407	DAWSON, BARBARA J	2127 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-441-50	2115 SHERIDAN RD	SAN BERNARDINO	CA	92407	VALDEPENA, HECTOR	2115 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-441-51	2114 SHERIDAN RD	SAN BERNARDINO	CA	92407	HARRIS, DEBORAH ANN	2114 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-441-52	2124 SHERIDAN RD	SAN BERNARDINO	CA	92407	MCCUMBER, PATRICK	PO BOX 158	RIMFOREST	CA	92378
0266-491-11	5578 ASTER ST	SAN BERNARDINO	CA	92407	SACHSE, PATRICIA A	5578 ASTER ST	SAN BERNARDINO	CA	92407
0266-491-12	5586 ASTER ST	SAN BERNARDINO	CA	92407	GARCIA, GUADALUPE F	5586 ASTER ST	SAN BERNARDINO	CA	92407
0266-491-13	5594 ASTER ST	SAN BERNARDINO	CA	92407	CASS, THOMAS L	5594 ASTER ST	SAN BERNARDINO	CA	92407
0266-491-14	2348 SHERIDAN RD	SAN BERNARDINO	CA	92407	HOLMBERG, PATRICIA A	2348 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-491-15	2334 SHERIDAN RD	SAN BERNARDINO	CA	92407	ROLDAN, SERGIO	2334 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-491-16	2318 SHERIDAN RD	SAN BERNARDINO	CA	92407	THEODORIDIS, GEORGE	6197 GREENWOOD PL	RANCHO CUCAMONGA	CA	91739
0266-491-17	2304 SHERIDAN RD	SAN BERNARDINO	CA	92407	LIBERTY BELL DEVELOPMENT LLC	1033 KIMBARK AVE	SAN BERNARDINO	CA	92407

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0266-491-18	2294 SHERIDAN RD	SAN BERNARDINO	CA	92407	FARMER, NICHOLAS EDWARD	2294 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-491-19	2278 SHERIDAN RD	SAN BERNARDINO	CA	92407	ANOLIN, ALBERT O	2278 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-491-20	2264 SHERIDAN RD	SAN BERNARDINO	CA	92407	MARTINEZ, MICHAEL A	6123 BROOKHAVEN CT	FONTANA	CA	92336
0266-491-21	2248 SHERIDAN RD	SAN BERNARDINO	CA	92407	CARRBRIDGE LLC	PO BOX 1226	OAKLAND	CA	94604
0266-491-22	2234 SHERIDAN RD	SAN BERNARDINO	CA	92407	GALVAN, JUANITA	2234 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-491-23	2245 SHERIDAN RD	SAN BERNARDINO	CA	92407	PADUA, NATALIE D	2245 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-491-24	2255 SHERIDAN RD	SAN BERNARDINO	CA	92407	WORAWONGS, CHUMNAN	2255 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-491-25	5579 THISTLE ST	SAN BERNARDINO	CA	92407	IBARRA, JIMEN F	5579 THISTLE ST	SAN BERNARDINO	CA	92407
0266-491-26	5571 THISTLE ST	SAN BERNARDINO	CA	92407	MARQUEZ, EDGAR E	5571 THISTLE ST	SAN BERNARDINO	CA	92407
0266-491-32	5572 THISTLE ST	SAN BERNARDINO	CA	92407	REESE, DOROTHY	4824 BANCROFT DR	NEW ORLEANS	LA	70122
0266-491-33	5580 THISTLE ST	SAN BERNARDINO	CA	92407	BOAKYE, JOSEPH K	5580 THISTLE ST	SAN BERNARDINO	CA	92407
0266-491-34	5585 ASTER ST	SAN BERNARDINO	CA	92407	FIGUEROA, DAISY A	5585 ASTER ST	SAN BERNARDINO	CA	92407
0266-491-35	5577 ASTER ST	SAN BERNARDINO	CA	92407	DAVIS, MENDEZ	5577 ASTER ST	SAN BERNARDINO	CA	92407
0266-521-06	977 KENDALL DR	SAN BERNARDINO	CA	92407	STATER BROS MARKETS	PO BOX 150	SAN BERNARDINO	CA	92402
0266-521-15	KENDALL DR	SAN BERNARDINO	CA	92407	STATER BROS MARKETS	PO BOX 150	SAN BERNARDINO	CA	92402
0266-521-16	985 KENDALL DR	SAN BERNARDINO	CA	92407	STATER BROS MARKETS	PO BOX 150	SAN BERNARDINO	CA	92402
0266-521-18	KENDALL DR	SAN BERNARDINO	CA	92407	STATER BROS MARKETS	PO BOX 150	SAN BERNARDINO	CA	92402
0266-521-19	KENDALL DR	SAN BERNARDINO	CA	92407	STATER BROS MARKETS	PO BOX 150	SAN BERNARDINO	CA	92402
0266-601-01	1660 KENDALL DR	SAN BERNARDINO	CA	92407	MOUNTAINSIDE APARTMENTS INVESTORS LL	1800 JOHN F KENNEDY BLVD STE 603	PHILADELPHIA	PA	19103
0266-601-02	1660 KENDALL DR	SAN BERNARDINO	CA	92407	MOUNTAINSIDE APARTMENTS INVESTORS LL	1800 JOHN F KENNEDY BLVD STE 603	PHILADELPHIA	PA	19103
0266-601-03		SAN BERNARDINO	CA	92407	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0266-751-04	1766 KENDALL DR	SAN BERNARDINO	CA	92407	HHI SAN BERNARDINO LLC	3452 UNIVERSITY AVE	RIVERSIDE	CA	92501
0266-751-09	5200 UNIVERSITY PKWY	SAN BERNARDINO	CA	92407	5200 UNIVERSITY PARKWAY LLC	701 W MONTAUK HWY	BAY SHORE	NY	11706
0266-751-11	5244 UNIVERSITY PKWY	SAN BERNARDINO	CA	92407	UNIVERSITY COMMONS LLC	2399 CAMINO DEL RIO S	SAN DIEGO	CA	92108
0266-751-14		SAN BERNARDINO	CA	92407	UNIVERSITY COMMONS LLC	2399 CAMINO DEL RIO S	SAN DIEGO	CA	92108
0266-761-01	5691 NEW PINE AVE	SAN BERNARDINO	CA	92407	MARTINEZ, VERONICA	5691 NEW PINE AVE	SAN BERNARDINO	CA	92407
0266-761-02	5687 NEW PINE AVE	SAN BERNARDINO	CA	92407	EPPS, MARIAH JANE	5687 NEW PINE AVE	SAN BERNARDINO	CA	92407
0266-761-06	5696 NEW PINE AVE	SAN BERNARDINO	CA	92407	SCOLLON, MEYLIN O	10516 BOULDER CANYON RD	ALTA LOMA	CA	91737
0266-761-07	5692 NEW PINE AVE	SAN BERNARDINO	CA	92407	QUINTERO, EDGAR	5692 NEW PINE AVE	SAN BERNARDINO	CA	92407
0266-761-08	2736 RITO CT	SAN BERNARDINO	CA	92407	BRYANT, SEAN Y	2736 RITO CT	SAN BERNARDINO	CA	92407
0266-761-09	2740 RITO CT	SAN BERNARDINO	CA	92407	PODOLSKA, WESLEY R	2740 RITO CT	SAN BERNARDINO	CA	92407

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0266-761-10	2744 RITO CT	SAN BERNARDINO	CA	92407	REYES, ELIZABETH A	2744 RITO CT	SAN BERNARDINO	CA	92407
0266-761-11	2748 RITO CT	SAN BERNARDINO	CA	92407	GARCIA, ERICK Y	2748 RITO CT	SAN BERNARDINO	CA	92407
0266-761-28	5671 JUSTIN CT	SAN BERNARDINO	CA	92407	VAN GALDER, THOMAS C	5671 JUSTIN CT	SAN BERNARDINO	CA	92407
0266-761-29	5675 JUSTIN CT	SAN BERNARDINO	CA	92407	MARQUEZ, DIMAS DE HARRO	5675 JUSTIN CT	SAN BERNARDINO	CA	92407
0266-761-30	5679 JUSTIN CT	SAN BERNARDINO	CA	92407	BRIONES, BENJAMIN N	5679 JUSTIN CT	SAN BERNARDINO	CA	92407
0266-761-31	5683 JUSTIN CT	SAN BERNARDINO	CA	92407	HSU, SHAN CHENG	803 RIMROCK CIR	WALNUT	CA	91789
0266-761-32	5680 JUSTIN CT	SAN BERNARDINO	CA	92407	DORADO, RAYMOND	5680 JUSTIN CT	SAN BERNARDINO	CA	92407
0266-761-33	5676 JUSTIN CT	SAN BERNARDINO	CA	92407	MACEDO, ANTONIO	5450 STONEVIEW RD	RANCHO CUCAMONGA	CA	91739
0266-761-34	5672 JUSTIN CT	SAN BERNARDINO	CA	92407	MOHNEY, LINDA ANN	5672 JUSTIN CT	SAN BERNARDINO	CA	92407
0266-761-41	5680 AUTUMN ST	SAN BERNARDINO	CA	92407	FONSECA, SUZETTE M	5680 AUTUMN ST	SAN BERNARDINO	CA	92407
0266-761-42	5684 AUTUMN ST	SAN BERNARDINO	CA	92407	CARMAN, GARY WAYNE	5684 AUTUMN ST	SAN BERNARDINO	CA	92407
0266-761-43	5688 AUTUMN ST	SAN BERNARDINO	CA	92407	TOTZKE, MATTHEW	5688 AUTUMN ST	SAN BERNARDINO	CA	92407
0266-761-44	2690 SHERIDAN RD	SAN BERNARDINO	CA	92407	LOZANO, MOISES	2690 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-761-45	2694 SHERIDAN RD	SAN BERNARDINO	CA	92407	ROSE, DELLA SUE	2694 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-761-46	2698 SHERIDAN RD	SAN BERNARDINO	CA	92407	WOODY, DE D	2698 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-761-47	2704 SHERIDAN RD	SAN BERNARDINO	CA	92407	RON, JUAN P	2704 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-761-48	2708 SHERIDAN RD	SAN BERNARDINO	CA	92407	MILLER, RUS	2708 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-761-49	2712 SHERIDAN RD	SAN BERNARDINO	CA	92407	FOSTER, MARK D	2712 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-761-50	2707 SHERIDAN RD	SAN BERNARDINO	CA	92407	ZARATE, MARINO S	2707 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-761-51	2703 SHERIDAN RD	SAN BERNARDINO	CA	92407	TOMES, DEBORAH LYNN	2703 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-761-52	5681 AUTUMN ST	SAN BERNARDINO	CA	92407	SIKES, MARK P	5681 AUTUMN ST	SAN BERNARDINO	CA	92407
0266-771-14	2602 SHERIDAN RD	SAN BERNARDINO	CA	92407	ORTEGA, ANEL	2602 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-771-15	2606 SHERIDAN RD	SAN BERNARDINO	CA	92407	UHLIR, WAYNE A	2606 W SHERIDAN RD	SAN BERNARDINO	CA	92404
0266-771-16	2610 SHERIDAN RD	SAN BERNARDINO	CA	92407	LARSON, JEFF	PO BOX 90153	SAN BERNARDINO	CA	92427
0266-771-17	2614 SHERIDAN RD	SAN BERNARDINO	CA	92407	MARTINEZ, JESSE	2614 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-771-18	2618 SHERIDAN RD	SAN BERNARDINO	CA	92407	CAMPBELL, CARMEN ELENA	2618 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-771-19	2622 SHERIDAN RD	SAN BERNARDINO	CA	92407	WHALEN, EDWARD LEONARD	391 MESA VERDE PARK	BEAUMONT	CA	92223
0266-771-20	2626 SHERIDAN RD	SAN BERNARDINO	CA	92407	MUCHLER, JAMIE S	2626 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-771-21	2630 SHERIDAN RD	SAN BERNARDINO	CA	92407	WILLIAMS, EBONY	2630 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-771-22	2634 SHERIDAN RD	SAN BERNARDINO	CA	92407	GUERRERO, DAVID J	2634 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-771-23	2638 SHERIDAN RD	SAN BERNARDINO	CA	92407	ALLMAN, CECIL LAMAR	2638 SHERIDAN RD	SAN BERNARDINO	CA	92407

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0266-771-24	2642 SHERIDAN RD	SAN BERNARDINO	CA	92407	FLORES, LOUIE DEAN	2462 W SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-771-25	2646 SHERIDAN RD	SAN BERNARDINO	CA	92407	MOSER, DOUGLAS G	2646 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-771-26	5672 BAILEY CT	SAN BERNARDINO	CA	92407	LEWIS, TIMOTHY F	1627 DON CARLOS AVE	GLENDALE	CA	91208
0266-771-27	5668 BAILEY CT	SAN BERNARDINO	CA	92407	VANZANDT, JEFFREY	5668 BAILEY CT	SAN BERNARDINO	CA	92407
0266-771-28	5662 BAILEY CT	SAN BERNARDINO	CA	92407	IH2 PROPERTY WEST LP	291 CORPORATE TERRACE CIR	CORONA	CA	92879
0266-771-36	5667 BAILEY CT	SAN BERNARDINO	CA	92407	MICKEY, JOSEPH C	5667 BAILEY CT	SAN BERNARDINO	CA	92407
0266-771-37	2633 SHERIDAN RD	SAN BERNARDINO	CA	92407	LEVARIO, ALICE	2633 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-771-38	2629 SHERIDAN RD	SAN BERNARDINO	CA	92407	JUAREZ, MARIA Y	2629 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-771-39	2625 SHERIDAN RD	SAN BERNARDINO	CA	92407	WHITE, CHRISTOPHER	2625 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-771-40	2621 SHERIDAN RD	SAN BERNARDINO	CA	92407	SIA, REX FYCUECO	2621 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-771-41	2617 SHERIDAN RD	SAN BERNARDINO	CA	92407	KUHLMAN, JAMES B	6175 CEDAR HILL PL	RANCHO CUCAMONGA	CA	91739
0266-771-42	2613 SHERIDAN RD	SAN BERNARDINO	CA	92407	FOWLER, MELANIE J	2613 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-771-43	2609 SHERIDAN RD	SAN BERNARDINO	CA	92407	IACONO, JOHN J	2609 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-771-44	2605 SHERIDAN RD	SAN BERNARDINO	CA	92407	MOSQUEDA, SONIA	2605 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-771-45	2601 SHERIDAN RD	SAN BERNARDINO	CA	92407	GARCIA, ANTHONY	2601 SHERIDAN RD	SAN BERNARDINO	CA	92407
0266-781-01	5647 MASON DR	SAN BERNARDINO	CA	92407	TRAN, MIKE B	5647 MASON DR	SAN BERNARDINO	CA	92407
0266-781-02	5643 MASON DR	SAN BERNARDINO	CA	92407	BLAKENEY, STEPHEN C	5643 MASON DR	SAN BERNARDINO	CA	92407
0266-781-03	5639 MASON DR	SAN BERNARDINO	CA	92407	NUNEZ, OSCAR RAMIREZ	5639 MASON DR	SAN BERNARDINO	CA	92407
0266-781-04	5635 MASON DR	SAN BERNARDINO	CA	92407	NAULLS, DEOUNDRA	5635 MASON DR	SAN BERNARDINO	CA	92407
0266-821-01	1265 KENDALL DR APT 323	SAN BERNARDINO	CA	92407	DRPIC, MARCELA	6047 DENNY AVE	NORTH HOLLYWOOD	CA	91606
0266-821-02	1265 KENDALL DR APT 313	SAN BERNARDINO	CA	92407	CHENG, XIAOSONG	735 W DUARTE RD # 420	ARCADIA	CA	91007
0266-821-03	1265 KENDALL DR APT 322	SAN BERNARDINO	CA	92407	HODURA, VACLAV	19526 E CALORA ST	COVINA	CA	91724
0266-821-04	1265 KENDALL DR APT 312	SAN BERNARDINO	CA	92407	SILVA, GASTON	20065 AVENUE OF THE OAKS	NEWHALL	CA	91321
0266-821-05	1265 KENDALL DR APT 321	SAN BERNARDINO	CA	92407	PATEL, JAYSHRIBEN P	1265 KENDALL DR APT 321	SAN BERNARDINO	CA	92407
0266-821-06	1265 KENDALL DR APT 311	SAN BERNARDINO	CA	92407	SERA, VERONICA TENORIO	1265 KENDALL DR APT 311	SAN BERNARDINO	CA	92407
0266-821-07	1265 KENDALL DR APT 324	SAN BERNARDINO	CA	92407	JIAO, YAQIN	1265 KENDALL DR APT 324	SAN BERNARDINO	CA	92407
0266-821-08	1265 KENDALL DR APT 314	SAN BERNARDINO	CA	92407	LI, WEI	735 W DUARTE RD # 420	ARCADIA	CA	91007
0266-821-09	1265 KENDALL DR APT 425	SAN BERNARDINO	CA	92407	ROSEBURE, MEREDITH L	1265 KENDALL DR APT 425	SAN BERNARDINO	CA	92407
0266-821-10	1265 KENDALL DR APT 415	SAN BERNARDINO	CA	92407	MC KINNEY, ERNESTINE	12833 CARISSA CT	RANCHO CUCAMONGA	CA	91739

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0266-821-11	1265 KENDALL DR APT 424	SAN BERNARDINO	CA	92407	WHITE MAPPLE LLC	207 CHAMPION PL	ALHAMBRA	CA	91801
0266-821-12	1265 KENDALL DR APT 414	SAN BERNARDINO	CA	92407	HUANG, HENRY	21055 CANTEL PL	WALNUT	CA	91789
0266-821-13	1265 KENDALL DR APT 423	SAN BERNARDINO	CA	92407	CASTRO, ADAM	1265 KENDALL DR APT 423	SAN BERNARDINO	CA	92407
0266-821-14	1265 KENDALL DR APT 413	SAN BERNARDINO	CA	92407	MOUSSA, NAZIM MOUSSA	1265 KENDALL DR APT 413	SAN BERNARDINO	CA	92407
0266-821-15	1265 KENDALL DR APT 422	SAN BERNARDINO	CA	92407	WALKER, THOMAS	1140 SANO CT	ARCADIA	CA	91007
0266-821-16	1265 KENDALL DR APT 412	SAN BERNARDINO	CA	92407	CADENAS, HERMINIA G	517 FREMONT AVE	SOUTH PASADENA	CA	91030
0266-821-17	1265 KENDALL DR APT 421	SAN BERNARDINO	CA	92407	LECHUGA, JESUS PEREZ	4368 DON DIEGO ST	SAN BERNARDINO	CA	92407
0266-821-18	1265 KENDALL DR APT 411	SAN BERNARDINO	CA	92407	CHENNE CORPORATION	1130 FALLEN LEAF RD	ARCADIA	CA	91006
0266-821-19	1265 KENDALL DR APT 426	SAN BERNARDINO	CA	92407	MOUSSA, NAZIM MOUSSA	1265 KENDALL DR APT 426	SAN BERNARDINO	CA	92407
0266-821-20	1265 KENDALL DR APT 416	SAN BERNARDINO	CA	92407	WHITE, KATHLEEN M	1265 KENDALL DR APT 416	SAN BERNARDINO	CA	92407
0266-821-21	1265 KENDALL DR APT 525	SAN BERNARDINO	CA	92407	ADAIR, LISA GAYLE	1265 KENDALL DR APT 525	SAN BERNARDINO	CA	92407
0266-821-22	1265 KENDALL DR APT 515	SAN BERNARDINO	CA	92407	THE A & P FAMILY TRUST	13369 REDWOOD DR	RANCHO CUCAMONGA	CA	91739
0266-821-23	1265 KENDALL DR APT 524	SAN BERNARDINO	CA	92407	WU, KENNY	463 S OAKLAND AVE APT 10	PASADENA	CA	91101
0266-821-24	1265 KENDALL DR APT 514	SAN BERNARDINO	CA	92407	WU, KENNY	1885 WARWICK RD	SAN MARINO	CA	91108
0266-821-25	1265 KENDALL DR APT 523	SAN BERNARDINO	CA	92407	CASTANEDA, CONSESA	24646 ORMISTA DR	MORENO VALLEY	CA	92553
0266-821-26	1265 KENDALL DR APT 513	SAN BERNARDINO	CA	92407	CASA HERMOSA LLC	1265 KENDALL DR APT 513	SAN BERNARDINO	CA	92407
0266-821-27	1265 KENDALL DR APT 522	SAN BERNARDINO	CA	92407	KARRIGAN, DONNA J	1265 KENDALL DR APT 522	SAN BERNARDINO	CA	92407
0266-821-28	1265 KENDALL DR APT 512	SAN BERNARDINO	CA	92407	CASA HERMOSA LLC	2980 N BEVERLY GLEN CIR STE 300	LOS ANGELES	CA	90077
0266-821-29	1265 KENDALL DR APT 521	SAN BERNARDINO	CA	92407	SILVA, GASTON	15522 VANOWEN ST APT 214	VAN NUYS	CA	91406
0266-821-30	1265 KENDALL DR APT 511	SAN BERNARDINO	CA	92407	SUN, YINGLI	20117 RHAPSODY RD	WALNUT	CA	91789
0266-821-31	1265 KENDALL DR APT 422	SAN BERNARDINO	CA	92407	ZHOU, PEI GUANG	3720 MAINE AVE	BALDWIN PARK	CA	91706
0266-821-32	1265 KENDALL DR APT 516	SAN BERNARDINO	CA	92407	MOJICA, CLEMENTE ARTURO	1265 KENDALL DR APT 516	SAN BERNARDINO	CA	92407
0266-821-33	1265 KENDALL DR APT 126	SAN BERNARDINO	CA	92407	THOMAS, JAMES E	1265 KENDALL DR APT 126	SAN BERNARDINO	CA	92407
0266-821-34	1265 KENDALL DR APT 116	SAN BERNARDINO	CA	92407	RODGERS, GENEVA	1265 KENDALL DR APT 116	SAN BERNARDINO	CA	92407
0266-821-35	1265 KENDALL DR APT 125	SAN BERNARDINO	CA	92407	ZHANG, CONGYING	735 W DUARTE RD # 420	ARCADIA	CA	91007
0266-821-36	1265 KENDALL DR APT 115	SAN BERNARDINO	CA	92407	CHING, GREGORY P	6565 N JORDAN LN	SAN BERNARDINO	CA	92407
0266-821-37	1265 KENDALL DR APT 124	SAN BERNARDINO	CA	92407	CASE, RYAN	3103 OAKHURST AVE	LOS ANGELES	CA	90034
0266-821-38	1265 KENDALL DR APT 114	SAN BERNARDINO	CA	92407	ACOSTA, GLORIA MARINA	1265 KENDALL DR APT 114	SAN BERNARDINO	CA	92407
0266-821-39	1265 KENDALL DR APT 123	SAN BERNARDINO	CA	92407	PARQUE, JIN SUN	302 2ND ST # 103	BROOKLYN	NY	11215
0266-821-40	1265 KENDALL DR APT 113	SAN BERNARDINO	CA	92407	HAGEMAN, JOANN MARY	15363 BRANT DR	FONTANA	CA	92336

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0266-821-41	1265 KENDALL DR APT 122	SAN BERNARDINO	CA	92407	CASA HERMOSA LLC	2980 N BEVERLY GLEN CIR STE 300	LOS ANGELES	CA	90077
0266-821-42	1265 KENDALL DR APT 112	SAN BERNARDINO	CA	92407	CAPITAL FORESIGHT	5900 CANOGA AVE STE 200	WOODLAND HILLS	CA	91367
0266-821-43	1265 KENDALL DR APT 121	SAN BERNARDINO	CA	92407	EINI, FARROKH	1265 KENDALL DR APT 121	SAN BERNARDINO	CA	92407
0266-821-44	1265 KENDALL DR APT 111	SAN BERNARDINO	CA	92407	JOHNSON, STEVEN L	2914 CHERRY WAY	ONTARIO	CA	91761
0266-821-45	1265 KENDALL DR APT 223	SAN BERNARDINO	CA	92407	DON INVESTMENTS INC	739 E CEDAR ST	ONTARIO	CA	91761
0266-821-46	1265 KENDALL DR APT 213	SAN BERNARDINO	CA	92407	ZHANG, DONGNING	3355 EDWARDS AVE	EL MONTE	CA	91733
0266-821-47	1265 KENDALL DR APT 222	SAN BERNARDINO	CA	92407	HE, XIAO	735 W DUARTE RD # 420	ARCADIA	CA	91007
0266-821-48	1265 KENDALL DR APT 212	SAN BERNARDINO	CA	92407	ABBA LIVING TRUST	490 N CIVIC DR APT 205	WALNUT CREEK	CA	94596
0266-821-49	1265 KENDALL DR APT 221	SAN BERNARDINO	CA	92407	SMITH, SUSAN K	1376 CABLE CANYON RD	SAN BERNARDINO	CA	92407
0266-821-50	1265 KENDALL DR APT 211	SAN BERNARDINO	CA	92407	RAILEY, CATHY N	13801 S WILKIE AVE	GARDENA	CA	90249
0266-821-51	1265 KENDALL DR APT 224	SAN BERNARDINO	CA	92407	AL ZAKI, SHAKER	1265 KENDALL DR APT 224	SAN BERNARDINO	CA	92407
0266-821-52	1265 KENDALL DR APT 214	SAN BERNARDINO	CA	92407	WILLIAMS, SHONDA	1265 KENDALL DR APT 214	SAN BERNARDINO	CA	92407
0266-821-53	1265 KENDALL DR APT 6025	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-54	1265 KENDALL DR APT 6015	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-55	1265 KENDALL DR APT 6024	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-56	1265 KENDALL DR APT 6014	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-57	1265 KENDALL DR APT 6023	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-58	1265 KENDALL DR APT 6013	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-59	1265 KENDALL DR APT 6022	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-60	1265 KENDALL DR APT 6012	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-61	1265 KENDALL DR APT 6021	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-62	1265 KENDALL DR APT 6011	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-63	1265 KENDALL DR APT	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
	6026								
0266-821-64	1265 KENDALL DR APT 6016	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-65	1265 KENDALL DR APT 6125	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-66	1265 KENDALL DR APT 6115	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-67	1265 KENDALL DR APT 6124	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-68	1265 KENDALL DR APT 6114	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-69	1265 KENDALL DR APT 6123	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-70	1265 KENDALL DR APT 6113	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-71	1265 KENDALL DR APT 6122	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-72	1265 KENDALL DR APT 6112	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-73	1265 KENDALL DR APT 6121	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-74	1265 KENDALL DR APT 6111	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-75	1265 KENDALL DR APT 6126	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-76	1265 KENDALL DR APT 6116	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-77	1265 KENDALL DR APT 6224	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-78	1265 KENDALL DR APT 6214	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-79	1265 KENDALL DR APT 6223	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-80	1265 KENDALL DR APT 6213	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0266-821-81	1265 KENDALL DR APT 6222	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-82	1265 KENDALL DR APT 6212	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-83	1265 KENDALL DR APT 6221	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-84	1265 KENDALL DR APT 6211	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-85	1265 KENDALL DR APT 6226	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-86	1265 KENDALL DR APT 6216	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-87	1265 KENDALL DR APT 6225	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-821-88	1265 KENDALL DR APT 6215	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-822-01	1265 KENDALL DR APT 621	SAN BERNARDINO	CA	92407	CASA HERMOSA LLC	2980 N BEVERLY GLEN CIR STE 300	LOS ANGELES	CA	90077
0266-822-02	1265 KENDALL DR APT 611	SAN BERNARDINO	CA	92407	DIOURI, MOHCINE	PO BOX 81075	RSM	CA	92688
0266-822-03	1265 KENDALL DR APT 626	SAN BERNARDINO	CA	92407	OLGUIN, SHANE A	28170 MAPES RD	ROMOLAND	CA	92585
0266-822-04	1265 KENDALL DR APT 616	SAN BERNARDINO	CA	92407	FEDERAL NATIONAL MORTGAGE ASSOCIATION	1800 TAPO CANYON RD	SIMI VALLEY	CA	93063
0266-822-06	1265 KENDALL DR APT 615	SAN BERNARDINO	CA	92407	TODD, MICHAEL	1265 KENDALL DR APT 615	SAN BERNARDINO	CA	92407
0266-822-12	1265 KENDALL DR APT 612	SAN BERNARDINO	CA	92407	MOUSSA, NAZIM	1265 KENDALL DR APT 612	SAN BERNARDINO	CA	92407
0266-822-13	1265 KENDALL DR APT 722	SAN BERNARDINO	CA	92407	HAGEMAN, JOANN MARY	15363 BRANT DR	FONTANA	CA	92336
0266-822-14	1265 KENDALL DR APT 712	SAN BERNARDINO	CA	92407	GROSS, DANIEL J	13071 VISTA ST	RANCHO CUCAMONGA	CA	91739
0266-822-15	1265 KENDALL DR APT 721	SAN BERNARDINO	CA	92407	DARNELL, ANNAMARIE R	1265 KENDALL DR APT 721	SAN BERNARDINO	CA	92407
0266-822-16	1265 KENDALL DR APT 711	SAN BERNARDINO	CA	92407	CASTILLO-PEREZ, ISAAC	1265 KENDALL DR APT 711	SAN BERNARDINO	CA	92407
0266-822-17	1265 KENDALL DR APT 724	SAN BERNARDINO	CA	92407	JI, WENHAI	7127 MYRTLE PL	FONTANA	CA	92336
0266-822-18	1265 KENDALL DR APT 714	SAN BERNARDINO	CA	92407	CARDIFF INVESTMENT GROUP LLC	1265 KENDALL DR APT 714	SAN BERNARDINO	CA	92407
0266-822-19	1265 KENDALL DR APT 723	SAN BERNARDINO	CA	92407	KU, SAMANTHA CHUIZHAN	31498 SHADOW RIDGE DR	MENIFEE	CA	92584
0266-822-20	1265 KENDALL DR APT 713	SAN BERNARDINO	CA	92407	MULJANA, LANNY	349 REBECCA DR	SAN DIMAS	CA	91773
0266-822-22	1265 KENDALL DR APT 814	SAN BERNARDINO	CA	92407	TRAINON INVESTMENT LLC	PO BOX 661682	ARCADIA	CA	91066
0266-822-23	1265 KENDALL DR APT 823	SAN BERNARDINO	CA	92407	WU, KENNY	1885 WARWICK RD	SAN MARINO	CA	91108

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0266-822-24	1265 KENDALL DR APT 813	SAN BERNARDINO	CA	92407	CASA HERMOSA LLC	2980 N BEVERLY GLEN CIR STE 300	LOS ANGELES	CA	90077
0266-822-25	1265 KENDALL DR APT 822	SAN BERNARDINO	CA	92407	K M INVESTMENT GROUP	3344 AMY DR	CORONA	CA	92882
0266-822-26	1265 KENDALL DR APT 812	SAN BERNARDINO	CA	92407	SAMUDIO, NANCY	1265 KENDALL DR APT 812	SAN BERNARDINO	CA	92407
0266-822-27	1265 KENDALL DR APT 821	SAN BERNARDINO	CA	92407	NEUMANN, JOSEPH	1265 KENDALL DR APT 1324	SAN BERNARDINO	CA	92407
0266-822-28	1265 KENDALL DR APT 811	SAN BERNARDINO	CA	92407	KM INVESTMENT GROUP	3344 AMY DR	CORONA	CA	92882
0266-822-29	1265 KENDALL DR APT 826	SAN BERNARDINO	CA	92407	WU, KENNY	1885 WARWICK RD	SAN MARINO	CA	91108
0266-822-30	1265 KENDALL DR APT 816	SAN BERNARDINO	CA	92407	CASA HERMOSA LLC	2980 N BEVERLY GLEN CIR STE 300	LOS ANGELES	CA	90077
0266-822-34	1265 KENDALL DR APT 1515	SAN BERNARDINO	CA	92407	CHENNE CORPORATION	735 W DUARTE RD STE 305	ARCADIA	CA	91007
0266-822-61	1265 KENDALL DR APT 425	SAN BERNARDINO	CA	92407	RODRIQUEZ, ABRIL H	1265 KENDALL DR APT 1022	SAN BERNARDINO	CA	92407
0266-822-62	1265 KENDALL DR APT 1012	SAN BERNARDINO	CA	92407	KHOURY, ZIAD S	PO BOX 9892	SAN BERNARDINO	CA	92427
0266-822-63	1265 KENDALL DR APT 1021	SAN BERNARDINO	CA	92407	LEE, KYUNG JA	1265 KENDALL DR APT 1021	SAN BERNARDINO	CA	92407
0266-822-64	1265 KENDALL DR APT 1011	SAN BERNARDINO	CA	92407	ESCUTIN JR, RODOLFO ONG	1451 PATRICIA DR	REDLANDS	CA	92373
0266-822-65	1265 KENDALL DR APT 1026	SAN BERNARDINO	CA	92407	LI, WEI	735 W DUARTE RD # 420	ARCADIA	CA	91007
0266-822-66	1265 KENDALL DR APT 1016	SAN BERNARDINO	CA	92407	CASA HERMOSA LLC	2980 N BEVERLY GLEN CIR STE 300	LOS ANGELES	CA	90077
0266-822-68	1265 KENDALL DR APT 1015	SAN BERNARDINO	CA	92407	CHAMBERLAIN, DEBORAH S	1265 KENDALL DR APT 1015	SAN BERNARDINO	CA	92407
0266-824-01	1265 KENDALL DR APT 2624	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-824-02	1265 KENDALL DR APT 2614	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-824-03	1265 KENDALL DR APT 2623	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-824-04	1265 KENDALL DR APT 2613	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-824-05	1265 KENDALL DR APT 2622	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-824-06	1265 KENDALL DR APT	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
	2612								
0266-824-07	1265 KENDALL DR APT 2621	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-824-08	1265 KENDALL DR APT 2611	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-824-09	1265 KENDALL DR APT 2626	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-824-11	1265 KENDALL DR APT 2625	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-824-12	1265 KENDALL DR APT 2615	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-824-13	1265 KENDALL DR APT 2723	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-824-14	1265 KENDALL DR APT 2713	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-824-15	1265 KENDALL DR APT 2722	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-824-16	1265 KENDALL DR APT 2712	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-824-17	1265 KENDALL DR APT 2721	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-824-18	1265 KENDALL DR APT 2711	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-824-19	1265 KENDALL DR APT 2726	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-824-20	1265 KENDALL DR APT 2716	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-824-21	1265 KENDALL DR APT 2725	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-824-22	1265 KENDALL DR APT 2715	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-824-23	1265 KENDALL DR APT 2724	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-824-24	1265 KENDALL DR APT 2714	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0266-824-84	1265 KENDALL DR APT 2513	SAN BERNARDINO	CA	92407	CASA HERMOSA LLC	2980 N BEVERLY GLEN CIR STE 300	LOS ANGELES	CA	90077
0266-831-01	1265 KENDALL DR APT 5825	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-02	1265 KENDALL DR APT 5815	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-03	1265 KENDALL DR APT 5824	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-04	1265 KENDALL DR APT 5814	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-05	1265 KENDALL DR APT 5823	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-06	1265 KENDALL DR APT 5813	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-07	1265 KENDALL DR APT 5822	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-08	1265 KENDALL DR APT 5812	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-09	1265 KENDALL DR APT 5821	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-10	1265 KENDALL DR APT 5811	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-11	1265 KENDALL DR APT 5826	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-12	1265 KENDALL DR APT 5816	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-13	1265 KENDALL DR APT 5925	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-14	1265 KENDALL DR APT 5912	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-15	1265 KENDALL DR APT 5924	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-16	1265 KENDALL DR APT 5914	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-17	1265 KENDALL DR APT	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
	5923								
0266-831-18	1265 KENDALL DR APT 5913	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-19	1265 KENDALL DR APT 5922	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-20	1265 KENDALL DR APT 5912	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-21	1265 KENDALL DR APT 5921	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-22	1265 KENDALL DR APT 5911	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-23	1265 KENDALL DR APT 5926	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-24	1265 KENDALL DR APT 5916	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-25	1265 KENDALL DR APT 5626	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-26	1265 KENDALL DR APT 5616	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-27	1265 KENDALL DR APT 5625	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-28	1265 KENDALL DR APT 5615	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-29	1265 KENDALL DR APT 5624	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-30	1265 KENDALL DR APT 5614	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-31	1265 KENDALL DR APT 5623	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-32	1265 KENDALL DR APT 5613	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-33	1265 KENDALL DR APT 5622	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-34	1265 KENDALL DR APT 5612	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0266-831-35	1265 KENDALL DR APT 5621	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-36	1265 KENDALL DR APT 5611	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-37	1265 KENDALL DR APT 5725	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-38	1265 KENDALL DR APT 5715	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-39	1265 KENDALL DR APT 5724	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-40	1265 KENDALL DR APT 5714	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-41	1265 KENDALL DR APT 5723	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-42	1265 KENDALL DR APT 5713	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-43	1265 KENDALL DR APT 5722	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-44	1265 KENDALL DR APT 5712	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-45	1265 KENDALL DR APT 5721	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-46	1265 KENDALL DR APT 5711	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-47	1265 KENDALL DR APT 5726	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-831-48	1265 KENDALL DR APT 5716	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-13	1265 KENDALL DR APT 5323	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-14	1265 KENDALL DR APT 5313	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-15	1265 KENDALL DR APT 5322	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0266-832-16	1265 KENDALL DR APT 5312	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-17	1265 KENDALL DR APT 5321	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-18	1265 KENDALL DR APT 5311	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-19	1265 KENDALL DR APT 5324	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-20	1265 KENDALL DR APT 5314	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-21	1265 KENDALL DR APT 5422	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-22	1265 KENDALL DR APT 5412	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-23	1265 KENDALL DR APT 5421	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-24	1265 KENDALL DR APT 5411	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-25	1265 KENDALL DR APT 5426	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-26	1265 KENDALL DR APT 5416	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-27	1265 KENDALL DR APT 5425	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-28	1265 KENDALL DR APT 5415	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-29	1265 KENDALL DR APT 5424	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-30	1265 KENDALL DR APT 5414	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-31	1265 KENDALL DR APT 5423	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-32	1265 KENDALL DR APT 5413	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-33	1265 KENDALL DR APT	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
	4422								
0266-832-34	1265 KENDALL DR APT 4412	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-35	1265 KENDALL DR APT 4421	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-36	1265 KENDALL DR APT 4411	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-37	1265 KENDALL DR APT 4424	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-38	1265 KENDALL DR APT 4414	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-39	1265 KENDALL DR APT 4423	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0266-832-40	1265 KENDALL DR APT 4413	SAN BERNARDINO	CA	92407	LIDO CONDOMINIUMS LLC	378 TORREY PINES DR	ARCADIA	CA	91006
0271-011-11	550 W 40TH ST	SAN BERNARDINO	CA	92407	LUPOID LLC	PO BOX 561	CALIMESA	CA	92320
0271-011-17	4017 N 1ST AVE	SAN BERNARDINO	CA	92407	CASTLEBERRY, ELI B	4017 N 1ST AVE	SAN BERNARDINO	CA	92407
0271-011-18	4021 N 1ST AVE	SAN BERNARDINO	CA	92407	HERNANDEZ, CAROLINA	141 LUPIN LN	SAN BERNARDINO	CA	92407
0271-011-19	4025 N 1ST AVE	SAN BERNARDINO	CA	92407	SUMAYA, GILBERTO	4025 N 1ST AVE	SAN BERNARDINO	CA	92407
0271-011-22	4029 N 1ST AVE	SAN BERNARDINO	CA	92407	ORTEGA, NANCY	4029 N 1ST AVE	SAN BERNARDINO	CA	92407
0271-011-46	584 W 40TH ST	SAN BERNARDINO	CA	92407	INTERNATIONAL CHURCH FOURSQUARE GOSP	PO BOX 2692	LOS ANGELES	CA	90078
0271-021-01	460 W 40TH ST	SAN BERNARDINO	CA	92407	REID-BINKS, CLAIRE EVELYN	8275 SIERRA AVE STE 104	FONTANA	CA	92335
0271-021-02	474 W 40TH ST	SAN BERNARDINO	CA	92407	BAKER, RODNEY YORK	25552 NILES ST	SAN BERNARDINO	CA	92404
0271-021-03	484 W 40TH ST	SAN BERNARDINO	CA	92407	CAMBEROS, ERNESTO MANUEL AYON	484 W 40TH ST	SAN BERNARDINO	CA	92407
0271-021-04	494 W 40TH ST	SAN BERNARDINO	CA	92407	FARIAS, MARIA A	494 W 40TH ST	SAN BERNARDINO	CA	92407
0271-021-05	4021 JOHNSON ST	SAN BERNARDINO	CA	92407	RUSSELL, FRED	4021 JOHNSON ST	SAN BERNARDINO	CA	92407
0271-021-06	4020 ACRE LN	SAN BERNARDINO	CA	92407	WARREN, NORMAN DON	PO BOX 5021	BLUE JAY	CA	92317
0271-021-07	4024 ACRE LN	SAN BERNARDINO	CA	92407	HAENSLY, ERIC	4024 ACRE LN	SAN BERNARDINO	CA	92407
0271-021-28	4023 JOHNSON ST	SAN BERNARDINO	CA	92407	MOTA, JOSE	4023 JOHNSON ST	SAN BERNARDINO	CA	92407
0271-022-04	4014 NEWMARK AVE	SAN BERNARDINO	CA	92407	VILLEGAS, ALBERT JR	4014 NEWMARK AVE	SAN BERNARDINO	CA	92407
0271-022-05	4025 ACRE LN	SAN BERNARDINO	CA	92407	SHAY, ROBERT L	163 E 39TH ST	SAN BERNARDINO	CA	92404
0271-031-03		SAN BERNARDINO	CA	92407	COMMUNITY BIBLE CHURCH	324 W 40TH ST	SAN BERNARDINO	CA	92407
0271-031-61	4038 LORRAINE DR	SAN BERNARDINO	CA	92407	YIP, KAPUI	PO BOX 660514	ARCADIA	CA	91066

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0271-031-64	4038 LORRAINE DR	SAN BERNARDINO	CA	92407	YIP, KAPUI	PO BOX 660514	ARCADIA	CA	91066
0271-041-07	373 W 40TH ST	SAN BERNARDINO	CA	92407	KADDOUR, FAWAZ	3559 BELVEDERE CIR	CORONA	CA	92882
0271-042-13	40TH ST	SAN BERNARDINO	CA	92407	ABBASSI, JADAN	1618 MAIN AVE	CLIFTON	NJ	7011
0271-051-11	339 W 40TH ST	SAN BERNARDINO	CA	92407	HENLEY, BRYAN	337 W 40TH ST	SAN BERNARDINO	CA	92407
0271-051-12	337 W 40 ST	SAN BERNARDINO	CA	92407	HENLEY, BRYAN	21155 FELIPA RD	YORBA LINDA	CA	92887
0271-052-11	325 W 40TH ST	SAN BERNARDINO	CA	92407	EL-AAWAR SHAB TRUST	3998 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92405
0271-052-12	321 W 40TH ST	SAN BERNARDINO	CA	92407	EL-AAWAR SHAB TRUST	3998 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92405
0271-052-13	301 W 40TH ST	SAN BERNARDINO	CA	92407	EL AAWAR SHAB TRUST	3998 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92405
0271-052-27	335 W 40TH ST	SAN BERNARDINO	CA	92407	GONZALEZ, JESUS ROJAS	335 W 40TH ST	SAN BERNARDINO	CA	92407
0271-052-29	331 W 40TH ST	SAN BERNARDINO	CA	92407	FRUCIANO, MARK A	579 E RALSTON AVE	SAN BERNARDINO	CA	92404
0271-061-01	261 W 40TH ST	SAN BERNARDINO	CA	92407	EL-AAWAR CHEHAB H TR	3998 N MOUNTAIN VIEW AVE	SAN BERNARDINO	CA	92405
0279-141-58	2501 W 3RD AVE	SAN BERNARDINO	CA	92407	PIZZA PLUS PROPERTIES INC	330 6TH ST STE 103	REDLANDS	CA	92374
0348-131-03	1900 REX COLE RD	SAN BERNARDINO	CA	92407	CALIFORNIA STATE	1900 REX COLE RD	SAN BERNARDINO	CA	92407
0348-131-06	1910 REX COLE RD	SAN BERNARDINO	CA	92407	BATHURST, DENNIS E	1910 REX COLE RD	SAN BERNARDINO	CA	92407
0348-131-07	CAJON BLVD	DEVORE	CA	92407	OLIVIER, HENRY	2989 SPLIT MOUNTAIN LN	SAN BERNARDINO	CA	92407
0348-132-01	18572 CAJON BLVD	SAN BERNARDINO	CA	92407	JONES, RUTH H	PO BOX 9704	FORT MOHAVE	AZ	86427
0348-132-02	18572 CAJON BLVD	SAN BERNARDINO	CA	92407	STATE OF CALIFORNIA	464 W 4TH ST # 6TH	SAN BERNARDINO	CA	92401
0348-132-03	18570 CAJON BLVD	SAN BERNARDINO	CA	92407	STATE OF CALIFORNIA	464 W 4TH ST # 6TH	SAN BERNARDINO	CA	92401
0348-132-04	18590 CAJON BLVD	SAN BERNARDINO	CA	92407	ECKROTE, LARRY	18748 DEERCREST ESTATES PL	DEVORE	CA	92407
0348-132-05	18592 CAJON BLVD	SAN BERNARDINO	CA	92407	GRANGE, JEFFERY TODD	18592 CAJON BLVD	SAN BERNARDINO	CA	92407
0348-132-06	18620 CAJON BLVD	SAN BERNARDINO	CA	92407	STATE OF CALIFORNIA	464 W 4TH ST # 6TH	SAN BERNARDINO	CA	92401
0348-132-07	18622 CAJON BLVD	SAN BERNARDINO	CA	92407	CHRISTIANSEN JR, GEORGE H	18622 CAJON BLVD	SAN BERNARDINO	CA	92407
0348-132-08	18632 CAJON BLVD	SAN BERNARDINO	CA	92407	STATE OF CALIFORNIA	464 W 4TH ST # 6TH	SAN BERNARDINO	CA	92401
0348-132-09	18642 CAJON BLVD	SAN BERNARDINO	CA	92407	LEE, SEAN S	8150 CABLE CANYON RD	SAN BERNARDINO	CA	92407
0348-132-12	18672 CAJON BLVD	SAN BERNARDINO	CA	92407	STATE OF CALIFORNIA	464 W 4TH ST # 6TH	SAN BERNARDINO	CA	92401
0348-132-13	18686 CAJON BLVD	SAN BERNARDINO	CA	92407	OHOWELL, BETTY M	18686 CAJON BLVD	SAN BERNARDINO	CA	92407
0348-132-14	18700 CAJON BLVD	SAN BERNARDINO	CA	92407	LIBERTY BELL DEVELOPMENT LLC	1033 KIMBARK AVE	SAN BERNARDINO	CA	92407
0348-132-16	18720 CAJON BLVD	SAN BERNARDINO	CA	92407	STATE OF CALIFORNIA	464 W 4TH ST # 6TH	SAN BERNARDINO	CA	92401
0348-132-17	18730 CAJON BLVD	SAN BERNARDINO	CA	92407	STATE OF CALIFORNIA	464 W 4TH ST # 6TH	SAN BERNARDINO	CA	92401
0348-132-18	18864 CAJON BLVD	SAN BERNARDINO	CA	92407	STATE OF CALIFORNIA	464 W 4TH ST	SAN BERNARDINO	CA	92401
0348-132-19	18754 CAJON BLVD	SAN BERNARDINO	CA	92407	STATE OF CALIFORNIA	464 W 4TH ST # 6TH	SAN BERNARDINO	CA	92401

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0348-132-20	18764 CAJON BLVD	SAN BERNARDINO	CA	92407	HUNTER, LAWRENCE	18764 CAJON BLVD	SAN BERNARDINO	CA	92407
0348-132-21	18774 CAJON BLVD	SAN BERNARDINO	CA	92407	GROGAN, ELISABETH W	18774 CAJON BLVD	SAN BERNARDINO	CA	92407
0348-132-22	18788 CAJON BLVD	SAN BERNARDINO	CA	92407	FOX, CHARLES D	18788 CAJON BLVD	SAN BERNARDINO	CA	92407
0348-132-23	18824 CAJON BLVD	SAN BERNARDINO	CA	92407	DODD, LAWRENCE ALBERT	18824 CAJON BLVD	SAN BERNARDINO	CA	92407
0348-132-24	18826 CAJON BLVD	SAN BERNARDINO	CA	92407	ROSIER, WILLIAM RAYMOND	18826 CAJON BLVD	SAN BERNARDINO	CA	92407
0348-132-25		SAN BERNARDINO	CA	92407	ROSIER, WILLIAM R	24311 CANYON LAKE DR N APT 15	CANYON LAKE	CA	92587
0348-132-28	18710 CAJON BLVD	SAN BERNARDINO	CA	92407	FEDERAL NATIONAL MORTGAGE ASSOCIATION	PO BOX 650043	DALLAS	TX	75265
0348-132-29	18654 CAJON BLVD	SAN BERNARDINO	CA	92407	STATE OF CALIFORNIA	464 W 4TH ST # 6TH	SAN BERNARDINO	CA	92401
0348-141-01	18828 CAJON BLVD	SAN BERNARDINO	CA	92407	STATE OF CALIFORNIA	2280 MARKET ST STE 200	RIVERSIDE	CA	92501
0348-141-02		SAN BERNARDINO	CA	92407	STATE OF CALIFORNIA	2280 MARKET ST STE 200	RIVERSIDE	CA	92501
0348-141-03	18850 CAJON BLVD	SAN BERNARDINO	CA	92407	STATE OF CALIFORNIA	2280 MARKET ST STE 200	RIVERSIDE	CA	92501
0348-141-04	18858 CAJON BLVD	SAN BERNARDINO	CA	92407	DAMRON, JAMES E	415 DILLSON RD	SAN BERNARDINO	CA	92404
0348-141-05	CAJON BLVD	SAN BERNARDINO	CA	92407	DAMRON, JAMES E	1415 DILLSON RD	SAN BERNARDINO	CA	92404
0348-141-06	18900 CAJON BLVD	SAN BERNARDINO	CA	92407	GWIN, TOM	18900 CAJON BLVD	SAN BERNARDINO	CA	92407
0348-141-08	18904 CAJON BLVD	SAN BERNARDINO	CA	92407	SANCHEZ, GREGORIO	11329 SMITH RD	PHELAN	CA	92371
0348-141-09	18918 CAJON BLVD	SAN BERNARDINO	CA	92407	GARCILAZO, ANTONIA	18918 CAJON BLVD	SAN BERNARDINO	CA	92407
0348-141-10	18928 CAJON BLVD	SAN BERNARDINO	CA	92407	STATE OF CALIFORNIA	464 W 4TH ST # 6TH	SAN BERNARDINO	CA	92401
0348-141-11	18938 CAJON BLVD	SAN BERNARDINO	CA	92407	WAHAB ENTERTAINMENT	8432 CRIMSON CIR	HUNTINGTON BEACH	CA	92646
0348-141-13	18960 CAJON BLVD	SAN BERNARDINO	CA	92407	GREENWOOD, TRACIE A	18960 CAJON BLVD	SAN BERNARDINO	CA	92407
0348-141-14	18970 CAJON BLVD	SAN BERNARDINO	CA	92407	STATE OF CALIFORNIA	464 W 4TH ST # 6TH	SAN BERNARDINO	CA	92401
0348-141-15	18980 CAJON BLVD	SAN BERNARDINO	CA	92407	PROCH, SHIRLEY ANN	18980 CAJON BLVD	SAN BERNARDINO	CA	92407
0348-141-20	18910 CAJON BLVD	SAN BERNARDINO	CA	92407	BIRD, ROBERT W	18910 CAJON BLVD	SAN BERNARDINO	CA	92407
0348-141-21	18950 CAJON BLVD	SAN BERNARDINO	CA	92407	GAMBOA, IGNACIO	18950 CAJON BLVD	DEVORE HEIGHTS	CA	92407
0348-141-23	18985 CAJON BLVD	SAN BERNARDINO	CA	92407	LEONHARDT, DENISE M	29590 SANTA ANA CANYON RD	HIGHLAND	CA	92346
0348-141-24	18999 CAJON BLVD	SAN BERNARDINO	CA	92407	LEONHARDT, DENISE M	18999 CAJON BLVD	SAN BERNARDINO	CA	92407
0348-142-04	19050 CAJON BLVD	SAN BERNARDINO	CA	92407	KIM, YOUNG	4028 US HIGHWAY 138	PHELAN	CA	92371
0348-142-06	19084 CAJON BLVD	SAN BERNARDINO	CA	92407	BUNSE, RONNIE L	867 WOODLAWN AVE	DEVORE HEIGHTS	CA	92407
0348-142-07		SAN BERNARDINO	CA	92407	CACKA, FRANK JR	19110 CAJON BLVD	SAN BERNARDINO	CA	92407
0348-142-08	19110 CAJON BLVD	SAN BERNARDINO	CA	92407	CACKA, FRANK JR	19110 CAJON BLVD	SAN BERNARDINO	CA	92407
0348-142-11	19060 CAJON BLVD	SAN BERNARDINO	CA	92407	KIM, YOUNG	4028 US HIGHWAY 138	PHELAN	CA	92371

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0348-142-15		SAN BERNARDINO	CA	92407	CACKA, FRANK JR	19110 CAJON BLVD	SAN BERNARDINO	CA	92407
0348-142-18	19042 CAJON BLVD	SAN BERNARDINO	CA	92407	BREMER FAMILY TRUST	12183 DUNLAP PL	CHINO	CA	91710
0348-142-19		SAN BERNARDINO	CA	92407	BREMER FAMILY TRUST	12183 DUNLAP PL	CHINO	CA	91710
0348-142-20	19022 CAJON BLVD	SAN BERNARDINO	CA	92407	CARGILL, SUSAN W	18632 CAJON BLVD	SAN BERNARDINO	CA	92407
0348-142-21	19180 CAJON BLVD	SAN BERNARDINO	CA	92407	KANAYAN, WILLIAM	PO BOX 643	RIMFOREST	CA	92378
0348-151-25	7250 CAJON BLVD	SAN BERNARDINO	CA	92407	LIT INDUSTRIAL LIMITED PARTNERSHIP	2650 CEDAR SPRINGS RD STE 850	DALLAS	TX	75201
0349-011-01		SAN BERNARDINO	CA	92407	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0349-011-02		SAN BERNARDINO	CA	92407	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0349-011-03		SAN BERNARDINO	CA	92407	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0349-011-04		SAN BERNARDINO	CA	92407	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0349-011-07		SAN BERNARDINO	CA	92407	WILDLANDS, CONSERVANCY	39611 OAK GLEN RD UNIT 12	OAK GLEN	CA	92399
0349-011-08		SAN BERNARDINO	CA	92407	WILDLANDS, CONSERVANCY	39611 OAK GLEN RD UNIT 12	OAK GLEN	CA	92399
0349-011-12		SAN BERNARDINO	CA	92407	PACIFIC TELEPHONE AND TELEGRAPH CO	208 S AKARD ST	DALLAS	TX	75202
0349-041-55		SAN BERNARDINO	CA	92407	STRATTON, DANIEL WAYNE	632 W LA DENEY DR	ONTARIO	CA	91762
0349-061-01		SAN BERNARDINO	CA	92407	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0349-061-02		SAN BERNARDINO	CA	92407	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0349-061-03		SAN BERNARDINO	CA	92407	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0349-061-04		SAN BERNARDINO	CA	92407	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0349-061-05		SAN BERNARDINO	CA	92407	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0349-061-09		SAN BERNARDINO	CA	92407	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0349-061-20		SAN BERNARDINO	CA	92407	BAKEMAN, DAVID D	PO BOX 9346	SAN BERNARDINO	CA	92427
0349-061-21		SAN BERNARDINO	CA	92407	BAKEMAN DAVID D TR	PO BOX 9346	SAN BERNARDINO	CA	92427
0349-062-02		DEVORE	CA	92407	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0349-062-32		SAN BERNARDINO	CA	92407	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0349-062-33		SAN BERNARDINO	CA	92407	MATHEWS, ROBERT D	17010 MATHEWS RANCH RD	SAN BERNARDINO	CA	92407
0349-062-39		SAN BERNARDINO	CA	92407	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0349-062-40		SAN BERNARDINO	CA	92407	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0349-062-48		SAN BERNARDINO	CA	92407	SOUTHERN CALIFORNIA GAS CO	555 W 5TH ST	LOS ANGELES	CA	90013
0349-062-50		SAN BERNARDINO	CA	92407	STRATTON CHARLES B & CORAL L TR 5-1	632 W LA DENEY DR	ONTARIO	CA	91762
0349-101-06		SAN BERNARDINO	CA	92407	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0349-101-24		SAN BERNARDINO	CA	92407	AABERG ROBERT A & JANET M TR	6558 CRYSTALAIRES DR	SAN DIEGO	CA	92120

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0349-101-25		SAN BERNARDINO	CA	92407	AABERG ROBERT A & JANET M TR	6558 CRYSTALAIRES DR	SAN DIEGO	CA	92120
0349-101-30		SAN BERNARDINO	CA	92407	SOUTHERN CALIFORNIA GAS CO	555 W 5TH ST	LOS ANGELES	CA	90013
0349-101-31		SAN BERNARDINO	CA	92407	SOUTHERN CALIFORNIA GAS CO	555 W 5TH ST	LOS ANGELES	CA	90013
0349-101-32		SAN BERNARDINO	CA	92407	SOUTHERN CALIFORNIA GAS CO	555 W 5TH ST	LOS ANGELES	CA	90013
0349-102-01		SAN BERNARDINO	CA	92407	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0349-102-06	CAJON BLVD	DEVORE	CA	92407	SAN BERNARDINO DEV LLC	2441 W LINCOLN AVE APT 59	ANAHEIM	CA	92801
0349-102-07		SAN BERNARDINO	CA	92407	HUBBARD, MARK	140 ORANGEWOOD ST	COLTON	CA	92324
0349-102-08		SAN BERNARDINO	CA	92407	HUBBARD, ARLIE R	140 ORANGEWOOD ST	COLTON	CA	92324
0349-102-09	17164 CAJON BLVD	DEVORE HEIGHTS	CA	92407	STATE OF CALIFORNIA	464 W 4TH ST # 6TH	SAN BERNARDINO	CA	92401
0349-102-10		SAN BERNARDINO	CA	92407	JONES 2001 FAMILY TRUST	2366 GOLDEN GATE CIR	NORCO	CA	92860
0349-102-13		SAN BERNARDINO	CA	92407	AABERG ROBERT A & JANET M TR	6558 CRYSTALAIRES DR	SAN DIEGO	CA	92120
0349-102-14		SAN BERNARDINO	CA	92407	AABERG ROBERT A & JANET M TR	6558 CRYSTALAIRES DR	SAN DIEGO	CA	92120
0349-102-15		SAN BERNARDINO	CA	92407	MCI TELECOMMUNICATION CORP	22001 LOUDOUN COUNTY PKWY	ASHBURN	VA	20147
0349-113-08		SAN BERNARDINO	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0349-113-10		SAN BERNARDINO	CA	92407	SOUTHERN CALIFORNIA GAS CO	555 W 5TH ST	LOS ANGELES	CA	90013
0349-114-02	CAJON BLVD	DEVORE	CA	92407	SAN BERNARDINO HOTEL LLC	1685 COOLIDGE ST	SAN DIEGO	CA	92111
0349-114-03	CAJON BLVD	DEVORE	CA	92407	SAN BERNARDINO HOTEL LLC	1685 COOLIDGE ST	SAN DIEGO	CA	92111
0349-115-01		SAN BERNARDINO	CA	92407	SIGDESTAD, LEONARD A	2605 S WATERMAN AVE	SAN BERNARDINO	CA	92408
0349-144-02		SAN BERNARDINO	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0349-154-03	CAJON BLVD	DEVORE	CA	92407	CIRRITO, ROBERT	1922 GREEN VIEW LN	LA VERNE	CA	91750
0349-154-12	CAJON BLVD	DEVORE	CA	92407	CIRRITO, ROBERT J	1922 GREEN VIEW LN	LA VERNE	CA	91750
0349-154-13	1788 DEVORE RD	SAN BERNARDINO	CA	92407	TOTH, RON	925 LILAC DR	MONTECITO	CA	93108
0349-169-02	CAJON BLVD	DEVORE	CA	92407	LARRIBA, MARY RENE	15212 LIVE OAK ST	HESPERIA	CA	92345
0349-169-03	1775 DEVORE RD	SAN BERNARDINO	CA	92407	STATE OF CALIFORNIA	464 W 4TH ST # 6TH	SAN BERNARDINO	CA	92401
0349-169-04	CAJON BLVD	DEVORE	CA	92407	LARRIBA, MARY RENE	15212 LIVE OAK ST	HESPERIA	CA	92345
0349-169-05	DEVORE RD	DEVORE	CA	92407	YANCEY, JERRY B	1920 REYNOLDSBURG RD	PARIS	TN	38242
0349-169-06	CAJON BLVD	DEVORE	CA	92407	LARRIBA, MARY RENE	15212 LIVE OAK ST	HESPERIA	CA	92345
0349-169-07	CAJON BLVD	DEVORE	CA	92407	LARRIBA, MARY RENE	15212 LIVE OAK ST	HESPERIA	CA	92345
0349-169-08	CAJON BLVD	DEVORE	CA	92407	LARRIBA, MARY RENE	15212 LIVE OAK ST	HESPERIA	CA	92345
0349-171-01		DEVORE	CA	92407	KARDOS, VICTOR JAMES	3943 IRVINE BLVD # 19	IRVINE	CA	92602
0349-172-01	TAFT AVE	DEVORE	CA	92407	STATE OF CALIFORNIA	464 W 4TH ST # 6TH	SAN BERNARDINO	CA	92401

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0349-173-07		SAN BERNARDINO	CA	92407	KARDOS, VICTOR J	3943 IRVINE BLVD # 19	IRVINE	CA	92602
0349-173-08		SAN BERNARDINO	CA	92407	KARDOS, VICTOR J	3943 IRVINE BLVD # 19	IRVINE	CA	92602
0349-173-11		SAN BERNARDINO	CA	92407	STATE OF CALIF DEPT NATL RESOURCES	3800 N SIERRA WAY	SAN BERNARDINO	CA	92405
0349-173-19		SAN BERNARDINO	CA	92407	KARDOS, VICTOR J	3943 IRVINE BLVD # 19	IRVINE	CA	92602
0349-173-20	18329 CAJON BLVD	SAN BERNARDINO	CA	92407	KARDOS, VICTOR J	3943 IRVINE BLVD # 19	IRVINE	CA	92602
0349-173-22	CAJON BLVD	SAN BERNARDINO	CA	92407	HAYNES, ELIZABETH M	39996 VIA TIAMA	MURRIETA	CA	92562
0349-173-24	18345 CAJON BLVD	SAN BERNARDINO	CA	92407	KIM, YOUNG	4028 US HIGHWAY 138	PHELAN	CA	92371
0349-173-26	18345 CAJON BLVD	SAN BERNARDINO	CA	92407	ABAUNZA, JESUS	5835 SILVER SAGE LN	GRAND PRAIRIE	TX	75052
0349-173-28	18291 CAJON BLVD	SAN BERNARDINO	CA	92407	BUNSE, RONNIE L	867 WOODLAWN AVE	SAN BERNARDINO	CA	92407
0349-173-29		SAN BERNARDINO	CA	92407	CITY OF SAN BERNARDINO	300 N D ST # 421	SAN BERNARDINO	CA	92418
0349-173-31	TAFT AVE	DEVORE	CA	92407	ASHE, FRANK M	PO BOX 38	YUCAIPA	CA	92399
0349-173-32	18181 CAJON BLVD	SAN BERNARDINO	CA	92407	WENDLER, STACY MARIE	18169 CAJON BLVD	SAN BERNARDINO	CA	92407
0349-173-33	18169 CAJON BLVD	SAN BERNARDINO	CA	92407	WENDLER, STACY MARIE	18169 CAJON BLVD	SAN BERNARDINO	CA	92407
0349-173-37	CAJON BLVD	DEVORE	CA	92407	NEXTEL OF CALIF, INC	624 S GRAND AVE STE 900	LOS ANGELES	CA	90017
0349-173-38	18253 TAFT AVE	DEVORE	CA	92407	STATE OF CALIFORNIA	464 W 4TH ST # 6TH	SAN BERNARDINO	CA	92401
0349-174-01		SAN BERNARDINO	CA	92407	PLIES ALBRIGHT M AND MARY C TRS	31970 ROCKING HORSE RD	ESCONDIDO	CA	92026
0349-174-02	18495 CAJON BLVD	SAN BERNARDINO	CA	92407	DENNO, JERJIS J	115 FOX HALL LN	SAN ANTONIO	TX	78213
0349-174-03	DEVORE RD	DEVORE	CA	92407	JP PREFERRED LLC	23415 CAMINO TERRAZA RD	CORONA	CA	92883
0349-174-04		DEVORE	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0349-174-07		DEVORE	CA	92407	ATCHISON TOPEKA AND SANTA FE RR CO	2650 LOU MENK DR	FORT WORTH	TX	76131
0349-174-09		DEVORE	CA	92407	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0349-174-10		DEVORE	CA	92407	CITY OF SAN BERNARDINO	PO BOX 710	SAN BERNARDINO	CA	92402
0349-181-12	DEVORE RD	DEVORE	CA	92407	VAN DER VLAG, JACOB	2221 DESIRE AVE	ROWLAND HEIGHTS	CA	91748
0349-182-06	CAJON BLVD	DEVORE	CA	92407	OLIVIER, HENRY	2989 SPLIT MOUNTAIN LN	SAN BERNARDINO	CA	92407
0349-182-09		SAN BERNARDINO	CA	92407	GENERAL TELEPHONE CO OF CALIFORNIA	PO BOX 641	SAN BERNARDINO	CA	92402
0349-182-10	1947 GLEN HELEN PKWY	SAN BERNARDINO	CA	92407	WOOD, BRANDEN EUGENE	PO BOX 90580	SAN BERNARDINO	CA	92427
0349-201-02		SAN BERNARDINO	CA	92407	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0350-041-09		SAN BERNARDINO	CA	92407	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0350-041-10		SAN BERNARDINO	CA	92407	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0350-061-09		SAN BERNARDINO	CA	92407	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0350-061-11		SAN BERNARDINO	CA	92407	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0350-061-37		SAN BERNARDINO	CA	92407	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0350-071-01	15810 CAJON BLVD	SAN BERNARDINO	CA	92407	BAYLESS, BRETT M	23819 HUASNA RD	APPLE VALLEY	CA	92307
0350-071-11		SAN BERNARDINO	CA	92407	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0350-071-12	15924 CAJON BLVD	SAN BERNARDINO	CA	92407	SHACKELFORD, ELMER JAY	15924 CAJON BLVD	DEVORE HEIGHTS	CA	92407
0350-071-13	15948 CAJON BLVD	SAN BERNARDINO	CA	92407	BOWDEN, KATHLEEN M	PO BOX 2898	SAN BERNARDINO	CA	92406
0350-071-14		SAN BERNARDINO	CA	92407	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0350-071-15		SAN BERNARDINO	CA	92407	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0350-071-16		SAN BERNARDINO	CA	92407	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0350-071-17		SAN BERNARDINO	CA	92407	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0350-071-23	15455 CAJON BLVD	SAN BERNARDINO	CA	92407	GAUTHIER, ROBERT	15501 CAJON BLVD	SAN BERNARDINO	CA	92407
0350-071-24	15501 CAJON BLVD	SAN BERNARDINO	CA	92407	GAUTHIER, ROBERT	15501 CAJON BLVD	SAN BERNARDINO	CA	92407
0350-071-26	15551 CAJON BLVD	SAN BERNARDINO	CA	92407	KIM, SUNG II	15551 CAJON BLVD	SAN BERNARDINO	CA	92407
0350-071-27	15575 CAJON BLVD	SAN BERNARDINO	CA	92407	BLUE CUT LLC	23819 HUASNA RD	APPLE VALLEY	CA	92307
0350-071-34	15810 CAJON BLVD	SAN BERNARDINO	CA	92407	GEM PARTNERS	23819 HUASNA RD	APPLE VALLEY	CA	92307
0350-071-35	15575 CAJON BLVD	SAN BERNARDINO	CA	92407	BLUE CUT LLC	23819 HUASNA RD	APPLE VALLEY	CA	92307
0350-071-36	15575 CAJON BLVD	SAN BERNARDINO	CA	92407	BLUE CUT LLC	23819 HUASNA RD	APPLE VALLEY	CA	92307
0350-071-37	15501 CAJON BLVD	SAN BERNARDINO	CA	92407	GAUTHIER, ROBERT EUGENE	15501 CAJON BLVD	SAN BERNARDINO	CA	92407
0350-071-38	15551 CAJON BLVD	SAN BERNARDINO	CA	92407	ARMENTEROS, GEORGE SR	16 CAMPUS DR UNIT 203	ARCADIA	CA	91007
0350-071-45		SAN BERNARDINO	CA	92407	UNION PACIFIC RAILROAD COMPANY	1400 DOUGLAS ST	OMAHA	NE	68179
0351-171-01		SAN BERNARDINO	CA	92407	SAN BERNARDINO NATIONAL FOREST	602 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0136-341-04		SAN BERNARDINO	CA	92408	UNION PACIFIC RAILROAD COMPANY	1400 DOUGLAS ST	OMAHA	NE	68179
0136-341-57		SAN BERNARDINO	CA	92408	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0136-341-64	110 E MILL ST	SAN BERNARDINO	CA	92408	WESTGATE NO 1	3 LINCOLN CENTRE 5430 LBJ FWY #800	DALLAS	TX	75240
0136-341-65	1456 E HARRY SHEPARD BLVD	SAN BERNARDINO	CA	92408	TEC PARC LAND L, P	13155 NOEL RD STE 100	DALLAS	TX	75240
0136-341-71		SAN BERNARDINO	CA	92408	SAN BERNARDINO INTL AIRPORT AUTHORIT	294 S LELAND NORTON WAY # 1	SAN BERNARDINO	CA	92408
0136-341-72	1477 E HARRY SHEPARD BLVD	SAN BERNARDINO	CA	92408	STATER BROS MARKETS	PO BOX 150	SAN BERNARDINO	CA	92402
0136-341-80	E 3RD ST	SAN BERNARDINO	CA	92408	VALLEY, INLAND AGENCY	294 S LELAND NORTON WAY	SAN BERNARDINO	CA	92408
0136-351-17		SAN BERNARDINO	CA	92408	VALLEY, INLAND AGENCY	294 S LELAND NORTON WAY # 1	SAN BERNARDINO	CA	92408

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0136-351-18		SAN BERNARDINO	CA	92408	VALLEY, INLAND AGENCY	294 S LELAND NORTON WAY # 1	SAN BERNARDINO	CA	92408
0136-351-19		SAN BERNARDINO	CA	92408	UNITED STATES OF AMERICA	10845 RANCHO BERNARDO RD STE 200	SAN DIEGO	CA	92127
0141-321-14		SAN BERNARDINO	CA	92408	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0141-332-01	505 WIER RD	SAN BERNARDINO	CA	92408	WONG TRUST	138 S BONNIE AVE UNIT 5	PASADENA	CA	91106
0141-332-02	515 WIER RD	SAN BERNARDINO	CA	92408	GROUP IX BP PROPERTIES LP	4900 SANTA ANITA 2-C # 276	EL MONTE CA	CA	91731
0141-332-03	525 WIER RD	SAN BERNARDINO	CA	92408	GROUP IX BP PROPERTIES LP	4900 SANTA ANITA 2-C # 276	EL MONTE CA	CA	91731
0141-332-04	545 WIER RD	SAN BERNARDINO	CA	92408	WONG TRUST	138 S BONNIE AVE UNIT 5	PASADENA	CA	91106
0141-332-06	2575 STEELE RD	SAN BERNARDINO	CA	92408	LOMA VISTA INVESTORS LLC	65 ENTERPRISE # 150	ALISO VIEJO	CA	92656
0141-341-01		SAN BERNARDINO	CA	92408	MONTECITO MUTUAL WATER CO	PO BOX 5546	SAN BERNARDINO	CA	92412
0141-341-02		SAN BERNARDINO	CA	92408	MONTECITO MEMORIAL PARK CORP	PO BOX 130548	HOUSTON	TX	77219
0141-341-12	456 INDUSTRIAL RD	SAN BERNARDINO	CA	92408	FOUR, FIFTY SIX	10200 PIONEER BLVD STE 500	SANTA FE SPRINGS	CA	90670
0141-341-13		SAN BERNARDINO	CA	92408	UNION PACIFIC RAILROAD COMPANY	1400 DOUGLAS ST	OMAHA	NE	68179
0141-342-13	495 INDUSTRIAL RD	SAN BERNARDINO	CA	92408	BENNION, ROBERT CRAIG	495 INDUSTRIAL RD	SAN BERNARDINO	CA	92408
0141-342-14	495 INDUSTRIAL RD	SAN BERNARDINO	CA	92408	BENNION, ROBERT CRAIG	495 INDUSTRIAL RD	SAN BERNARDINO	CA	92408
0141-351-01	494 COMMERCIAL RD	SAN BERNARDINO	CA	92408	OCEAN BLUE INC	494 COMMERCIAL RD	SAN BERNARDINO	CA	92408
0141-352-01	480 WIER RD	SAN BERNARDINO	CA	92408	ACAA LIMITED PARTNERSHIP	29848 LIVE OAK CANYON RD	REDLANDS	CA	92373
0141-352-02	470 WIER RD	SAN BERNARDINO	CA	92408	ACAA LIMITED PARTNERSHIP	29848 LIVE OAK CANYON RD	REDLANDS	CA	92373
0141-352-03	460 WIER RD	SAN BERNARDINO	CA	92408	ACAA LIMITED PARTNERSHIP	29848 LIVE OAK CANYON RD	REDLANDS	CA	92373
0141-352-04	440 WIER RD	SAN BERNARDINO	CA	92408	ACAA LIMITED PARTNERSHIP	29848 LIVE OAK CANYON RD	REDLANDS	CA	92373
0141-352-05	422 WIER RD	SAN BERNARDINO	CA	92408	ACAA LIMITED PARTNERSHIP	29848 LIVE OAK CANYON RD	REDLANDS	CA	92373
0141-352-06	400 WIER RD	SAN BERNARDINO	CA	92408	ACAA LIMITED PARTNERSHIP	29848 LIVE OAK CANYON RD	REDLANDS	CA	92373
0141-352-07	394 WIER RD	SAN BERNARDINO	CA	92408	ACAA LIMITED PARTNERSHIP	29848 LIVE OAK CANYON RD	REDLANDS	CA	92373
0141-352-08	378 WIER RD	SAN BERNARDINO	CA	92408	ACAA LIMITED PARTNERSHIP	29848 LIVE OAK CANYON RD	REDLANDS	CA	92373
0141-352-09		SAN BERNARDINO	CA	92408	APT, LEONARD	527 MERIDIAN WAY	CARLSBAD	CA	92011
0141-352-10		SAN BERNARDINO	CA	92408	APT, LEONARD	527 MERIDIAN WAY	CARLSBAD	CA	92011
0141-352-11		SAN BERNARDINO	CA	92408	APT, LEONARD	527 MERIDIAN WAY	CARLSBAD	CA	92011
0141-352-12		SAN BERNARDINO	CA	92408	APT, LEONARD	527 MERIDIAN WAY	CARLSBAD	CA	92011
0141-352-13		SAN BERNARDINO	CA	92408	APT, LEONARD	527 MERIDIAN WAY	CARLSBAD	CA	92011
0141-352-15	E COMMERCIAL RD	SAN BERNARDINO	CA	92408	SARKARIA, DALJIT S	PO BOX 5766	ORANGE	CA	92863
0141-352-16	E COMMERCIAL RD	SAN BERNARDINO	CA	92408	SARKARIA, DALJIT S	PO BOX 5766	ORANGE	CA	92863

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0141-352-21	E COMMERCIAL RD	SAN BERNARDINO	CA	92408	SARKARIA, DALJIT S	PO BOX 5766	ORANGE	CA	92863
0141-352-22	E COMMERCIAL RD	SAN BERNARDINO	CA	92408	SARKARIA, DALJIT S	PO BOX 5766	ORANGE	CA	92863
0141-352-23	E COMMERCIAL RD	SAN BERNARDINO	CA	92408	SARKARIA, DALJIT S	PO BOX 5766	ORANGE	CA	92863
0141-352-24	E COMMERCIAL RD	SAN BERNARDINO	CA	92408	SARKARIA, DALJIT S	PO BOX 5766	ORANGE	CA	92863
0141-352-25	E COMMERCIAL RD	SAN BERNARDINO	CA	92408	SARKARIA, DALJIT S	PO BOX 5766	ORANGE	CA	92863
0141-352-26	495 COMMERCIAL RD	SAN BERNARDINO	CA	92408	ERIC REALITY INC	PO BOX 8549	ASHEVILLE	NC	28814
0141-352-28	S WATERMAN AVE	SAN BERNARDINO	CA	92408	SARKARIA, DALJIT S	PO BOX 5766	ORANGE	CA	92863
0141-352-29	365 COMMERCIAL RD	SAN BERNARDINO	CA	92408	TELACU HOUSING SAN BERNARDINO III, IN	1248 GOODRICH BLVD	COMMERCE	CA	90022
0141-381-01	2605 S WATERMAN AVE	SAN BERNARDINO	CA	92408	SIGDESTAD, LEONARD A	2605 S WATERMAN AVE	SAN BERNARDINO	CA	92408
0141-381-02	2619 S WATERMAN AVE	SAN BERNARDINO	CA	92408	BUOYE, DANIEL J	6101 QUAIL VALLEY CT	RIVERSIDE	CA	92507
0141-381-03	2627 S WATERMAN AVE	SAN BERNARDINO	CA	92408	KEEN, JOHN B	6746 HAWARDEN DR	RIVERSIDE	CA	92506
0141-381-22	2604 FLINT WAY	SAN BERNARDINO	CA	92408	KNOTH, ROBERT J	21826 TICONDEROGA LN	LAKE FOREST	CA	92630
0141-381-28	2619 FLINT WAY	SAN BERNARDINO	CA	92408	WONG, JOHN W	138 S BONNIE AVE UNIT 5	PASADENA	CA	91106
0141-381-29	2605 FLINT WAY	SAN BERNARDINO	CA	92408	WONG TR	138 S BONNIE AVE UNIT 5	PASADENA	CA	91106
0141-381-32	2634 COPPER LN	SAN BERNARDINO	CA	92408	COPPER LANE PARTNERS LP	9801 IRVINE CENTER DR	IRVINE	CA	92618
0141-381-33	2618 FLINT WAY	SAN BERNARDINO	CA	92408	KUPSH, PAUL K	21826 TICONDEROGA LN	LAKE FOREST	CA	92630
0141-391-01	520 INDUSTRIAL RD	SAN BERNARDINO	CA	92408	LONE OAK SAN BERNARDINO II L L C	6250 N RIVER RD STE 9000	ROSEMONT	IL	60018
0141-391-02	590 INDUSTRIAL RD	SAN BERNARDINO	CA	92408	LONE OAK SAN BERNARDINO II L L C	6250 N RIVER RD STE 9000	ROSEMONT	IL	60018
0141-391-08	606 INDUSTRIAL RD	SAN BERNARDINO	CA	92408	LONE OAK SAN BERNARDINO II L L C	6250 N RIVER RD STE 9000	ROSEMONT	IL	60018
0141-392-04	2505 STEELE RD	SAN BERNARDINO	CA	92408	LONE OAK - SAN BERNARDINO LLC	6250 N RIVER RD STE 9000	ROSEMONT	IL	60018
0141-493-37		SAN BERNARDINO	CA	92408	WEST COLONY COMMUNITY ASSOC	PO BOX 2710	NEWPORT BEACH	CA	92658
0141-494-14	2749 FRANKLIN CT	SAN BERNARDINO	CA	92408	MANAENKO, ANATOL	2749 FRANKLIN CT	SAN BERNARDINO	CA	92408
0141-494-23	131 MONROE CT	SAN BERNARDINO	CA	92408	BAUER, STEVEN MICHAEL	131 MONROE CT	SAN BERNARDINO	CA	92408
0141-494-24	125 MONROE CT	SAN BERNARDINO	CA	92408	GOH, RICHARD K	3065 TIFFANY LN	COLTON	CA	92324
0141-494-25	117 MONROE CT	SAN BERNARDINO	CA	92408	DE LA TORRE, JOE	117 MONROE CT	SAN BERNARDINO	CA	92408
0141-494-26	111 MONROE CT	SAN BERNARDINO	CA	92408	SALEM, NEZIH M N	612 MYSTIC WAY	LAGUNA BEACH	CA	92651
0141-494-28	2643 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	GETACHEW, FEVEN Y	2643 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-494-29	2641 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	MARTINGALE INVESTMENTS LLC	319 MAIN ST	EL SEGUNDO	CA	90245
0141-494-30	2639 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	HEWITT, PAMELA PHINNY	7759 CENTRO VIS	HIGHLAND	CA	92346
0141-494-31	2637 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	HOSSAIN, MOHAMMED	2637 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-494-32	2635 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	KURI, JANICE LYNN	2635 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-494-33	2633 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	ROIBALLOVE, DESMOND RICHARD	2633 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0141-501-02	2708 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	LAI, LIEN	2708 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-03	2706 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	LEE, ERIC H	2706 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-04	2704 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	ARROYO, ONASSIS	2704 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-05	2702 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	TAURO, JOSE ZOLAYVAR	2702 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-06	2699 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	RODRIGUEZ, ENZO S	2699 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-07	2697 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	ADZEMA, JAMES J	1410 CALLE ESPANA	SAN DIMAS	CA	91773
0141-501-08	2695 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	WANG, LAURA JEN LUAN	5202 BRIDGEWOOD DR	LA PALMA	CA	90623
0141-501-09	2693 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	NAWAR, ATEF	PO BOX 172	LOMA LINDA	CA	92354
0141-501-10	2691 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	LAW, JACKIE	PO BOX 603	TEMPLE CITY	CA	91780
0141-501-11	2689 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	LEE, BEOM J	4855 RIVER GREEN PKWY STE 110	DULUTH	GA	30096
0141-501-12	2687 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	GUTIERREZ, FRANK C	2687 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-13	2705 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	CONTRERAS, DAVID	2705 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-14	2707 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	COMM, ALLISON	2707 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-16	2726 SALEM CT	SAN BERNARDINO	CA	92408	RICE, GENE P	2726 SALEM CT	SAN BERNARDINO	CA	92408
0141-501-17	2736 SALEM CT	SAN BERNARDINO	CA	92408	SILVA, JUAN FRANCISCO	2736 SALEM CT	SAN BERNARDINO	CA	92408
0141-501-18	2748 SALEM CT	SAN BERNARDINO	CA	92408	SALEM LLC	4775 W 27TH PL	YUMA	AZ	85364
0141-501-19	2749 SALEM CT	SAN BERNARDINO	CA	92408	UPPALA, GURUNATHA	2749 SALEM CT	SAN BERNARDINO	CA	92408
0141-501-20	2737 SALEM CT	SAN BERNARDINO	CA	92408	BABINO, MYRTLE CLAUDETTE	2865 LADERA RD	SAN BERNARDINO	CA	92405
0141-501-21	2727 SALEM CT	SAN BERNARDINO	CA	92408	OLSEN, MICHAEL	2727 SALEM CT	SAN BERNARDINO	CA	92408
0141-501-22	2736 FRANKLIN CT	SAN BERNARDINO	CA	92408	THAKKAR, SANDEEP	158 S TREVOR ST	ANAHEIM	CA	92806
0141-501-23	2737 FRANKLIN CT	SAN BERNARDINO	CA	92408	DADHANIYA, KIRANBALA	158 S TREVOR ST	ANAHEIM	CA	92806
0141-501-24	2727 FRANKLIN CT	SAN BERNARDINO	CA	92408	DIAZ, JUAN R	2727 FRANKLIN CT	SAN BERNARDINO	CA	92408
0141-501-25	2685 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	SHIN, DONG JOON	2685 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-26	2683 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	NAJJAR, SHADI	3034 CRYSTAL RIDGE LN	COLTON	CA	92324
0141-501-27	2681 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	CHUQUIMIA, FREDERICO	2681 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-28	2679 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	WALLACE, WALTER	2679 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-29	2677 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	PINLAC, EDWARD Y	2677 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-30	2675 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	SMN BUSINESS INC	3034 CRYSTAL RIDGE LN	COLTON	CA	92324
0141-501-31	2673 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	CRUZ, HELEN D	2673 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-32	2671 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	BERNARDO, HERMOGENES SAN JOSE	2671 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-33	2669 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	ZUBIA, JOSE DELALUZ	2669 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0141-501-34	2667 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	TINBLE LLC	5440 TRABUCO RD # H200	IRVINE	CA	92620
0141-501-35	2658 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	CAPEROCHO, RUFINO P	2658 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-36	2660 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	VIRAMONTES, HECTOR MEDINA	2660 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-37	2662 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	NAJJAR, FADI	25526 REDLANDS BLVD SPC 150	LOMA LINDA	CA	92354
0141-501-38	2664 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	YOUNG, RIPIN	2664 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-39	2666 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	DIEN, HAROLD	2666 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-40	2668 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	BICKLEY, WAYNE R	2668 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-41	2670 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	LOPEZ, MARTHA H	2670 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-42	2672 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	YOUNG, THOMAS C	36 PHEASANT CRK	IRVINE	CA	92618
0141-501-43	2665 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	REIMANN, ALEXANDER	2665 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-44	2663 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	NUNLEY, STEVEN L	2663 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-45	2661 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	NGUYEN, KHA HOANG	11217 HERCULES ST	NORWALK	CA	90650
0141-501-46	2659 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	CRUZ, AMANDA C	2659 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-47	2657 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	MURPHY FONTANEZ, NANCY	2657 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-48	2655 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	MCGRATH, DENNIS J	2655 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-49	2653 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	SCHISLER, THURMAN KEITH	2653 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-50	2651 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	ADAMS, GARY E	2651 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-51	2649 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	BOGDAN, JOSEPH	4605 N STAR ST	ROCKLIN	CA	95677
0141-501-52	2647 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	NAVARRO, MEDARDO L	38 VALENCIA LN	REDLANDS	CA	92374
0141-501-53	2645 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408	KANG, HO SIL	2645 ANNAPOLIS CIR	SAN BERNARDINO	CA	92408
0141-501-54		SAN BERNARDINO	CA	92408	WEST COLONY COMMUNITY ASSN	550 E SANTA ANA CANYON RD	ANAHEIM	CA	92807
0141-501-55		SAN BERNARDINO	CA	92408	WEST COLONY COMMUNITY ASSN	5500 E SANTA ANA CANYON RD	ANAHEIM	CA	92807
0141-501-56		SAN BERNARDINO	CA	92408	WEST COLONY COMMUNITY ASSN	5500 E SANTA ANA CANYON RD	ANAHEIM	CA	92807
0141-501-57		SAN BERNARDINO	CA	92408	WEST COLONY COMMUNITY ASSN	5500 E SANTA ANA CANYON RD	ANAHEIM	CA	92807
0141-521-17	2559 SHADY GLEN LN	SAN BERNARDINO	CA	92408	TOJINO, RAY R	2559 SHADY GLEN LN	SAN BERNARDINO	CA	92408
0141-521-46		SAN BERNARDINO	CA	92408	WEST COLONY COMMUNITY ASSN	PO BOX 2710	NEWPORT BEACH	CA	92658
0141-531-01	2561 SHADY GLEN LN	SAN BERNARDINO	CA	92408	TONN, PETER H	2561 SHADY GLEN LN	SAN BERNARDINO	CA	92408
0141-531-02	SHADY GLEN LN	SAN BERNARDINO	CA	92408	TANWANGCO, ANTONIO T	491 S LA SALLE ST	REDLANDS	CA	92374

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0141-531-03	2569 SHADY GLEN LN	SAN BERNARDINO	CA	92408	GENTRY, DAVID W	2569 SHADY GLEN LN	SAN BERNARDINO	CA	92408
0141-531-04	2571 SHADY GLEN LN	SAN BERNARDINO	CA	92408	AULMAN, STEPHEN	1428 RAINBOW CREST RD	FALLBROOK	CA	92028
0141-531-05	2575 SHADY GLEN LN	SAN BERNARDINO	CA	92408	SARLI, ENILSON G	2575 SHADY GLEN LN	SAN BERNARDINO	CA	92408
0141-531-06	2579 SHADY GLEN LN	SAN BERNARDINO	CA	92408	HE, NENG	2579 SHADY GLEN LN	SAN BERNARDINO	CA	92408
0141-531-07	2581 SHADY GLEN LN	SAN BERNARDINO	CA	92408	GILBERT, TERESA	2581 SHADY GLEN LN	SAN BERNARDINO	CA	92408
0141-531-08	2585 SHADY GLEN LN	SAN BERNARDINO	CA	92408	SANTIZO, CARLOS A	2585 SHADY GLEN LN	SAN BERNARDINO	CA	92408
0141-531-09	2589 SHADY GLEN LN	SAN BERNARDINO	CA	92408	LAWTON, PHILLIP B	2589 SHADY GLEN LN	SAN BERNARDINO	CA	92408
0141-531-10	2591 SHADY GLEN LN	SAN BERNARDINO	CA	92408	SALVADOR, ELISEO S	5918 KINGS RANCH RD	RIVERSIDE	CA	92505
0141-531-11	2595 SHADY GLEN LN	SAN BERNARDINO	CA	92408	LUMENTA, MELLY	2595 SHADY GLEN LN	SAN BERNARDINO	CA	92408
0141-531-12	2594 SHADY GLEN LN	SAN BERNARDINO	CA	92408	KHANAM, TANIA	34947 HAGEN HTS	BEAUMONT	CA	92223
0141-531-13	2590 SHADY GLEN LN	SAN BERNARDINO	CA	92408	SALVADOR, ELISEO S	5918 KINGS RANCH RD	RIVERSIDE	CA	92505
0141-531-14	2586 SHADY GLEN LN	SAN BERNARDINO	CA	92408	LAO, WILSON	2100 RECHE CANYON RD	COLTON	CA	92324
0141-531-15	2582 SHADY GLEN LN	SAN BERNARDINO	CA	92408	SIGDESTAD, LEONARD A	2605 S WATERMAN AVE	SAN BERNARDINO	CA	92408
0141-531-16	2570 SHADY GLEN LN	SAN BERNARDINO	CA	92408	OROZCO, APRIL	2570 SHADY GLEN LN	SAN BERNARDINO	CA	92408
0141-531-17	2566 SHADY GLEN LN	SAN BERNARDINO	CA	92408	HONG, JOSHUA SWUNG WOO	2566 SHADY GLEN LN	SAN BERNARDINO	CA	92408
0141-531-18	2562 SHADY GLEN LN	SAN BERNARDINO	CA	92408	DECKER, DAVID R	120 N PLYMOUTH WAY	SAN BERNARDINO	CA	92408
0141-531-19		SAN BERNARDINO	CA	92408	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0141-531-20	2585 SHADY GLEN LN	SAN BERNARDINO	CA	92408	SANTIZO, CARLOS A	2585 SHADY GLEN LN	SAN BERNARDINO	CA	92408
0141-531-21	2694 S ERIN WAY	SAN BERNARDINO	CA	92408	THOMAS, HERVE	2694 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-531-22	2686 S ERIN WAY	SAN BERNARDINO	CA	92408	CABACUNGAN, RENATO	3 BLUEBELL ST	AMERICAN CANYON	CA	94503
0141-531-23	2678 S ERIN WAY	SAN BERNARDINO	CA	92408	BRADFORD, KEITH	2678 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-531-24	2670 S ERIN WAY	SAN BERNARDINO	CA	92408	MURAD, AL-HAWASH	2670 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-531-25	2664 S ERIN WAY	SAN BERNARDINO	CA	92408	ROSS, PHILLIP J	2664 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-531-26	2656 S ERIN WAY	SAN BERNARDINO	CA	92408	ACOSTA, JAISBER FERNANDO	2656 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-531-27	2648 S ERIN WAY	SAN BERNARDINO	CA	92408	POWELL, ALVIN DOUGLASS	1503 MARGIT ST	REDLANDS	CA	92374
0141-531-28	2642 S ERIN WAY	SAN BERNARDINO	CA	92408	HWANG, KENNETH T	2642 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-531-29	2634 S ERIN WAY	SAN BERNARDINO	CA	92408	RIJOS, HARRY NEGRON	2634 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-531-30	2620 S ERIN WAY	SAN BERNARDINO	CA	92408	RAMIREZ, MICHAEL D	2620 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-531-31	2704 S ERIN WAY	SAN BERNARDINO	CA	92408	RUMINSON, JONATHAN W	2704 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-531-32	2659 S ERIN WAY	SAN BERNARDINO	CA	92408	LOPEZ, PAUL F	2659 E ERIN WAY	SAN BERNARDINO	CA	92408
0141-531-33	2665 S ERIN WAY	SAN BERNARDINO	CA	92408	COLLADO, MADELEINE HOLLERO	2665 E ERIN WAY	SAN BERNARDINO	CA	92408

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0141-531-34	2687 S ERIN WAY	SAN BERNARDINO	CA	92408	GROCHULSKI, LOVELYN A	2687 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-531-35	2695 S ERIN WAY	SAN BERNARDINO	CA	92408	KAROLYI, JAY S	2695 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-531-36	2705 S ERIN WAY	SAN BERNARDINO	CA	92408	KHASRU, MOHAMMED A	2705 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-531-37	2715 S ERIN WAY	SAN BERNARDINO	CA	92408	JACKSON, SHERRI D	2715 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-531-44	2621 S ERIN WAY	SAN BERNARDINO	CA	92408	HERRERA, JOSE R	2621 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-531-45	2635 S ERIN WAY	SAN BERNARDINO	CA	92408	SERNA, SYLVIA TORRES	2635 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-551-01	2594 S YOUNG CT	SAN BERNARDINO	CA	92408	PHAM, ERIC	2380 W CANOPY LN	ANAHEIM	CA	92801
0141-551-02	2582 S YOUNG CT	SAN BERNARDINO	CA	92408	CHELBEGEAN, MATEI	2582 S YOUNG CT	SAN BERNARDINO	CA	92408
0141-551-29	2541 S MELISSA WAY	SAN BERNARDINO	CA	92408	MOORE, WILLIAM D	100 BEVERLY HANKS CTR	HENDERSONVILLE	NC	28792
0141-551-30	2559 S MELISSA WAY	SAN BERNARDINO	CA	92408	PELEV, TODOR	628 FAIRWAY DR	REDLANDS	CA	92373
0141-551-31	2577 S MELISSA WAY	SAN BERNARDINO	CA	92408	GARNER, DONNY KIRK	2577 S MELISSA WAY	SAN BERNARDINO	CA	92408
0141-551-32	2595 S MELISSA WAY	SAN BERNARDINO	CA	92408	HIZON, HORACE	2595 S MELISSA WAY	SAN BERNARDINO	CA	92408
0141-551-33	295 E CAROL WAY	SAN BERNARDINO	CA	92408	DAVID, JOSEPH M	295 E CAROL WAY	SAN BERNARDINO	CA	92408
0141-551-34	285 E CAROL WAY	SAN BERNARDINO	CA	92408	PARCO, JOANA BELLE G	285 E CAROL WAY	SAN BERNARDINO	CA	92408
0141-551-35	277 E CAROL WAY	SAN BERNARDINO	CA	92408	LAWTON, FLORENCE	277 E CAROL WAY	SAN BERNARDINO	CA	92408
0141-551-36	267 E CAROL WAY	SAN BERNARDINO	CA	92408	PERRY, ROBERT B	5447 SIERRA VISTA AVE	RIVERSIDE	CA	92505
0141-551-37	259 E CAROL WAY	SAN BERNARDINO	CA	92408	VILLANUEVA, JOSEPH M	259 E CAROL WAY	SAN BERNARDINO	CA	92408
0141-551-38	249 E CAROL WAY	SAN BERNARDINO	CA	92408	YOUKER, JEFF	249 E CAROL WAY	SAN BERNARDINO	CA	92408
0141-551-39	241 E CAROL WAY	SAN BERNARDINO	CA	92408	SANTOS, NORBERT S	909 RILEY WAY	REDLANDS	CA	92374
0141-551-40	231 E CAROL WAY	SAN BERNARDINO	CA	92408	AMAJOYI, CHARLES U	231 E CAROL WAY	SAN BERNARDINO	CA	92408
0141-551-41	223 E CAROL WAY	SAN BERNARDINO	CA	92408	REYES, JHOANNA MARIE B	223 E CAROL WAY	SAN BERNARDINO	CA	92408
0141-551-42	213 E CAROL WAY	SAN BERNARDINO	CA	92408	FERNANDEZ, ALEJANDRO	213 E CAROL WAY	SAN BERNARDINO	CA	92408
0141-551-43	205 E CAROL WAY	SAN BERNARDINO	CA	92408	COFFMAN, BRENT	205 E CAROL WAY	SAN BERNARDINO	CA	92408
0141-551-44	2595 S YOUNG CT	SAN BERNARDINO	CA	92408	JEON, SUNGAH SOON	16785 WATERFORD POINTE CIR	ANCHORAGE	AK	99516
0141-551-45	2583 S YOUNG CT	SAN BERNARDINO	CA	92408	ABRENIO, PAMELA M	8087 TUSCANY ST	FONTANA	CA	92336
0141-551-47	223 E MELINDA LN	SAN BERNARDINO	CA	92408	RAMIREZ, WENDY	223 E MELINDA LN	SAN BERNARDINO	CA	92408
0141-551-48	241 E MELINDA LN	SAN BERNARDINO	CA	92408	CATOLICO, MARIETTA G	204 E MELINDA LN	SAN BERNARDINO	CA	92408
0141-551-49	259 E MELINDA LN	SAN BERNARDINO	CA	92408	BAHOD, ENRIQUE	259 E MELINDA LN	SAN BERNARDINO	CA	92408
0141-551-50	277 E MELINDA LN	SAN BERNARDINO	CA	92408	BANGUERIGO, REY D	277 E MELINDA LN	SAN BERNARDINO	CA	92408
0141-551-53	283 E MANCHESTER LN	SAN BERNARDINO	CA	92408	SANDOVAL, FELIPE	283 E MANCHESTER LN	SAN BERNARDINO	CA	92408
0141-551-54	289 E MANCHESTER LN	SAN BERNARDINO	CA	92408	MERTZLUFT, CASS M	289 E MANCHESTER LN	SAN BERNARDINO	CA	92408

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0141-551-55	294 E CAROL WAY	SAN BERNARDINO	CA	92408	CURTISS, BRIAN DAVID	294 E CAROL WAY	SAN BERNARDINO	CA	92408
0141-551-56	278 E CAROL WAY	SAN BERNARDINO	CA	92408	SARABOSING, ELISA RIVAS	278 E CAROL WAY	SAN BERNARDINO	CA	92408
0141-551-57	266 E CAROL WAY	SAN BERNARDINO	CA	92408	LUTTRELL, HANNAH	266 E CAROL WAY	SAN BERNARDINO	CA	92408
0141-551-58	258 E CAROL WAY	SAN BERNARDINO	CA	92408	LLOREN, EDGARDO	284 S NEWPORT AVE	SAN BERNARDINO	CA	92408
0141-551-59	248 E CAROL WAY	SAN BERNARDINO	CA	92408	EASTERBROOK, MATTHEW SCOTT	248 E CAROL WAY	SAN BERNARDINO	CA	92408
0141-551-60	240 E CAROL WAY	SAN BERNARDINO	CA	92408	ZAMUDIO, MA ELSA E	240 E CAROL WAY	SAN BERNARDINO	CA	92408
0141-551-61	230 E CAROL WAY	SAN BERNARDINO	CA	92408	GUIAO, FERDINAND T	230 E CAROL WAY	SAN BERNARDINO	CA	92408
0141-561-09	219 E KIMBERLY CT	SAN BERNARDINO	CA	92408	ACERON, NIMROD T	219 E KIMBERLY CT	SAN BERNARDINO	CA	92408
0141-561-10	211 E KIMBERLY CT	SAN BERNARDINO	CA	92408	GONZALES, MARJORIE R	211 E KIMBERLY CT	SAN BERNARDINO	CA	92408
0141-561-11	205 E KIMBERLY CT	SAN BERNARDINO	CA	92408	DAVE, LORLYN B	205 E KIMBERLY CT	SAN BERNARDINO	CA	92408
0141-561-12	2794 S ERIN WAY	SAN BERNARDINO	CA	92408	TANG, TRINH	2794 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-561-13	2782 S ERIN WAY	SAN BERNARDINO	CA	92408	ROBUCK, TIMOTHY M	2782 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-561-14	2772 S ERIN WAY	SAN BERNARDINO	CA	92408	REYNO, MARJORIE ANN TOBIAS	2772 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-561-15	2760 S ERIN WAY	SAN BERNARDINO	CA	92408	QUINONES, DELIA T	2760 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-561-16	2748 S ERIN WAY	SAN BERNARDINO	CA	92408	WEERASINGHE, SHARMEL P	2748 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-561-17	2736 S ERIN WAY	SAN BERNARDINO	CA	92408	WEERASINGHE, SUNJEEVE P	2736 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-561-18	2726 S ERIN WAY	SAN BERNARDINO	CA	92408	LIU, KELLY	2726 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-561-19	2714 S ERIN WAY	SAN BERNARDINO	CA	92408	FLORES, RACHAEL	2714 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-561-20	2727 S ERIN WAY	SAN BERNARDINO	CA	92408	GONZALEZ, CELIA	2727 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-561-21	2737 S ERIN WAY	SAN BERNARDINO	CA	92408	LIM, CLIFFORD S	2737 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-561-22	2749 S ERIN WAY	SAN BERNARDINO	CA	92408	CACHO, VINCE PATRICK R	2749 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-561-23	2761 S ERIN WAY	SAN BERNARDINO	CA	92408	QUINTYN, KENROY B	2761 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-561-24	2773 S ERIN WAY	SAN BERNARDINO	CA	92408	CASEL, ERLINDA	PO BOX 363	BRYN MAWR	CA	92318
0141-571-01	2612 S ERIN WAY	SAN BERNARDINO	CA	92408	DEWRI, RACHEL	2612 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-571-02	2604 S ERIN WAY	SAN BERNARDINO	CA	92408	MAGPAYO, RHONA	2604 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-571-03	2605 S CARL PL	SAN BERNARDINO	CA	92408	COMETA, JONATHAN E	2605 S CARL PL	SAN BERNARDINO	CA	92408
0141-571-04	2615 S CARL PL	SAN BERNARDINO	CA	92408	QUEZADA, YAHARA	2615 S CARL PL	SAN BERNARDINO	CA	92408
0141-571-05	2627 S CARL PL	SAN BERNARDINO	CA	92408	NAPITUPULU, BRIGITA M	2627 S CARL PL	SAN BERNARDINO	CA	92408
0141-571-19	2605 S ERIN WAY	SAN BERNARDINO	CA	92408	JANZEN, JUSTIN	PO BOX 5301	SAN BERNARDINO	CA	92412
0141-571-20	2613 S ERIN WAY	SAN BERNARDINO	CA	92408	TAMAYO, EDWARD ALAN MOYA	2613 S ERIN WAY	SAN BERNARDINO	CA	92408
0141-581-06	423 INDUSTRIAL RD	SAN BERNARDINO	CA	92408	SOUTHWEST BUILDINGS LLC	4193 FLAT ROCK DR STE 100	RIVERSIDE	CA	92505
0141-581-07	459 INDUSTRIAL RD	SAN BERNARDINO	CA	92408	ERS PARTNERS LP	231 W FOOTHILL BLVD	GLENORA	CA	91741

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0141-581-12	458 COMMERCIAL RD	SAN BERNARDINO	CA	92408	GWH PROPERTIES LLC	458 COMMERCIAL RD # L	SAN BERNARDINO	CA	92408
0279-235-37	1163 E CONGRESS ST	SAN BERNARDINO	CA	92408	NGUYEN, KINH DANG	1163 E CONGRESS ST	SAN BERNARDINO	CA	92408
0279-235-38	1171 E CONGRESS ST	SAN BERNARDINO	CA	92408	TRUONG, TIN	1171 E CONGRESS ST	SAN BERNARDINO	CA	92408
0279-235-39	1179 E CONGRESS ST	SAN BERNARDINO	CA	92408	STARLITE MGMT - II LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0279-235-40	1187 E CONGRESS ST	SAN BERNARDINO	CA	92408	FEIR, GABRIEL G	1187 E CONGRESS ST	SAN BERNARDINO	CA	92408
0279-235-41	275 S GOLDEN AVE	SAN BERNARDINO	CA	92408	NOA, TOWLE F	8693 SOMERSET AVE	SAN DIEGO	CA	92123
0279-235-42	265 S GOLDEN AVE	SAN BERNARDINO	CA	92408	LOPEZ, MARIBEL	8628 SONFEST DR	PICO RIVERA	CA	90660
0279-235-43	255 S GOLDEN AVE	SAN BERNARDINO	CA	92408	MERCADO, CLEMENTE	2596 APPLGATE AVE	CLOVIS	CA	93611
0279-235-44	245 S GOLDEN AVE	SAN BERNARDINO	CA	92408	DINH, HIEP N	245 S GOLDEN AVE	SAN BERNARDINO	CA	92408
0279-235-45	235 S GOLDEN AVE	SAN BERNARDINO	CA	92408	RAMIREZ, MARIO A LOERA	235 S GOLDEN AVE	SAN BERNARDINO	CA	92408
0279-235-46	225 S GOLDEN AVE	SAN BERNARDINO	CA	92408	DOSHI FAMILY LIMITED PARTNERSHIP	PO BOX 6545	ORANGE	CA	92863
0279-235-47	215 S GOLDEN AVE	SAN BERNARDINO	CA	92408	RAWAL, DHANANJAY	PO BOX 490	PATTON	CA	92369
0279-235-48	205 S GOLDEN AVE	SAN BERNARDINO	CA	92408	FAIRLEY, DONNA	205 S GOLDEN AVE	SAN BERNARDINO	CA	92408
0279-235-49	195 S GOLDEN AVE	SAN BERNARDINO	CA	92408	GOMEZ, JOSE S	195 S GOLDEN AVE	SAN BERNARDINO	CA	92408
0279-235-50	185 S GOLDEN AVE	SAN BERNARDINO	CA	92408	MORA, ALEJANDRINA	185 S GOLDEN AVE	SAN BERNARDINO	CA	92408
0279-235-51	177 S GOLDEN AVE	SAN BERNARDINO	CA	92408	DOSHI FAMILY LIMITED PARTNERSHIP	PO BOX 6545	ORANGE	CA	92863
0279-235-52	167 S GOLDEN AVE	SAN BERNARDINO	CA	92408	BARAJAS, ANTONIA	3176 DIVERNON AVE	SIMI VALLEY	CA	93063
0279-235-53	159 S GOLDEN AVE	SAN BERNARDINO	CA	92408	JACKSON, TERRY W	13777 ANDEAN CT	VICTORVILLE	CA	92394
0279-235-54	149 S GOLDEN AVE	SAN BERNARDINO	CA	92408	BAEZ, JOSE L	149 S GOLDEN AVE	SAN BERNARDINO	CA	92408
0279-235-55	141 S GOLDEN AVE	SAN BERNARDINO	CA	92408	TRAN, JESSY	141 S GOLDEN AVE	SAN BERNARDINO	CA	92408
0279-235-56	131 S GOLDEN AVE	SAN BERNARDINO	CA	92408	FEROLINO, JOHNSON F	131 S GOLDEN AVE	SAN BERNARDINO	CA	92408
0279-235-57	123 S GOLDEN AVE	SAN BERNARDINO	CA	92408	BARRIOS, MONICA ANN	123 S GOLDEN AVE	SAN BERNARDINO	CA	92408
0279-235-58	113 S GOLDEN AVE	SAN BERNARDINO	CA	92408	NGO, HA VAN	113 S GOLDEN AVE	SAN BERNARDINO	CA	92408
0279-235-59	105 S GOLDEN AVE	SAN BERNARDINO	CA	92408	GUERRERO, SOCORRO	105 S GOLDEN AVE	SAN BERNARDINO	CA	92408
0279-236-01	104 S GOLDEN AVE	SAN BERNARDINO	CA	92408	KIM, SAMUTH	104 S GOLDEN AVE	SAN BERNARDINO	CA	92408
0279-236-02	112 S GOLDEN AVE	SAN BERNARDINO	CA	92408	ESCAMILLA, EVARISTO	112 S GOLDEN AVE	SAN BERNARDINO	CA	92408
0279-236-03	122 S GOLDEN AVE	SAN BERNARDINO	CA	92408	ALMAZAN, JOSE	122 S GOLDEN AVE	SAN BERNARDINO	CA	92408
0279-236-04	130 S GOLDEN AVE	SAN BERNARDINO	CA	92408	PHAM, TIEN N	130 S GOLDEN AVE	SAN BERNARDINO	CA	92408
0279-236-05	140 S GOLDEN AVE	SAN BERNARDINO	CA	92408	PLAZA, ROBERTO	140 S GOLDEN AVE	SAN BERNARDINO	CA	92408
0279-236-06	148 S GOLDEN AVE	SAN BERNARDINO	CA	92408	MARTINEZ, APOLINAR	148 S GOLDEN AVE	SAN BERNARDINO	CA	92408
0279-236-07	158 S GOLDEN AVE	SAN BERNARDINO	CA	92408	NGUYEN, CANG TRUNG	158 S GOLDEN AVE	SAN BERNARDINO	CA	92408

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0279-237-01	176 S GOLDEN AVE	SAN BERNARDINO	CA	92408	TA, BINH D	3356 WALNUT GROVE AVE	ROSEMEAD	CA	91770
0279-237-02	184 S GOLDEN AVE	SAN BERNARDINO	CA	92408	PORTILLO, MARCOS A	184 S GOLDEN AVE	SAN BERNARDINO	CA	92408
0279-237-03	194 S GOLDEN AVE	SAN BERNARDINO	CA	92408	LEE, ALEXANDRA	12160 ROSEVILLE DR	RANCHO CUCAMONGA	CA	91739
0279-237-04	204 S GOLDEN AVE	SAN BERNARDINO	CA	92408	SHAH, SNEHAL	PO BOX 6545	ORANGE	CA	92863
0279-237-05	214 S GOLDEN AVE	SAN BERNARDINO	CA	92408	GUERRERO, ALBERTO LOPEZ	214 S GOLDEN AVE	SAN BERNARDINO	CA	92408
0279-237-06	224 S GOLDEN AVE	SAN BERNARDINO	CA	92408	BURGESS, LESTER G	1530 ARMSTRONG AVE UNIT 62	NOVATO	CA	94945
0279-237-07	234 S GOLDEN AVE	SAN BERNARDINO	CA	92408	LIU, KUNG CHAO	PO BOX 5581	FULLERTON	CA	92838
0279-237-08	244 S GOLDEN AVE	SAN BERNARDINO	CA	92408	ENTRUST ADMINISTRATION TRUST	555 12TH ST STE 1250	OAKLAND	CA	94607
0279-237-09	1170 E CONGRESS ST	SAN BERNARDINO	CA	92408	ABELON, AURORA N	1170 E CONGRESS ST	SAN BERNARDINO	CA	92408
0279-237-10	1162 E CONGRESS ST	SAN BERNARDINO	CA	92408	PATEL, PINAKIN R	17790 VINELAND AVE	MONTE SERENO	CA	95030
0279-301-29	1188 E 2ND ST	SAN BERNARDINO	CA	92408	ZARAGOZA, LUIS	1188 E 2ND ST	SAN BERNARDINO	CA	92408
0279-301-30	1178 E 2ND ST	SAN BERNARDINO	CA	92408	VEGA, ROGELIO	1178 E 2ND ST	SAN BERNARDINO	CA	92408
0279-301-31	24922 E 2ND ST	SAN BERNARDINO	CA	92408	MARQUEZ, RUBEN	1800 DALEY CANYON RD	SAN BERNARDINO	CA	92404
0279-301-51	212 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	NAGOULAT, MIRIAM NIRVANA	212&214 N TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0279-311-15	1173 E 2ND ST	SAN BERNARDINO	CA	92408	IONEL, VASILE	1173 E 2ND ST	SAN BERNARDINO	CA	92408
0279-311-16	1179 E 2ND ST	SAN BERNARDINO	CA	92408	LONG, VERNON P	1179 E 2ND ST	SAN BERNARDINO	CA	92408
0279-311-17	1187 E 2ND ST	SAN BERNARDINO	CA	92408	LEE, CHRISTOPHER	3516 MICHELLE DR	TORRANCE	CA	90503
0279-311-22	134 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	STOUT, JULIE R	3500 BAYSIDE WALK APT 2C	SAN DIEGO	CA	92109
0279-311-23		SAN BERNARDINO	CA	92408	STOUT, JESS	3500 BAYSIDE WALK APT 2C	SAN DIEGO	CA	92109
0279-311-24		SAN BERNARDINO	CA	92408	STOUT, JESS	3500 BAYSIDE WALK APT 2C	SAN DIEGO	CA	92109
0279-311-48	1166 E RIALTO AVE	SAN BERNARDINO	CA	92408	LOWERY, JAMES L	1152 E RIALTO AVE	SAN BERNARDINO	CA	92408
0279-311-52		SAN BERNARDINO	CA	92408	SPSSM INVESTMENTS LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0279-311-53	1195 E 2ND ST	SAN BERNARDINO	CA	92408	SPSSM INVESTMENTS LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0280-091-23	786 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	INLAND VALLEY DEVELOPMENT AGENCY	294 S LELAND NORTON WAY # 1	SAN BERNARDINO	CA	92408
0280-091-27		SAN BERNARDINO	CA	92408	DYRUD, VALERIE S	1200 OUTRIGGER DR	CORONA DEL MAR	CA	92625
0280-091-28	716 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	LAWSON, MICHAEL K	445 CHESTNUT AVE	REDLANDS	CA	92373
0280-091-29		SAN BERNARDINO	CA	92408	LAWSON, MICHAEL K	2411 W LUGONIA AVE	REDLANDS	CA	92374
0280-091-68	662 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	TIP PROPERTY TWO LLC	4221 WILSHIRE BLVD STE 240	LOS ANGELES	CA	90010

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0280-091-69	662 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	TIP PROPERTY TWO LLC	4221 WILSHIRE BLVD STE 240	LOS ANGELES	CA	90010
0280-091-70	696 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	TIP PROPERTY THREE LLC	4221 WILSHIRE BLVD STE 240	LOS ANGELES	CA	90010
0280-101-27		SAN BERNARDINO	CA	92408	SAN BERNARDINO INTERNATIONAL AIRPORT	294 S LELAND NORTON WAY # 1	SAN BERNARDINO	CA	92408
0280-231-10		SAN BERNARDINO	CA	92408	NAYLA LLC	683 CLIFFSIDE DR	SAN DIMAS	CA	91773
0280-231-11	TIPPECANOE	SAN BERNARDINO	CA	92408	LOPEZ, FERNANDO SR	1147 E CENTRAL AVE	SAN BERNARDINO	CA	92408
0280-231-12	856 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	LLOYD II, DAVID J	PO BOX 244	FRIESLAND	WI	53935
0280-231-13	868 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	VO, ANHTUAN THANH	868 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0280-231-14		SAN BERNARDINO	CA	92408	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0280-231-15	892 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	POSADA, ANTONIO	892 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0280-231-16	904 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	LOPEZ, DANIEL	1341 CHURCH ST APT 6	REDLANDS	CA	92374
0280-231-17	914 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	MEJIA, BERNARDINO	914 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0280-231-24	BENEDICT RD	SAN BERNARDINO	CA	92408	LOPEZ, FERNANDO SR	1147 E CENTRAL AVE	SAN BERNARDINO	CA	92408
0280-231-25	957 E CENTRAL AVE	SAN BERNARDINO	CA	92408	LOPEZ, FERNANDO SR	1147 E CENTRAL AVE	SAN BERNARDINO	CA	92408
0280-232-09	944 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	HW GATEWAY BENEDICT LP	5430 LYNDON B JOHNSON FWY STE 800	DALLAS	TX	75240
0280-232-15	TIPPECANOE AVE	SAN BERNARDINO	CA	92408	HW GATEWAY BENEDICT LP	5430 LYNDON B JOHNSON FWY STE 800	DALLAS	TX	75240
0280-232-18	E BENEDICT RD	SAN BERNARDINO	CA	92408	HW GATEWAY BENEDICT LP	5430 LYNDON B JOHNSON FWY STE 800	DALLAS	TX	75240
0280-232-20		SAN BERNARDINO	CA	92408	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0280-232-21	TIPPECANOE AVE	SAN BERNARDINO	CA	92408	HW GATEWAY BENEDICT LP	5430 LYNDON B JOHNSON FWY STE 800	DALLAS	TX	75240
0280-232-31		SAN BERNARDINO	CA	92408	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0280-232-32	934 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	HW GATEWAY BENEDICT LP	5430 LYNDON B JOHNSON FWY STE 800	DALLAS	TX	75240
0280-241-03	SUNNYSIDE AVE	SAN BERNARDINO	CA	92408	HW GATEWAY BENEDICT LP	5430 LYNDON B JOHNSON FWY STE 800	DALLAS	TX	75240
0280-241-04		SAN BERNARDINO	CA	92408	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0280-241-05		SAN BERNARDINO	CA	92408	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0280-241-08	1150 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	BURR GROUP LP	9890 CHERRY AVE	FONTANA	CA	92335
0280-251-23		SAN BERNARDINO	CA	92408	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0280-251-54		SAN BERNARDINO	CA	92408	CITY OF RIVERSIDE	3900 MAIN ST	RIVERSIDE	CA	92522

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0280-251-58	1320 E RIVERSIDE DR	SAN BERNARDINO	CA	92408	ROGINA, RICHARD	11098 DEER CANYON DR	RANCHO CUCAMONGA	CA	91737
0280-251-61		SAN BERNARDINO	CA	92408	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0280-251-62	1155 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	STORAGE QUEST WEST LIMITED PARTNERSHIP	77738 FLORA RD	PALM DESERT	CA	92211
0280-251-65	TIPPECANOE AVE	SAN BERNARDINO	CA	92408	GEORGE CARSON LLC	18710 S WILMINGTON AVE STE 200	RANCHO DOMINGUEZ	CA	90220
0281-031-21		SAN BERNARDINO	CA	92408	SAN, BERNARDINO GOVERNMENT	472 N ARROWHEAD AVE	SAN BERNARDINO	CA	92401
0281-041-13		SAN BERNARDINO	CA	92408	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0281-041-14		SAN BERNARDINO	CA	92408	CITY OF RIVERSIDE	3900 MAIN ST	RIVERSIDE	CA	92522
0281-041-15		SAN BERNARDINO	CA	92408	CITY OF RIVERSIDE	3900 MAIN ST	RIVERSIDE	CA	92522
0281-041-28	1185 E COOLEY AVE	SAN BERNARDINO	CA	92408	TIPPECANOE HOLDINGS	647 N ARITON ST	ORANGE	CA	92868
0281-041-29	1470 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	FORD WHOLESALE CO, INC	PO BOX 5888	EL MONTE	CA	91734
0281-041-48	1390 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	KAPLAN INDUSTRIAL LLC	500 N BRAND BLVD STE 2120	GLENDALE	CA	91203
0281-041-64	1150 S TIPPECANOE AVE # 1250	SAN BERNARDINO	CA	92408	BURR GROUP LP	9400 CHERRY AVE # C	FONTANA	CA	92335
0281-041-65	1250 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	BURR GROUP LP	9890 CHERRY AVE	FONTANA	CA	92335
0281-041-83	1145 ORANGE SHOW RD STE K	SAN BERNARDINO	CA	92408	ECLAR PROPERTIES LLC	PO BOX 9024	REDLANDS	CA	92375
0281-041-84		SAN BERNARDINO	CA	92408	COOLEY COURT LLC	1719 STEWART ST	SANTA MONICA	CA	90404
0281-061-24		SAN BERNARDINO	CA	92408	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0281-071-01	512 E REDLANDS BLVD	SAN BERNARDINO	CA	92408	GRABOWSKI, PATRICK F	12018 CENTRAL AVE	CHINO	CA	91710
0281-071-03		SAN BERNARDINO	CA	92408	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0281-071-04	484 E REDLANDS BLVD	SAN BERNARDINO	CA	92408	ZADEH, ABDUL G	484 E REDLANDS BLVD	SAN BERNARDINO	CA	92408
0281-071-05	484 E REDLANDS BLVD	SAN BERNARDINO	CA	92408	ZADEH, ABDUL G	484 E REDLANDS BLVD	SAN BERNARDINO	CA	92408
0281-071-11	472 E REDLANDS BLVD	SAN BERNARDINO	CA	92408	FISCHER, EDDIE R	2020 E ORANGETHORPE AVE	FULLERTON	CA	92831
0281-071-12		SAN BERNARDINO	CA	92408	CITY OF SAN BERNARDINO	300 N D ST	SAN BERNARDINO	CA	92418
0281-081-23	1066 HARRIMAN PL	SAN BERNARDINO	CA	92408	GEISREITER, REED	120 13TH AVE	SANTA CRUZ	CA	95062
0281-081-32	1060 HARRIMAN PL	SAN BERNARDINO	CA	92408	R J O M D LLC	5175 E PACIFIC COAST HWY STE 405	LONG BEACH	CA	90804
0281-091-28	24716 E REDLANDS BLVD	SAN BERNARDINO	CA	92408	FOLKERTSMA FAM TR	2530 MILL CREEK RD	MENTONE	CA	92359
0281-091-31	24893 E REDLANDS BLVD	SAN BERNARDINO	CA	92408	WILLIS, HAROLD W	PO BOX 11057	SAN BERNARDINO	CA	92423
0281-091-40	E REDLANDS BLVD	LOMA LINDA	CA	92408	LUBINSKY, LOUIS G	24818 REDLANDS BLVD	LOMA LINDA	CA	92354
0281-091-41	24850 E REDLANDS BLVD	SAN BERNARDINO	CA	92408	PATEL, PRAKASH	16390 FOOTHILL BLVD	FONTANA	CA	92335

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0281-101-12	1333 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	MACH I CTRI TIPPECANOE LLC	65 ENTERPRISE	ALISO VIEJO	CA	92656
0281-102-07		SAN BERNARDINO	CA	92408	SAN, BERNARDINO GOVERNMENT	1170 W 3RD ST # 2ND	SAN BERNARDINO	CA	92410
0281-102-12		SAN BERNARDINO	CA	92408	SAN, BERNARDINO GOVERNMENT	472 N ARROWHEAD AVE	SAN BERNARDINO	CA	92401
0281-111-12	1234 HARDT ST	SAN BERNARDINO	CA	92408	SALAZAR, FRANCISCO J	1234 HARDT ST	SAN BERNARDINO	CA	92408
0281-111-13	1224 HARDT ST	SAN BERNARDINO	CA	92408	DAVIES, JOHN	PO BOX 86582	LOS ANGELES	CA	90086
0281-111-14	1214 HARDT ST	SAN BERNARDINO	CA	92408	TO, JOANNE	1214 HARDT ST	SAN BERNARDINO	CA	92408
0281-111-15	1526 HARDT ST	SAN BERNARDINO	CA	92408	KATRIB, SAM M	11513 MANDARIN CT	LOMA LINDA	CA	92354
0281-111-22		SAN BERNARDINO	CA	92408	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0281-111-26	1204 HARDT ST	SAN BERNARDINO	CA	92408	KATRIB, SAM M	11513 MANDARIN CT	LOMA LINDA	CA	92354
0281-112-01	1205 HARDT ST	SAN BERNARDINO	CA	92408	SHAHID, FARZANA	8632 CAVEL ST	DOWNEY	CA	90242
0281-112-02	1215 HARDT ST	SAN BERNARDINO	CA	92408	DAVIES, JOHN	PO BOX 86582	LOS ANGELES	CA	90086
0281-112-22	1210 GOULD ST	SAN BERNARDINO	CA	92408	PERLA, HELMER R	1210 GOULD ST	SAN BERNARDINO	CA	92408
0281-112-25	1164 GOULD ST	SAN BERNARDINO	CA	92408	POWER, GORDON G	1431 HENRIETTA ST	REDLANDS	CA	92373
0281-112-26	1154 GOULD ST	SAN BERNARDINO	CA	92408	POWER TRUST	1431 HENRIETTA ST	REDLANDS	CA	92373
0281-112-28	1565 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	PAGE, VICTOR W	PO BOX 51900	RIVERSIDE	CA	92517
0281-112-29	S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	PAGE, VICTOR W	PO BOX 51900	RIVERSIDE	CA	92517
0281-112-30	1545 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	SALAJEAN, VIOREL	1545 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0281-112-31	1535 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	SALAJEAN, VIOREL	1545 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0281-112-32	1203 HARDT ST	SAN BERNARDINO	CA	92408	MONGKHON, VIRIYAPANTHU	PO BOX 1381	LOMA LINDA	CA	92354
0281-112-33	1174 GOULD ST	SAN BERNARDINO	CA	92408	SALAMANCA, ANTONIO	1174 GOULD ST	SAN BERNARDINO	CA	92408
0281-112-34	1194 GOULD ST	SAN BERNARDINO	CA	92408	RUBALCAVA, LARRY	1194 GOULD ST	SAN BERNARDINO	CA	92408
0281-112-39	1575 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	TANGUNAN, MERLINDA	1575 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0281-112-40	1585 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	TANGUNAN, MERLINA H	1585 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0281-131-03	1175 GOULD ST	SAN BERNARDINO	CA	92408	NHAM, QUANG T	2578 LITITZ PIKE	LANCASTER	PA	17601
0281-131-27	1176 E DAVIDSON ST	SAN BERNARDINO	CA	92408	STRUTZ, PETER G	111 SARONA CIR	PALM DESERT	CA	92211
0281-131-28	1158 E DAVIDSON ST	SAN BERNARDINO	CA	92408	STRUTZ, PETER G	111 SARONA CIR	PALM DESERT	CA	92211
0281-131-29	1695 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	STRUTZ, PETER G	111 SARONA CIR	PALM DESERT	CA	92211
0281-131-30	1659 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	STRUTZ, PETER G	111 SARONA CIR	PALM DESERT	CA	92211
0281-131-50	1155 GOULD ST	SAN BERNARDINO	CA	92408	HHI SAN BERNARDINO LLC	3452 UNIVERSITY AVE	RIVERSIDE	CA	92501
0281-132-01	1705 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	CHA, HYON SONG	26091 HINCKLEY ST	LOMA LINDA	CA	92354
0281-132-03	1167 E DAVIDSON ST	SAN BERNARDINO	CA	92408	REVELL, DOLORES C	1167 A & B DAVIDSON ST	SAN BERNARDINO	CA	92408
0281-132-04	1177 E DAVIDSON ST	SAN BERNARDINO	CA	92408	CHUNG, GRACE JIEUN	11546 MURPHY ST	LOMA LINDA	CA	92354

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0281-132-25	1172 COULSTON ST	SAN BERNARDINO	CA	92408	BARRION, EDWARD A	1172 COULSTON ST	SAN BERNARDINO	CA	92408
0281-132-26	1148 COULSTON ST	SAN BERNARDINO	CA	92408	SHIBUYA, MAREMARO	26898 DEZAHARA WAY	LOS ALTOS HILLS	CA	94022
0281-132-28	S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	CHA, HYON SONG	26091 HINCKLEY ST	LOMA LINDA	CA	92354
0281-132-33		SAN BERNARDINO	CA	92408	CHA, HYON SONG	26091 HINCKLEY ST	LOMA LINDA	CA	92354
0281-132-34	1159 E DAVIDSON ST	SAN BERNARDINO	CA	92408	CASTRO JR, MANUEL	1666 GREENWICH RD	SAN DIMAS	CA	91773
0281-133-01	1821 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	HSU, PATRICK	12660 VALLEY VIEW LN	REDLANDS	CA	92373
0281-133-02	1813 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	HSU, PATRICK H	12660 VALLEY VIEW LN	REDLANDS	CA	92373
0281-133-03	1807 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	HSU, PATRICK C	12660 VALLEY VIEW LN	REDLANDS	CA	92373
0281-133-04	1151 COULSTON ST	SAN BERNARDINO	CA	92408	DY, JUSTINO	976 CAMELIA DR	HENDERSON	NV	89011
0281-133-28	1173 COULSTON ST	SAN BERNARDINO	CA	92408	GARAZA, PABLITO	22120 LADERA ST	GRAND TERRACE	CA	92313
0281-151-19	LAURELWOOD DR	SAN BERNARDINO	CA	92408	BERRY ALLEN L AND GRETA N TR	11530 HILLCREST ST	LOMA LINDA	CA	92354
0281-151-21	10275 TIPPECANOE ST	SAN BERNARDINO	CA	92408	BERRY ALLEN L AND GRETA N TR	11530 HILLCREST ST	LOMA LINDA	CA	92354
0281-151-27	1154 LEE ST	SAN BERNARDINO	CA	92408	JONES, CAROL J	830 W AVE	CALIMESA	CA	92320
0281-151-39	1185 LEE ST	SAN BERNARDINO	CA	92408	GAMBOA, ROGER	1185 LEE ST	SAN BERNARDINO	CA	92408
0281-151-41	1144 LEE ST	SAN BERNARDINO	CA	92408	HICKS, PATRICIA A	535 W STATE ST STE G	REDLANDS	CA	92373
0281-151-42	TIPPECANOE AVE	SAN BERNARDINO	CA	92408	HICKS, PATRICIA A	535 W STATE ST STE G	REDLANDS	CA	92373
0281-151-48	1165 LEE ST	SAN BERNARDINO	CA	92408	FARLEY, DONALD V	139 CARLIN LN	RIVERSIDE	CA	92507
0281-151-49	1857 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	VALENCIA, GLENN	1857 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408
0281-151-50	S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	BERRY ALLEN L AND GRETA N TR	11530 HILLCREST ST	LOMA LINDA	CA	92354
0281-151-59	1155 LEE ST	SAN BERNARDINO	CA	92408	ROJAS, FRANCISCO	1155 LEE ST	SAN BERNARDINO	CA	92408
0281-151-70	1164 LEE ST	SAN BERNARDINO	CA	92408	YANIT, ESTEBAN C	2019 S 2ND ST	ALHAMBRA	CA	91803
0281-151-71	1184 LEE ST	SAN BERNARDINO	CA	92408	MULJONO, TATANG	1184 LEE ST	SAN BERNARDINO	CA	92408
0281-151-75		SAN BERNARDINO	CA	92408	BERRY ALLEN L TR	11530 HILLCREST ST	LOMA LINDA	CA	92354
0281-152-02	1165 E LAURELWOOD DR	SAN BERNARDINO	CA	92408	GROVER, WIMBLERY C	643 W BASE LINE ST	SAN BERNARDINO	CA	92410
0281-152-42	1915 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	WENZEL, LEOPOLD EDUARDO	1460 EDGEHILL LN	REDLANDS	CA	92373
0281-152-43	10341 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	THRIFTY OIL CO	13116 IMPERIAL HWY	SANTA FE SPRINGS	CA	90670
0281-161-41	1185 E ROSEWOOD DR	SAN BERNARDINO	CA	92408	ROSEWOOD PROPERTIES RE LLC	308 W STATE ST STE 2B	REDLANDS	CA	92373
0281-311-01	1504 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	NEMEC, KATHY S	13053 CONNOR CT	YUCAIPA	CA	92399
0281-311-22	HARDT ST	SAN BERNARDINO	CA	92408	BURKE INVESTMENT CO L P	28 HAMMOND STE F	IRVINE	CA	92618
0281-311-24	1194 E BRIER DR	SAN BERNARDINO	CA	92408	LIAOU, ESTEFANI CHIA PEI	PO BOX 985	LOMA LINDA	CA	92354
0281-331-10	24564 E REDLANDS BLVD	SAN BERNARDINO	CA	92408	BUOYE, MARK	11522 CRAFTON AVE	REDLANDS	CA	92374

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0281-331-12	24576 E REDLANDS BLVD	SAN BERNARDINO	CA	92408	COBERLY, DENNIS	24588 REDLANDS BLVD	LOMA LINDA	CA	92354
0281-331-13	24586 E REDLANDS BLVD	SAN BERNARDINO	CA	92408	COBERLY, DENNIS	24586 REDLANDS BLVD	SAN BERNARDINO	CA	92408
0281-331-14	24588 E REDLANDS BLVD	SAN BERNARDINO	CA	92408	COBERLY, DENNIS	24586 REDLANDS BLVD	SAN BERNARDINO	CA	92408
0281-331-16	24632 E REDLANDS BLVD	SAN BERNARDINO	CA	92408	SYD LLC	24630 REDLANDS BLVD	LOMA LINDA	CA	92354
0281-351-31	1078 E HOSPITALITY LN	SAN BERNARDINO	CA	92408	TIPPONORTH SHOPS LLC	1149 POMONA RD STE E	CORONA	CA	92882
0281-351-32	1760 S TIPPECANOE AVE	SAN BERNARDINO	CA	92408	TIPPONORTH SHOPS LLC	1149 POMONA RD STE E	CORONA	CA	92882
0281-351-33	TIPPECANOE AVE	SAN BERNARDINO	CA	92408	TIPPECANOE NORTHPOINTE LLC	1149 POMONA RD STE E	CORONA	CA	92882
0281-351-34	TIPPECANOE AVE	SAN BERNARDINO	CA	92408	TIPPECANOE NORTHPOINTE LLC	1149 POMONA RD STE E	CORONA	CA	92882
0281-351-35	1003 E BRIER DR	SAN BERNARDINO	CA	92408	OPUS REAL ESTATE CA VII NORTHPOINTE	3500 AMERICAN BLVD W STE 200	BLOOMINGTON	MN	55431
0281-361-20	1099 E HOSPITALITY LN	SAN BERNARDINO	CA	92408	COSTCO WHOLESALE CORP	999 LAKE DR	ISSAQUAH	WA	98027
0281-401-08	1055 HARRIMAN PL	SAN BERNARDINO	CA	92408	ELISENAL LLC	701 B ST # 13TH	SAN DIEGO	CA	92101
0281-401-13		SAN BERNARDINO	CA	92408	REDEVELOPMENT AGENCY OF CITY OF SAN	201 N E ST STE 301	SAN BERNARDINO	CA	92401
0283-011-21	477 E REDLANDS BLVD	SAN BERNARDINO	CA	92408	PHAM, THANG Q	PO BOX 7000	ROLLING HILLS ESTATES	CA	90274
0283-011-22		SAN BERNARDINO	CA	92408	REDLANDS BOULEVARD TRUST	231 E ALESSANDRO BLVD STE A # A PMB 517 STE A	RIVERSIDE	CA	92508
0283-011-23	495 E REDLANDS BLVD	SAN BERNARDINO	CA	92408	REDLANDS BOULEVARD TRUST	231 E ALESSANDRO BLVD STE A # A PMB 517 STE A	RIVERSIDE	CA	92508
0283-011-24	2154 S GARDENA ST	SAN BERNARDINO	CA	92408	BELTRAN, GAYLE	2154 S GARDENA ST	SAN BERNARDINO	CA	92408
0283-011-25	2166 S GARDINA ST	LOMA LINDA	CA	92408	KAWELL, TERRY L	7050 ADAMS AVE	COLTON	CA	92324
0283-011-26	2180 S GARDENA ST	SAN BERNARDINO	CA	92408	KAWELL, TERRY L	7050 ADAMS AVE	COLTON	CA	92324
0283-011-27	470 E CAROLINE ST	SAN BERNARDINO	CA	92408	CHHAN, VUY	31599 BRENTWORTH ST	MENIFEE	CA	92584
0283-011-28	460 E CAROLINE ST	SAN BERNARDINO	CA	92408	DUTCIUC, MIHAI	4845 REDFIELD	YORBA LINDA	CA	92886
0283-012-16	455 E CAROLINE ST	SAN BERNARDINO	CA	92408	DE YONG JAMES L TRUST	720 VIA ROBLES	SAN LUIS OBISPO	CA	93401
0283-012-19	GARDENA ST	SAN BERNARDINO	CA	92408	DE YONG JAMES L TRUST	720 VIA ROBLES	SAN LUIS OBISPO	CA	93401
0283-012-29		SAN BERNARDINO	CA	92408	DE YONG JAMES L TRUST	720 VIA ROBLES	SAN LUIS OBISPO	CA	93401
0283-012-30	473 E CAROLINE ST	SAN BERNARDINO	CA	92408	DE YONG JAMES L TRUST	720 VIA ROBLES	SAN LUIS OBISPO	CA	93401
0283-021-05	565 REDLANDS BLVD	LOMA LINDA	CA	92408	SCHORK, KENNETH A	12818 FIRESTONE BLVD	SANTA FE SPRINGS	CA	90670
0283-021-06	REDLANDS BLVD	LOMA LINDA	CA	92408	SCHORK KENNETH A AND SHARON J TR	12818 FIRESTONE BLVD	SANTA FE SPRINGS	CA	90670
0283-021-13	594 E CAROLINE ST	SAN BERNARDINO	CA	92408	TRI-CITY INDUSTRIAL CENTER LLC	PO BOX 1210	REDLANDS	CA	92373

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0283-021-19	GARDENA ST	SAN BERNARDINO	CA	92408	MATLOCK TRANSPORTATION INC	PO BOX 63	SAN BERNARDINO	CA	92402
0283-021-20	542 E CAROLINE ST	SAN BERNARDINO	CA	92408	MATLOCK TRANSPORTATION INC	550 E CAROLINE ST	SAN BERNARDINO	CA	92408
0283-021-27		SAN BERNARDINO	CA	92408	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0283-021-28	685 E REDLANDS BLVD	SAN BERNARDINO	CA	92408	ABBOTS SPIRIT INC	685 E REDLANDS BLVD	SAN BERNARDINO	CA	92408
0283-021-29	CAROLINE ST	SAN BERNARDINO	CA	92408	LOMA LINDA UNIVERSITY	11145 ANDERSON ST # 203	LOMA LINDA	CA	92354
0283-021-30		SAN BERNARDINO	CA	92408	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0283-021-33	24339 REDLANDS BLVD	LOMA LINDA	CA	92408	SCHORK, KENNETH A	12818 FIRESTONE BLVD	SANTA FE SPRINGS	CA	90670
0283-021-34	REDLANDS BLVD	LOMA LINDA	CA	92408	SCHORK, KENNETH A	12818 FIRESTONE BLVD	SANTA FE SPRINGS	CA	90670
0283-021-40	575 E REDLANDS BLVD	SAN BERNARDINO	CA	92408	TRI-CITY INDUSTRIAL CENTER LLC	PO BOX 1210	REDLANDS	CA	92373
0283-021-42	REDLANDS BLVD	LOMA LINDA	CA	92408	BRIER, EVELYN P	PO BOX 127	SILVERTON	OR	97381
0283-021-43		SAN BERNARDINO	CA	92408	CITY OF RIVERSIDE	3900 MAIN ST	RIVERSIDE	CA	92522
0283-021-44	REDLANDS BLVD	SAN BERNARDINO	CA	92408	SCHORK FAMILY PARTNERSHIP L P	12818 FIRESTONE BLVD	SANTA FE SPRINGS	CA	90670
0283-021-45		SAN BERNARDINO	CA	92408	SCHORK KENNETH A AND SHARON J TR	12818 FIRESTONE BLVD	SANTA FE SPRINGS	CA	90670
0283-021-46	550 E CAROLINE ST	SAN BERNARDINO	CA	92408	THE LOMA LINDA HOUSING AUTHORITY	25541 BARTON RD	LOMA LINDA	CA	92354
0283-021-47	571 E REDLANDS BLVD	SAN BERNARDINO	CA	92408	FERGUSON, WALTER GRANT	571 E REDLANDS BLVD	SAN BERNARDINO	CA	92408
0283-031-02	2268 S GARDENA ST	SAN BERNARDINO	CA	92408	DE YONG JAMES L TRUST	720 VIA ROBLES	SAN LUIS OBISPO	CA	93401
0283-031-03	2278 S GARDENA ST	SAN BERNARDINO	CA	92408	DE YONG/ JAMES L TRUST	720 VIA ROBLES	SAN LUIS OBISPO	CA	93401
0283-031-04	2288 S GARDENA ST	SAN BERNARDINO	CA	92408	DE YONG JAMES L TRUST	720 VIA ROBLES	SAN LUIS OBISPO	CA	93401
0283-031-05	2296 S GARDENA ST	SAN BERNARDINO	CA	92408	BOLO, JIMMY B	2296 S GARDENA ST	SAN BERNARDINO	CA	92408
0283-031-07	2314 S GARDENA ST	SAN BERNARDINO	CA	92408	DE YONG JAMES L TRUST	720 VIA ROBLES	SAN LUIS OBISPO	CA	93401
0283-031-08	2324 S GARDENA ST	SAN BERNARDINO	CA	92408	DE YONG JAMES L TRUST	720 VIA ROBLES	SAN LUIS OBISPO	CA	93401
0283-031-10	GARDENA ST	SAN BERNARDINO	CA	92408	LOVE ROCK MINISTRIES INTERNATIONAL INC	2345 S WATERMAN AVE	SAN BERNARDINO	CA	92408
0283-031-11	GARDENA ST	SAN BERNARDINO	CA	92408	LOVE ROCK MINISTRIES INTERNATIONAL INC	2345 S WATERMAN AVE	SAN BERNARDINO	CA	92408
0283-031-12	GARDENA ST	SAN BERNARDINO	CA	92408	LOVE ROCK MINISTRIES INTERNATIONAL INC	2345 S WATERMAN AVE	SAN BERNARDINO	CA	92408
0283-031-13	GARDENA ST	SAN BERNARDINO	CA	92408	LOVE ROCK MINISTRIES INTERNATIONAL INC	2345 S WATERMAN AVE	SAN BERNARDINO	CA	92408
0283-031-14	GARDENA ST	SAN BERNARDINO	CA	92408	LOVE ROCK MINISTRIES INTERNATIONAL INC	2345 S WATERMAN AVE	SAN BERNARDINO	CA	92408
0283-031-15	GARDENA ST	SAN BERNARDINO	CA	92408	LOVE ROCK MINISTRIES INTERNATIONAL INC	2345 S WATERMAN AVE	SAN BERNARDINO	CA	92408
0283-031-16	2258 S GARDENA ST	SAN BERNARDINO	CA	92408	GARDENA NEW WORLD MINISTRY	2258 S GARDENA ST	SAN BERNARDINO	CA	92408
0283-031-17	2248 S GARDENA ST	SAN BERNARDINO	CA	92408	CASTRO, IGNACIO CUEVAS	2248 S GARDENA ST	SAN BERNARDINO	CA	92408

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0283-032-01	2359 S GARDENA ST	SAN BERNARDINO	CA	92408	DEJEU, MANUIL	2359 S GARDENA ST	SAN BERNARDINO	CA	92408
0283-032-02	2349 S GARDENA ST	SAN BERNARDINO	CA	92408	LOVE ROCK MINISTRIES INTERNATIONAL INC	2345 S WATERMAN AVE	SAN BERNARDINO	CA	92408
0283-032-03	2341 S GARDENA ST	SAN BERNARDINO	CA	92408	LOVE ROCK MINISTRIES INTERNATIONAL INC	2345 S WATERMAN AVE	SAN BERNARDINO	CA	92408
0283-032-04	2333 S GARDENA ST	SAN BERNARDINO	CA	92408	LIMON, JOSE LUIS	2333 S GARDENA ST	SAN BERNARDINO	CA	92408
0283-032-05	2315 S GARDENA ST	SAN BERNARDINO	CA	92408	HERNANDEZ, RUTH M	2315 S GARDENA ST	SAN BERNARDINO	CA	92408
0283-032-06	2305 S GARDENA ST	SAN BERNARDINO	CA	92408	LOVE ROCK MINISTRIES INTERNATIONAL	2345 S WATERMAN AVE	SAN BERNARDINO	CA	92408
0283-032-08	2285 S GARDENA ST	SAN BERNARDINO	CA	92408	LOVE ROCK MINISTRIES INTERNATIONAL	2345 S WATERMAN AVE	SAN BERNARDINO	CA	92408
0283-032-10	2265 S GARDENA ST	SAN BERNARDINO	CA	92408	MENDOZA, RICHARD	2265 S GARDENA ST	SAN BERNARDINO	CA	92408
0283-032-13	2223 S GARDENA ST	SAN BERNARDINO	CA	92408	TANG, KENY	2223 S GARDENA ST	SAN BERNARDINO	CA	92408
0283-032-15	551 E CAROLINE ST	SAN BERNARDINO	CA	92408	RAZZOUK, NAJI Y	11583 MURPHY ST	LOMA LINDA	CA	92354
0283-032-29	509 E CAROLINE ST	SAN BERNARDINO	CA	92408	ALPHA OMEGA 222 INC	6350 TERRACINA AVE	RANCHO CUCAMONGA	CA	91737
0283-032-30	539 E CAROLINE ST	SAN BERNARDINO	CA	92408	ION HOME SOLUTIONS INC	3703 CONNING ST	RIVERSIDE	CA	92509
0283-032-50	2255 S GARDENA ST	SAN BERNARDINO	CA	92408	PATULOT, EVELYN Z	2802 CANTERBURY TRL	ONTARIO	CA	91761
0283-032-51		SAN BERNARDINO	CA	92408	PATULOT, EVELYN Z	2802 CANTERBURY TRL	ONTARIO	CA	91761
0283-041-20		SAN BERNARDINO	CA	92408	LOMA, LINDA UNIVERSITY	FOUNDATION ADMINISTRATIO	LOMA LINDA	CA	92350
0283-041-21		SAN BERNARDINO	CA	92408	LOMA, LINDA UNIVERSITY	LOMA LINDA UNIVERSITY	LOMA LINDA	CA	92350
0283-041-31		SAN BERNARDINO	CA	92408	CITY OF RIVERSIDE	3922 MAIN ST	RIVERSIDE	CA	92522
0283-051-12		SAN BERNARDINO	CA	92408	UNION PACIFIC RAILROAD COMPANY	1400 DOUGLAS ST	OMAHA	NE	68179
0273-201-17	1164 E BASE LINE ST	SAN BERNARDINO	CA	92410	BAUTISTA, EDGARDO	14783 VAN NESS AVE	GARDENA	CA	90249
0273-202-10	1198 E BASE LINE ST	SAN BERNARDINO	CA	92410	AREC 1 LLC	PO BOX 29046	PHOENIX	AZ	85038
0273-202-12	1198 E BASE LINE ST	SAN BERNARDINO	CA	92410	AREC 1 LLC	PO BOX 29046	PHOENIX	AZ	85038
0273-202-15	1190 E BASE LINE ST	SAN BERNARDINO	CA	92410	AREC 1 LLC	PO BOX 29046	PHOENIX	AZ	85038
0273-202-16	1180 E BASE LINE ST	SAN BERNARDINO	CA	92410	MARTINEZ, AMADO	15526 LANARK ST	VAN NUYS	CA	91406
0273-202-17	1198 E BASE LINE ST	SAN BERNARDINO	CA	92410	AREC 1 LLC	PO BOX 29046	PHOENIX	AZ	85038
0273-202-18	1198 E BASE LINE ST	SAN BERNARDINO	CA	92410	AREC 1 LLC	PO BOX 29046	PHOENIX	AZ	85038
0273-202-44	1198 E BASE LINE ST	SAN BERNARDINO	CA	92410	AREC 1 LLC	PO BOX 29046	PHOENIX	AZ	85038
0273-211-13	1296 E BASE LINE ST	SAN BERNARDINO	CA	92410	VATAVE FAMILY TRUST	175 PRIMROSE PASS	NEWNAN	GA	30265
0273-212-24		SAN BERNARDINO	CA	92410	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0273-212-26	1326 E BASE LINE ST	SAN BERNARDINO	CA	92410	MILLER, ERIC	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0273-212-27	1320 E BASE LINE ST	SAN BERNARDINO	CA	92410	ALLEN, EDWARD B	PO BOX 2925	SAN BERNARDINO	CA	92406

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0273-212-90	25054 BASE LINE ST	SAN BERNARDINO	CA	92410	SULAEMAN, WIJAYA	3307 VALENCIA AVE	SAN BERNARDINO	CA	92404
0273-221-22	25134 BASE LINE ST	SAN BERNARDINO	CA	92410	FORD, GLENN	10853 LOCUST AVE	BLOOMINGTON	CA	92316
0273-221-24	25082 BASE LINE ST	SAN BERNARDINO	CA	92410	GRACIANA, ERIC	25082 BASE LINE ST	SAN BERNARDINO	CA	92410
0273-225-02	BASELINE ST	SAN BERNARDINO	CA	92410	ZARAGOZA, VICTOR H	25492 PACIFIC ST	SAN BERNARDINO	CA	92404
0273-225-07	25154 BASE LINE ST	SAN BERNARDINO	CA	92410	DIAZ, JUAN R	4156 MOUNTAIN DR	SAN BERNARDINO	CA	92407
0273-225-14	25180 BASE LINE ST	SAN BERNARDINO	CA	92410	SAN BERNARDINO REAL ESTATE VENTURES	25180 BASE LINE ST	SAN BERNARDINO	CA	92410
0273-232-27	1538 E BASE LINE ST	SAN BERNARDINO	CA	92410	ESPINOZA, MANUEL	28807 EDWARD VIEW DR	HIGHLAND	CA	92346
0273-232-28	1528 E BASE LINE ST	SAN BERNARDINO	CA	92410	DHA OPPORTUNITY 1-LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0273-232-29	1520 E BASE LINE ST	SAN BERNARDINO	CA	92410	NOCCHI, EUGENEN	1520 E BASE LINE ST	SAN BERNARDINO	CA	92410
0273-232-30	1512 E BASE LINE ST	SAN BERNARDINO	CA	92410	ZARAGOZA, CESAR	3910 LA HACIENDA DR	SAN BERNARDINO	CA	92404
0273-232-45	25260 BASE LINE ST	SAN BERNARDINO	CA	92410	MONTANO, DENNIS E	25260 BASE LINE ST	SAN BERNARDINO	CA	92410
0273-232-46	25276 BASE LINE ST	SAN BERNARDINO	CA	92410	MONTANO, DENNIS E	25260 BASE LINE ST	SAN BERNARDINO	CA	92410
0273-232-47	25282 BASE LINE ST	SAN BERNARDINO	CA	92410	ALAMO FENCE CO	1533 HEATHER LN	RIVERSIDE	CA	92504
0273-232-48		SAN BERNARDINO	CA	92410	ALBRITE FENCE CO	1533 HEATHER LN	RIVERSIDE	CA	92504
0273-232-49	25308 BASE LINE ST	SAN BERNARDINO	CA	92410	AHD LIMITED PARTNERSHIP	29848 LIVE OAK CANYON RD	REDLANDS	CA	92373
0278-041-66		SAN BERNARDINO	CA	92410	OUR LADY OF HOPE CATHOLIC COMMUNITY	1201 E HIGHLAND AVE	SAN BERNARDINO	CA	92404
0278-051-08	1066 N TIPPECANOE AVE	SAN BERNARDINO	CA	92410	TIPPECANOE DEVELOPMENTS LLC	34085 PACIFIC COAST HWY STE 206	DANA POINT	CA	92629
0278-051-11		SAN BERNARDINO	CA	92410	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0278-051-14	908 N TIPPECANOE AVE	SAN BERNARDINO	CA	92410	SHIN, MICHAEL H	1492 SONORA ST	SAN BERNARDINO	CA	92404
0278-051-27	950 N TIPPECANOE AVE	SAN BERNARDINO	CA	92410	CUBESMART LP	460 E SWEDES FORD RD STE 3000	WAYNE	PA	19087
0278-051-28	1180 E 9TH ST	SAN BERNARDINO	CA	92410	NADDOUR, GEORGE	10021 HIGHCLIFF DR	SANTA ANA	CA	92705
0278-063-01	1203 E BASE LINE ST	SAN BERNARDINO	CA	92410	HEAD, WINSTON W	1235 E BASE LINE ST	SAN BERNARDINO	CA	92410
0278-063-02	TIPPECANOE ST	SAN BERNARDINO	CA	92410	HEAD, WINSTON W	1235 E BASE LINE ST	SAN BERNARDINO	CA	92410
0278-063-03		SAN BERNARDINO	CA	92410	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0278-063-05	1355 E BASE LINE ST	SAN BERNARDINO	CA	92410	HMC DEVELOPMENT CO	6701 CENTER DR W #950	LOS ANGELES	CA	90045
0278-063-06		SAN BERNARDINO	CA	92410	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0278-063-07	1375 E BASE LINE ST	SAN BERNARDINO	CA	92410	HMC DEVELOPMENT CO	6701 CENTER DR W #950	LOS ANGELES	CA	90045
0278-063-08	1441 E BASE LINE ST	SAN BERNARDINO	CA	92410	U-STORE-IT LP	PO BOX 320099	ALEXANDRIA	VA	22320
0278-063-09	1469 E BASE LINE ST	SAN BERNARDINO	CA	92410	U-STORE-IT LP	PO BOX 320099	ALEXANDRIA	VA	22320
0278-063-10	1473 E BASE LINE ST	SAN BERNARDINO	CA	92410	U-STORE-IT LP	PO BOX 320099	ALEXANDRIA	VA	22320

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0278-063-11	1499 E BASE LINE ST	SAN BERNARDINO	CA	92410	CALVARY CHAPEL OF SAN BERNARDINO	1499 E BASE LINE ST	SAN BERNARDINO	CA	92410
0278-063-12	BASELINE ST	SAN BERNARDINO	CA	92410	MAXSON FOREST LLC	PO BOX 9316	SAN BERNARDINO	CA	92427
0278-063-23	E 9TH ST	SAN BERNARDINO	CA	92410	MTB INLAND EMPIRE PROPERTIES LLC	15 ENTERPRISE STE 445	ALISO VIEJO	CA	92656
0278-071-21	1321 E BASE LINE ST	SAN BERNARDINO	CA	92410	WEEKS, CLARENCE H	26152 EDGEMONT DR	HIGHLAND	CA	92346
0278-071-25	1295 E BASE LINE ST	SAN BERNARDINO	CA	92410	MORENO, JASMINE	6645 MISSION BLVD	RIVERSIDE	CA	92509
0278-071-26	1295 E BASE LINE ST	SAN BERNARDINO	CA	92410	MORENO, JASMINE	6645 MISSION BLVD	RIVERSIDE	CA	92509
0278-071-30		SAN BERNARDINO	CA	92410	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0278-071-31		SAN BERNARDINO	CA	92410	SAN BERNARDINO COUNTY FLOOD CONTROL	825 E 3RD ST	SAN BERNARDINO	CA	92415
0278-071-32		SAN BERNARDINO	CA	92410	SOUTHERN CALIFORNIA EDISON COMPANY	PO BOX 800	ROSEMEAD	CA	91770
0278-072-01	1025 N TIPPECANOE AVE UNIT 101	SAN BERNARDINO	CA	92410	MAXHEIMER, JAMES	22782 BRENTWOOD ST	GRAND TERRACE	CA	92313
0278-072-02	1025 N TIPPECANOE AVE UNIT 102	SAN BERNARDINO	CA	92410	CHANG, VIVAN	1486 WINTERWOOD LN	DIAMOND BAR	CA	91765
0278-072-03	1025 N TIPPECANOE AVE UNIT 103	SAN BERNARDINO	CA	92410	HUYNH, NU	16485 SYCAMORE ST	FOUNTAIN VALLEY	CA	92708
0278-072-04	1025 N TIPPECANOE AVE UNIT 104	SAN BERNARDINO	CA	92410	TRIUMPH ENTERPRISES LLC	216 S CITRUS ST	WEST COVINA	CA	91791
0278-072-05	1025 N TIPPECANOE AVE UNIT 105	SAN BERNARDINO	CA	92410	THOMPSON, HENRY L	2744 E MONROE ST	LONG BEACH	CA	90810
0278-072-06	1025 N TIPPECANOE AVE UNIT 106	SAN BERNARDINO	CA	92410	RAY, WELLI LU	1 LEAGUE UNIT 61560	IRVINE	CA	92602
0278-072-07	1025 N TIPPECANOE AVE UNIT 107	SAN BERNARDINO	CA	92410	WEAVER, SANDRA M	9201 SANTIAGO DR	HUNTINGTON BEACH	CA	92646
0278-072-08	1025 N TIPPECANOE AVE UNIT 108	SAN BERNARDINO	CA	92410	EMPIRE QUALITY RENTALS LLC	412 OLIVE AVE # 209	HUNTINGTON BEACH	CA	92648
0278-072-09	1025 N TIPPECANOE AVE UNIT 109	SAN BERNARDINO	CA	92410	HAN, GUOCHENG	1826 PINNACLE WAY	UPLAND	CA	91784
0278-072-10	1025 N TIPPECANOE AVE UNIT 110	SAN BERNARDINO	CA	92410	CHANG, PHILIP C	1826 PINNACLE WAY	UPLAND	CA	91784
0278-072-11	1025 N TIPPECANOE AVE UNIT 111	SAN BERNARDINO	CA	92410	IH2 PROPERTY WEST LP	291 CORPORATE TERRACE CIR	CORONA	CA	92879
0278-072-12	1025 N TIPPECANOE AVE UNIT 112	SAN BERNARDINO	CA	92410	ZHANG, HAI FENG HARRY	29 LOOKING GLASS	IRVINE	CA	92620
0278-072-13	1025 N TIPPECANOE AVE	SAN BERNARDINO	CA	92410	PETERSON, KERRY D	1025 N TIPPECANOE AVE	SAN BERNARDINO	CA	92410

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
	UNIT 113					UNIT 113			
0278-072-14	1025 N TIPPECANOE AVE UNIT 114	SAN BERNARDINO	CA	92410	PAN, KAREN	216 S CITRUS ST # 192	WEST COVINA	CA	91791
0278-072-15	1025 N TIPPECANOE AVE UNIT 115	SAN BERNARDINO	CA	92410	DELGADO, CARMEN	1025 N TIPPECANOE AVE UNIT 115	SAN BERNARDINO	CA	92410
0278-072-16	1025 N TIPPECANOE AVE UNIT 116	SAN BERNARDINO	CA	92410	ROBINSON, PEGGY	1025 N TIPPECANOE AVE UNIT 116	SAN BERNARDINO	CA	92410
0278-072-17	1025 N TIPPECANOE AVE UNIT 117	SAN BERNARDINO	CA	92410	MURRAY, REGINA	1025 N TIPPECANOE AVE UNIT 117	SAN BERNARDINO	CA	92410
0278-072-18	1025 N TIPPECANOE AVE UNIT 118	SAN BERNARDINO	CA	92410	RAICHANDANI, MICHAEL	240 S OLIVE ST APT 406B	LOS ANGELES	CA	90012
0278-072-19	1025 N TIPPECANOE AVE UNIT 119	SAN BERNARDINO	CA	92410	CJC DESIGN INC	140 N MAPLE ST STE 101	CORONA	CA	92880
0278-072-20	1025 N TIPPECANOE AVE UNIT 120	SAN BERNARDINO	CA	92410	TRIUMPH ENTERPRISE LLC	216 S CITRUS ST # 192	WEST COVINA	CA	91791
0278-072-21	1025 N TIPPECANOE AVE UNIT 121	SAN BERNARDINO	CA	92410	1025 N TIPPECANOE #121 TR	13549 FOREST WIND ST	CORONA	CA	92880
0278-072-22	1025 N TIPPECANOE AVE UNIT 122	SAN BERNARDINO	CA	92410	HAN, GUOJIE	1826 PINNACLE WAY	UPLAND	CA	91784
0278-072-23	1025 N TIPPECANOE AVE UNIT 123	SAN BERNARDINO	CA	92410	PERSEVERE CAPITAL TRUST	PO BOX 487	RIVERSIDE	CA	92502
0278-072-24	1025 N TIPPECANOE AVE UNIT 124	SAN BERNARDINO	CA	92410	LATTY, DAVID G	1025 N TIPPECANOE AVE UNIT 124	SAN BERNARDINO	CA	92410
0278-072-25	1025 N TIPPECANOE AVE UNIT 125	SAN BERNARDINO	CA	92410	LNC ENTERPRISES INC	14273 SETTLERS RIDGE CT	CORONA	CA	92880
0278-072-26	1025 N TIPPECANOE AVE UNIT 126	SAN BERNARDINO	CA	92410	GALINDO, AMBER NICOLE	1025 N TIPPECANOE AVE UNIT 126	SAN BERNARDINO	CA	92410
0278-072-27	1025 N TIPPECANOE AVE UNIT 155	SAN BERNARDINO	CA	92410	LARSON, JEREMY	1840 41ST AVE # 102262	CAPITOLA	CA	95010
0278-072-28	1025 N TIPPECANOE AVE UNIT 156	SAN BERNARDINO	CA	92410	LIN, SHOU CHEN	385 FAIRVIEW AVE	ARCADIA	CA	91007
0278-072-29	1025 N TIPPECANOE AVE UNIT 157	SAN BERNARDINO	CA	92410	ZHANG, HAI FENG HARRY	29 LOOKING GLASS	IRVINE	CA	92620
0278-072-30	1025 N TIPPECANOE AVE UNIT 158	SAN BERNARDINO	CA	92410	SUN, MEITAI	3610 S DOVER CT	ROWLAND HEIGHTS	CA	91748

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0278-072-31	1025 N TIPPECANOE AVE UNIT 159	SAN BERNARDINO	CA	92410	TRIUMPH ENTERPRISE LLC	216 S CITRUS ST # 192	WEST COVINA	CA	91791
0278-072-32	1025 N TIPPECANOE AVE UNIT 160	SAN BERNARDINO	CA	92410	TRIUMPH ENTERPRISE LLC	216 S CITRUS ST # 192	WEST COVINA	CA	91791
0278-072-33	1025 N TIPPECANOE AVE UNIT 201	SAN BERNARDINO	CA	92410	1025 N TIPPECANOE #201 TRUST	1826 PINNACLE WAY	UPLAND	CA	91784
0278-072-34	1025 N TIPPECANOE AVE UNIT 202	SAN BERNARDINO	CA	92410	REYES, LETICIA	15213 SANTA GERTRUDES AVE # W202	LA MIRADA	CA	90638
0278-072-35	1025 N TIPPECANOE AVE UNIT 203	SAN BERNARDINO	CA	92410	BARATH, ATHENA B	3198 GLENROSE AVE	ALTADENA	CA	91001
0278-072-36	1025 N TIPPECANOE AVE UNIT 204	SAN BERNARDINO	CA	92410	SANTOS, MAXINE A	1025 N TIPPECANOE AVE UNIT 204	SAN BERNARDINO	CA	92410
0278-072-37	1025 N TIPPECANOE AVE UNIT 205	SAN BERNARDINO	CA	92410	VERSA INTERNATIONAL LLC	12259 CRENSHAW BLVD # C	HAWTHORNE	CA	90250
0278-072-38	1025 N TIPPECANOE AVE UNIT 208	SAN BERNARDINO	CA	92410	Q INVESTMENT GROUP INC	5021 ALMADEN DR	LOS ANGELES	CA	90042
0278-072-39	1025 N TIPPECANOE AVE UNIT 209	SAN BERNARDINO	CA	92410	ZHANG, HAI FENG HARRY	29 LOOKING GLASS	IRVINE	CA	92620
0278-072-40	1025 N TIPPECANOE AVE UNIT 212	SAN BERNARDINO	CA	92410	Q INVESTMENT GROUP INC	1726 PEPPER ST APT E	ALHAMBRA	CA	91801
0278-072-41	1025 N TIPPECANOE AVE UNIT 213	SAN BERNARDINO	CA	92410	YANG, YANG	1826 PINNACLE WAY	UPLAND	CA	91784
0278-072-42	1025 N TIPPECANOE AVE UNIT 214	SAN BERNARDINO	CA	92410	1025 N TIPPECANOE #214 TRUST	1826 PINNACLE WAY	UPLAND	CA	91784
0278-072-43	1025 N TIPPECANOE AVE UNIT 215	SAN BERNARDINO	CA	92410	TOSHIYUKI, APRIL TANI	11512 KINGSLAND ST	LOS ANGELES	CA	90066
0278-072-44	1025 N TIPPECANOE AVE UNIT 216	SAN BERNARDINO	CA	92410	AYOUB, MALEK	240 FREEDOM AVE	UPLAND	CA	91786
0278-072-45	1025 N TIPPECANOE AVE UNIT 217	SAN BERNARDINO	CA	92410	1025 N TIPPECANOE #217 TRUST	1826 PINNACLE WAY	UPLAND	CA	91784
0278-072-46	1025 N TIPPECANOE AVE UNIT 218	SAN BERNARDINO	CA	92410	1025 N TIPPECANOE #218 TRUST	1826 PINNACLE WAY	UPLAND	CA	91784
0278-072-47	1025 N TIPPECANOE AVE UNIT 219	SAN BERNARDINO	CA	92410	SOLIMAN, SAMIR S	11400 HAVSTAD DR	LOMA LINDA	CA	92354
0278-072-48	1025 N TIPPECANOE AVE	SAN BERNARDINO	CA	92410	TRAN, ROSE	4089 MARGIE WAY	RIVERSIDE	CA	92509

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
	UNIT 220								
0278-072-49	1025 N TIPPECANOE AVE UNIT 221	SAN BERNARDINO	CA	92410	FLORES, JOSE	12917 LONGWORTH AVE	NORWALK	CA	90650
0278-072-50	1025 N TIPPECANOE AVE UNIT 222	SAN BERNARDINO	CA	92410	HAN, GUOJIE	1826 PINNACLE WAY	UPLAND	CA	91784
0278-072-51	1025 N TIPPECANOE AVE UNIT 223	SAN BERNARDINO	CA	92410	TOSHIYUKI, BEN YOSHIO	9 BLAKEMORE DR	LADERA RANCH	CA	92694
0278-072-52	1025 N TIPPECANOE AVE UNIT 226	SAN BERNARDINO	CA	92410	LIU, YADAI	1 LEAGUE UNIT 61560	IRVINE	CA	92602
0278-072-53	1025 N TIPPECANOE AVE UNIT 255	SAN BERNARDINO	CA	92410	DASHUTA, ERNST ERIK	25481 DODGE AVE APT 13	HARBOR CITY	CA	90710
0278-072-54	1025 N TIPPECANOE AVE UNIT 258	SAN BERNARDINO	CA	92410	CHANG, VIVIAN	1486 WINTERWOOD LN	DIAMOND BAR	CA	91765
0278-072-55	1025 N TIPPECANOE AVE UNIT 259	SAN BERNARDINO	CA	92410	HU, HELEN PAI LUN	8 VISTA DEL CERRO	ALISO VIEJO	CA	92656
0278-072-56	1025 N TIPPECANOE AVE UNIT 260	SAN BERNARDINO	CA	92410	Z & F INVESTMENT GROUP LLC	19606 SADDLECREST DR	WALNUT	CA	91789
0278-072-57	1025 N TIPPECANOE AVE	SAN BERNARDINO	CA	92410	BORDEAUX SB INC	29 TECHNOLOGY DR # 100	IRVINE	CA	92618
0278-073-01	1025 N TIPPECANOE AVE UNIT 127	SAN BERNARDINO	CA	92410	LINGAI, GBEANKOR G	1025 N TIPPECANOE AVE UNIT 127	SAN BERNARDINO	CA	92410
0278-073-02	1025 N TIPPECANOE AVE UNIT 128	SAN BERNARDINO	CA	92410	GARCIA, LORY ANN QUALLS	356 S SANDALWOOD AVE	RIALTO	CA	92376
0278-073-03	1025 N TIPPECANOE AVE UNIT 129	SAN BERNARDINO	CA	92410	VALDEZ, GUSTAVO CERDA	1025 N TIPPECANOE AVE UNIT 129	SAN BERNARDINO	CA	92410
0278-073-04	1025 N TIPPECANOE AVE UNIT 130	SAN BERNARDINO	CA	92410	FLOURNOY, CLENTIS PATRICIA	1246 REYES HERNANDEZ JR LN	COLTON	CA	92324
0278-073-05	1025 N TIPPECANOE AVE UNIT 131	SAN BERNARDINO	CA	92410	NU, HUYNH	16485 SYCAMORE ST	FOUNTAIN VALLEY	CA	92708
0278-073-18	1025 N TIPPECANOE AVE UNIT 144	SAN BERNARDINO	CA	92410	GRANT, DAVID	1345 GROVE AVE	UPLAND	CA	91786
0278-073-22	1025 N TIPPECANOE AVE UNIT 148	SAN BERNARDINO	CA	92410	CHEN, GEORGE E	217 CAROLWOOD DR	ARCADIA	CA	91006
0278-073-25	1025 N TIPPECANOE AVE UNIT 151	SAN BERNARDINO	CA	92410	LIU, YADAI	1 LEAGUE UNIT 61560	IRVINE	CA	92602
0278-073-26	1025 N TIPPECANOE AVE	SAN BERNARDINO	CA	92410	KUNG, DEBRA M	646 E WORKMAN ST	COVINA	CA	91723

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
	UNIT 152								
0278-073-27	1025 N TIPPECANOE AVE UNIT 153	SAN BERNARDINO	CA	92410	LIN, SHOUCHEN	385 FAIRVIEW AVE	ARCADIA	CA	91007
0278-073-28	1025 N TIPPECANOE AVE UNIT 154	SAN BERNARDINO	CA	92410	LOUCKS, ERIC SCOTT	16315 CONSTABLE RD	RIVERSIDE	CA	92504
0278-073-31	1025 N TIPPECANOE AVE UNIT 231	SAN BERNARDINO	CA	92410	HAN, GUOJIE	1826 PINNACLE WAY	UPLAND	CA	91784
0278-073-42	1025 N TIPPECANOE AVE UNIT 244	SAN BERNARDINO	CA	92410	MC INTOSH FAMILY TRUST	305 S BANDY AVE	WEST COVINA	CA	91790
0278-073-44	1025 N TIPPECANOE AVE UNIT 248	SAN BERNARDINO	CA	92410	TRIUMPH ENTERPRISE LLC	216 S CITRUS ST # 192	WEST COVINA	CA	91791
0278-073-49	1025 N TIPPECANOE AVE	SAN BERNARDINO	CA	92410	BORDEAUX SB INC	29 B TECHNOLOGY DR # 100	IRVINE	CA	92618
0278-081-19	1605 E BASE LINE ST	SAN BERNARDINO	CA	92410	KAZMA, KAROLIN	1201 E SIERRA MADRE AVE	GLENDORA	CA	91741
0278-081-21	E BASELINE ST	SAN BERNARDINO	CA	92410	KAZMA, KAROLIN	1201 E SIERRA MADRE AVE	GLENDORA	CA	91741
0278-081-24	1639 E BASE LINE ST	SAN BERNARDINO	CA	92410	AMAJOI, VINCENT C	3696 BROADMOOR BLVD	SAN BERNARDINO	CA	92404
0278-081-25	E BASELINE ST	SAN BERNARDINO	CA	92410	KAZMA, KAROLIN	1201 E SIERRA MADRE AVE	GLENDORA	CA	91741
0278-081-26	E BASELINE ST	SAN BERNARDINO	CA	92410	KAZMA, KAROLIN	1201 E SIERRA MADRE AVE	GLENDORA	CA	91741
0278-191-12	752 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	CASTELLANOS, DAVID R	752 TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0278-191-17	E 9TH ST	SAN BERNARDINO	CA	92410	HESPER, KARL	PO BOX 667	WOODLAND HILLS	CA	91365
0278-191-25	TIPPECANOE ST	SAN BERNARDINO	CA	92410	HESPER, KARL	PO BOX 667	WOODLAND HILLS	CA	91365
0278-191-28	E 9TH ST	SAN BERNARDINO	CA	92410	HESPER, KARL	PO BOX 667	WOODLAND HILLS	CA	91365
0278-191-34	7776 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	NORTHGATE ILP LLC	1215 4TH AVE STE 2400	SEATTLE	WA	98161
0278-201-01	S TIPPECANOE AVE	SAN BERNARDINO	CA	92410	TESTA FAMILY LIMITED PARTNERSHIP III	3552 RUNNING TIDE CIR	HUNTINGTON BEACH	CA	92649
0278-201-09	7689 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	TESTA FAMILY LIMITED PARTNERSHIP III	3552 RUNNING TIDE CIR	HUNTINGTON BEACH	CA	92649
0278-201-12	7687 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	TESTA FAMILY LIMITED PARTNERSHIP III	3552 RUNNING TIDE CIR	HUNTINGTON BEACH	CA	92649
0278-201-25	7607 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	RIVIELLO, MARC	PO BOX 905	REDWOOD CITY	CA	94064
0278-211-01	24918 VINE ST	SAN BERNARDINO	CA	92410	HANSEN, WAYNE N	24918 VINE ST	SAN BERNARDINO	CA	92410
0278-211-02	7729 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	STURM, HORST	7729 TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0278-211-03	24930 VINE ST	SAN BERNARDINO	CA	92410	VALDEZ, ISRAEL	24930 E VINE ST	HIGHLAND	CA	92410
0278-211-04	24938 VINE ST	SAN BERNARDINO	CA	92410	MCKAY, RON	37700 VALGIO DR	CALIMESA	CA	92320
0278-211-05	24948 VINE ST	SAN BERNARDINO	CA	92410	CERVANTEZ, BARBARA	801 SAN JACINTO ST	SAN BERNARDINO	CA	92408

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0278-211-18		SAN BERNARDINO	CA	92410	STURM, HORST	7729 TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0278-212-01	7779 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	BENAVIDES, MARION R	7779 TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0278-212-02	7773 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	COLUNGA, RAYMOND	7773 TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0278-212-03	7769 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	GONZALES, SANTOS A	1120 COUNTRY CLUB DR	RIVERSIDE	CA	92506
0278-212-04	24917 VINE ST	SAN BERNARDINO	CA	92410	VASQUEZ, CONCEPCION	24917 VINE ST	SAN BERNARDINO	CA	92410
0278-212-05	24931 VINE ST	SAN BERNARDINO	CA	92410	DUNCAN, SHIRLEY A	24931 VINE ST	SAN BERNARDINO	CA	92410
0278-212-06	24939 VINE ST	SAN BERNARDINO	CA	92410	TRUJEQUE, CELIA L	24939 VINE ST	SAN BERNARDINO	CA	92410
0278-212-32	24948 7TH ST	SAN BERNARDINO	CA	92410	STARLITE MGMT VIII LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0278-212-33	24938 7TH ST	SAN BERNARDINO	CA	92410	AUGUSTINE, SHERYL A	24938 7TH ST	SAN BERNARDINO	CA	92410
0278-212-34	24930 7TH ST	SAN BERNARDINO	CA	92410	GONZALES, ROBERT B	24930 7TH ST	SAN BERNARDINO	CA	92410
0278-213-01	7815 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	V&B INVESTMENTS CORPORATION	10803 FOOTHILL BLVD STE 109	RANCHO CUCAMONGA	CA	91730
0278-213-02	24917 7TH ST	SAN BERNARDINO	CA	92410	GALLEGOS, ARMANDO	24917 7TH ST	SAN BERNARDINO	CA	92410
0278-213-03	24929 7TH ST	SAN BERNARDINO	CA	92410	LAI, WEN FANG	PO BOX 1615	TEMPLE CITY	CA	91780
0278-213-04	24937 7TH ST	SAN BERNARDINO	CA	92410	RODRIGUEZ, MIGUEL G	1758 E FOOTHILL DR	SAN BERNARDINO	CA	92404
0278-213-05	24947 7TH ST	SAN BERNARDINO	CA	92410	MP DIRECT INVESTMENTS LLC	5205 ROUTE 508	MORTON	WA	98356
0278-221-01		SAN BERNARDINO	CA	92410	JANKAY, STEPHEN DONALD	PO BOX 13310	PALM DESERT	CA	92255
0278-221-02	7867 TIPPECANOE AVE # 7877	SAN BERNARDINO	CA	92410	NARANJO, BLANCA E	1707 OLD CANYON DR	HACIENDA HEIGHTS	CA	91745
0278-221-03	7847 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	7847 TIPPECANOE LLC	173 SEBAGO LAKE DR	SEWICKLEY	PA	15143
0278-221-04	7829 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	7847 TIPPECANOE LLC	173 SEBAGO LAKE DR	SEWICKLEY	PA	15143
0278-221-24	24952 6TH ST	SAN BERNARDINO	CA	92410	JADE 7 INVESTMENTS LLC	19112 JASPER	TRABUCO CANYON	CA	92679
0278-271-01	24914 UNION ST	SAN BERNARDINO	CA	92410	MILLER, MARIE M	35732 DATE AVE	YUCAIPA	CA	92399
0278-271-02	24926 UNION ST	SAN BERNARDINO	CA	92410	TIPPAART, SUTEE	24926 UNION ST	SAN BERNARDINO	CA	92410
0278-271-03	24934 UNION ST	SAN BERNARDINO	CA	92410	MILLER, MARIE M	35732 DATE AVE	YUCAIPA	CA	92399
0278-271-04	24942 UNION ST	SAN BERNARDINO	CA	92410	ESCOBAR, EVARISTO GUITERREZ	584 SAN BENITO AVE	COLTON	CA	92324
0278-271-19	24931 E 9TH ST	SAN BERNARDINO	CA	92410	RUE, DUDLEY L	26994 14TH ST	HIGHLAND	CA	92346
0278-271-20	24943 E 9TH ST	SAN BERNARDINO	CA	92410	RUE, DUDLEY L	26994 14TH ST	HIGHLAND	CA	92346
0278-273-01		SAN BERNARDINO	CA	92410	CITY OF RIVERSIDE	3900 MAIN ST	RIVERSIDE	CA	92501
0278-273-02	24913 UNION ST	SAN BERNARDINO	CA	92410	NARANJO, BERTHA A	24913 UNION ST	SAN BERNARDINO	CA	92410
0278-273-03	24925 UNION ST	SAN BERNARDINO	CA	92410	MILLER, MARIE M	35732 DATE AVE	YUCAIPA	CA	92399

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0278-273-04	24933 UNION ST	SAN BERNARDINO	CA	92410	ESPINOSA JOHN REVOCABLE FAM TR	24933 UNION ST	SAN BERNARDINO	CA	92410
0278-273-05	24941 UNION ST	SAN BERNARDINO	CA	92410	DESAI, ANJALI	PO BOX 6545	ORANGE	CA	92863
0279-102-01	24869 6TH ST	SAN BERNARDINO	CA	92410	RAMIREZ, ANNAMARIE	24869 6TH ST	SAN BERNARDINO	CA	92410
0279-102-02	7910 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	RAMIREZ, ANNA MARIE	24869 6TH ST	SAN BERNARDINO	CA	92410
0279-102-03		SAN BERNARDINO	CA	92410	VARGAS EUFEMIA C TR	24869 6TH ST	SAN BERNARDINO	CA	92410
0279-102-05		SAN BERNARDINO	CA	92410	ALVAREZ, ALFREDO GONZALEZ	7952 TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0279-102-06	7938 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	ALVAREZ, ALFREDO GONZALEZ	7952 TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0279-102-07	7952 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	GONZALES, ALFREDO	7952 TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0279-102-08	7960 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	ALVAREZ, ALFREDO GONZALES	7952 TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0279-102-09	7976 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	OROZCO, RODOLFO FLORES	7976 TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0279-102-10	7990 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	GALLARDO, ROSINA	1167 N MOUNT VERNON AVE	SAN BERNARDINO	CA	92411
0279-102-11	5TH ST	SAN BERNARDINO	CA	92410	GALLARDO, ROSINA	1167 N MOUNT VERNON AVE	SAN BERNARDINO	CA	92411
0279-102-12	24876 5TH ST	SAN BERNARDINO	CA	92410	MARQUEZ, ANA	24577 MONTEREY AVE	SAN BERNARDINO	CA	92410
0279-102-13	24872 5TH ST	SAN BERNARDINO	CA	92410	SALAZAR, CARLOS	24872 5TH ST	SAN BERNARDINO	CA	92410
0279-102-14	24868 5TH ST # A-C	SAN BERNARDINO	CA	92410	TRAN, BACH V	5324 W 135TH ST	HAWTHORNE	CA	90250
0279-102-17	7948 SUNNYSIDE AVE	SAN BERNARDINO	CA	92410	MEDINA, NOE	7948 SUNNYSIDE AVE	SAN BERNARDINO	CA	92410
0279-102-20	7935 SUNNYSIDE AVE	SAN BERNARDINO	CA	92410	MIRANDA, ISMAEL	7545 VICTORIA AVE	HIGHLAND	CA	92346
0279-102-21	7929 SUNNYSIDE AVE	SAN BERNARDINO	CA	92410	GUZMAN, GONZALO	825 N LOWELL ST	SANTA ANA	CA	92703
0279-102-24	7937 SUNNYSIDE AVE	SAN BERNARDINO	CA	92410	SALAZAR, JORGE	7937 SUNNYSIDE AVE	SAN BERNARDINO	CA	92410
0279-102-25	7951 SUNNYSIDE AVE	SAN BERNARDINO	CA	92410	SKKR LLC	PO BOX 3785	PALOS VERDES PENINSULA	CA	90274
0279-102-26	7949 SUNNYSIDE AVE	SAN BERNARDINO	CA	92410	BAKER, LILLIAN	7949 SUNNYSIDE AVE	SAN BERNARDINO	CA	92410
0279-102-28	24853 6TH ST	SAN BERNARDINO	CA	92410	HOFFMANN, YIRA	14390 S AVE	YUMA	AZ	85365
0279-112-01	24811 5TH ST	SAN BERNARDINO	CA	92410	MARTINEZ, JESSE	PO BOX 6325	SANTA MARIA	CA	93456
0279-112-02	24883 5TH ST	SAN BERNARDINO	CA	92410	THE J B ALLEN FAMILY TRUST	PO BOX 574	PATTON	CA	92369
0279-112-03	8026 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	THE J B ALLEN FAMILY TRUST	PO BOX 574	PATTON	CA	92369
0279-112-04	8042 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	THE J B ALLEN FAMILY TRUST	PO BOX 574	PATTON	CA	92369
0279-112-05	8048 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	TORRES, CARLOS L	25444 VAN LEUVEN ST	LOMA LINDA	CA	92354
0279-112-06		SAN BERNARDINO	CA	92410	SOUTHEASTERN CALIF ASSN 7TH DAY ADV	PO BOX 8050	RIVERSIDE	CA	92515
0279-112-07	8062 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	SOUTHEASTERN CALIF ASSN 7TH DAY ADV	PO BOX 79990	RIVERSIDE	CA	92513
0279-112-08		SAN BERNARDINO	CA	92410	SOUTHEASTERN CALIF ASSN 7TH DAY ADV	PO BOX 8050	RIVERSIDE	CA	92515
0279-112-09	8076 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	SO CAL CON 7TH DAY ADVENTISTS	PO BOX 79990	RIVERSIDE	CA	92513

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0279-112-12	8075 SUNNYSIDE AVE	SAN BERNARDINO	CA	92410	ALVAREZ, JESUS	7624 CYPRESS AVE	FONTANA	CA	92336
0279-112-13	8065 SUNNYSIDE AVE	SAN BERNARDINO	CA	92410	EYGABROAD, SIEUZAAN	PO BOX 9277	SAN BERNARDINO	CA	92427
0279-112-14	8061 SUNNYSIDE AVE	SAN BERNARDINO	CA	92410	SMITH, THOMAS G	1314 E 35TH ST	SAN BERNARDINO	CA	92404
0279-112-15	8051 SUNNYSIDE AVE	SAN BERNARDINO	CA	92410	FLEMING, JACK L	8051 SUNNYSIDE AVE	SAN BERNARDINO	CA	92410
0279-112-16	8043 SUNNYSIDE AVE	SAN BERNARDINO	CA	92410	GONZALEZ, JAVIER ALVAREZ	8043 SUNNYSIDE AVE	SAN BERNARDINO	CA	92410
0279-112-17	8037 SUNNYSIDE AVE	SAN BERNARDINO	CA	92410	DIOURI, MOHCINE	PO BOX 81075	RSM	CA	92688
0279-112-18	8029 SUNNYSIDE AVE	SAN BERNARDINO	CA	92410	CERVANTES, ERIK	1088 N 9TH ST	COLTON	CA	92324
0279-112-19	8023 SUNNYSIDE AVE	SAN BERNARDINO	CA	92410	COLE, ALLEN B	22747 EL CENTRO RD	APPLE VALLEY	CA	92307
0279-112-21	24878 4TH ST	SAN BERNARDINO	CA	92410	VAZQUEZ, ARTURO	24878 4TH ST	SAN BERNARDINO	CA	92410
0279-112-23	24860 4TH ST	SAN BERNARDINO	CA	92410	CRAMP PROPERTIES L P	1370 N D ST APT 109	SAN BERNARDINO	CA	92405
0279-112-24	8090 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	RIVAS, RAFAEL	8090 TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0279-112-25	8092 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	VILA RICHARD FAMILY TR	742 TERRACE RD	SAN BERNARDINO	CA	92410
0279-122-02	24877 4TH ST	SAN BERNARDINO	CA	92410	LE, KHAI QUOC	3330 LA COSTA WAY	SAN JOSE	CA	95135
0279-122-03	8112 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	ARAGON, VICTOR	8118 TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0279-122-04	8118 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	ARAGON, VICTOR	8118 TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0279-122-08	8148 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	STEFAN, MARINELLA H	8148 TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0279-122-09	8160 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	INLAND VALLEY DEVELOPMENT AGENCY	294 S LELAND NORTON WAY	SAN BERNARDINO	CA	92408
0279-122-10		SAN BERNARDINO	CA	92410	INLAND VALLEY DEVELOPMENT AGENCY	294 S LELAND NORTON WAY	SAN BERNARDINO	CA	92408
0279-122-11		SAN BERNARDINO	CA	92410	INLAND VALLEY DEVELOPMENT AGENCY	294 S LELAND NORTON WAY	SAN BERNARDINO	CA	92408
0279-122-17	8139 SUNNYSIDE AVE	SAN BERNARDINO	CA	92410	WIERENGA, BRENDA	8139 SUNNYSIDE AVE	SAN BERNARDINO	CA	92410
0279-122-20	8123 SUNNYSIDE AVE	SAN BERNARDINO	CA	92410	OLVERA, MARIA CARMEN	2456 CASS PL HUNTINGTON PARK	SAN BERNARDINO	CA	90255
0279-122-23	8122 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	SPENCE, JANET A	8126 TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0279-122-25	8166 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	INLAND VALLEY DEVELOPMENT AGENCY	294 S LELAND NORTON WAY	SAN BERNARDINO	CA	92408
0279-122-27	4TH ST	SAN BERNARDINO	CA	92410	SELECT VENTURES INC	636 S 2ND AVE STE D	COVINA	CA	91723
0279-122-28	8140 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	SPSSM INVESTMENT II LP	4900 SANTA ANITA AVE STE 2C	EL MONTE	CA	91731
0279-123-01	TIPPECANOE ST	SAN BERNARDINO	CA	92410	TRINITY CHRISTIAN FELLOWSHIP CHURCH	8158 TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0279-123-02	8158 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	TRINITY CHRISTIAN FELLOWSHIP CHURCH	8158 TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0279-123-10		SAN BERNARDINO	CA	92410	WETZEL, LEE P	15335 VALLEY BLVD	FONTANA	CA	92335
0279-123-12	24916 3RD ST	SAN BERNARDINO	CA	92410	BANKS, MICHAEL H	24801 PLUMTREE CT	MORENO VALLEY	CA	92557
0279-123-15	E 3RD ST	SAN BERNARDINO	CA	92410	RIVERVIEW LIMITED ENTERPRISE LLC	PO BOX 8273	FOUNTAIN VALLEY	CA	92728

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0279-123-17		SAN BERNARDINO	CA	92410	WETZEL, LEE P	15335 VALLEY BLVD	FONTANA	CA	92335
0279-123-19	24936 3RD ST	SAN BERNARDINO	CA	92410	CHO, HYE SOOK	16791 CATENA DR	CHINO HILLS	CA	91709
0279-123-20		SAN BERNARDINO	CA	92410	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0279-123-21	3RD ST	SAN BERNARDINO	CA	92410	BANKS, MICHAEL H	24801 PLUMTREE CT	MORENO VALLEY	CA	92557
0279-123-22		SAN BERNARDINO	CA	92410	WETZEL, LEE P	15335 VALLEY BLVD	FONTANA	CA	92335
0279-123-23		SAN BERNARDINO	CA	92410	HERTY, BARBARA A	18599 LAS FLORES ST	FOUNTAIN VALLEY	CA	92708
0279-131-01	7917 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	GARCIA, AMADOR	26772 UNION ST	HIGHLAND	CA	92346
0279-131-02	24939 6TH ST	SAN BERNARDINO	CA	92410	ORTEGA, JORGE A	24022 ROSELEAF PL	MORENO VALLEY	CA	92557
0279-131-03	6TH ST	SAN BERNARDINO	CA	92410	VILLA, RICHARD	742 TERRACE RD	SAN BERNARDINO	CA	92410
0279-131-20	24948 E 5TH ST	HIGHLAND	CA	92410	COBRA 28 NO 2 LP	4900 SANTA ANITA AVE #2C	EL MONTE	CA	91731
0279-131-21	24932 5TH ST	SAN BERNARDINO	CA	92410	SYED, ALI A	13127 SNOWDROP ST	CORONA	CA	92880
0279-131-22	24914 5TH ST	SAN BERNARDINO	CA	92410	ANDRAWIS, RAAFAT M	6979 PALM CT APT 119	RIVERSIDE	CA	92506
0279-131-23	7981 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	URIBE, CARLOS I	647 W 29TH ST	SAN BERNARDINO	CA	92405
0279-131-24	7973 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	URIBE, JOSE	647 W 29TH ST	SAN BERNARDINO	CA	92405
0279-131-25	7965 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	URIBE, CARLOS I	647 W 29TH ST	SAN BERNARDINO	CA	92405
0279-131-27	7945 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	TORRES, HECTOR	7945 TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0279-131-38	7955 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	POPE, CLARENCE D	PO BOX 1551	BEAVER	UT	84713
0279-141-01	24939 5TH ST	SAN BERNARDINO	CA	92410	BUSH, KEVIN	7768 STERLING AVE	SAN BERNARDINO	CA	92410
0279-141-02	24939 5TH ST	SAN BERNARDINO	CA	92410	5316 MAYWOOD LLC	6903 RITA AVE STE 212	HUNTINGTON PARK	CA	90255
0279-141-17	8137 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	PEDROZA, VICTOR M	8125 TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0279-141-18	8125 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	PEDROZA, VICTOR M	8125 TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0279-141-19	8115 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	SEABOARD INC	7768 STERLING AVE	SAN BERNARDINO	CA	92410
0279-141-20	8113 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	SEABOARD INC	7768 STERLING AVE	SAN BERNARDINO	CA	92410
0279-141-21	8125 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	PEDROZA, VICTOR M	8125 TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0279-141-22	TIPPECANOE	SAN BERNARDINO	CA	92410	SEABOARD INC	7768 STERLING AVE	SAN BERNARDINO	CA	92410
0279-141-23	TIPPECANOE	SAN BERNARDINO	CA	92410	SEABOARD INC	7768 STERLING AVE	SAN BERNARDINO	CA	92410
0279-141-32	8099 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	FILES, STAN	3348 N D ST	SAN BERNARDINO	CA	92405
0279-141-33		SAN BERNARDINO	CA	92410	FILES JR, MELVILLE STANLEY	3348 N D ST	SAN BERNARDINO	CA	92405
0279-141-38	8061 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	JUN, JONG JA	PO BOX 1011	HIGHLAND	CA	92346
0279-141-42		SAN BERNARDINO	CA	92410	JUN, JONG JA	PO BOX 1011	HIGHLAND	CA	92346
0279-141-43	8061 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	JUN, JONG JA	PO BOX 1011	HIGHLAND	CA	92346

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
0279-141-44	8055 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	JUN, JONG JA	PO BOX 1011	HIGHLAND	CA	92346
0279-141-45	8047 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	MONTALVO, VALDEMAR	6046 SAINT AUGUSTINE DR	RIVERSIDE	CA	92506
0279-141-46	8037 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	FAKHOURI, OSAMA	PO BOX 8234	ALTA LOMA	CA	91701
0279-141-52		SAN BERNARDINO	CA	92410	FILES JR, MELVILLE STANLEY	3348 N D ST	SAN BERNARDINO	CA	92405
0279-141-54	8107 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	SEABOARD INC	7768 STERLING AVE	SAN BERNARDINO	CA	92410
0279-141-55	8035 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	ALVAREZ, ALBERTO	PO BOX 936	SAN BERNARDINO	CA	92402
0279-141-56	8033 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	ALVAREZ, ALBERTO	8033 TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0279-141-59	8089 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	FILES JR, MELVILLE STANLEY	3348 N D ST	SAN BERNARDINO	CA	92405
0279-141-63	3RD ST	SAN BERNARDINO	CA	92410	YOUNG, DON	11572 LAWTON CT	LOMA LINDA	CA	92354
0279-141-64		SAN BERNARDINO	CA	92410	YOUNG, DON	11572 LAWTON CT	LOMA LINDA	CA	92354
0279-141-65		SAN BERNARDINO	CA	92410	SAN BERNARDINO CO FLOOD CONTROL DIST	825 E 3RD ST	SAN BERNARDINO	CA	92415
0279-141-67		SAN BERNARDINO	CA	92410	FELES, LUKAS T	25050 3RD ST	SAN BERNARDINO	CA	92410
0279-141-68		SAN BERNARDINO	CA	92410	BARRETT, MYRTLE	3348 N D ST	SAN BERNARDINO	CA	92405
0279-141-69	8069 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	FILES JR, MELVILLE STANLEY	3348 N D ST # 302	SAN BERNARDINO	CA	92405
0279-141-70	8071 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	FILES JR, MELVILLE STANLEY	3348 N D ST	SAN BERNARDINO	CA	92405
0279-141-72	8025 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	PARK, HEUNG JOO	24901 5TH ST	SAN BERNARDINO	CA	92410
0279-141-73	24927 5TH ST	SAN BERNARDINO	CA	92410	PARK, HEUNG JOO	24901 5TH ST	SAN BERNARDINO	CA	92410
0279-141-77	TIPPECANOE ST	SAN BERNARDINO	CA	92410	EMAMI, KAVOUS	730 S TEAL CIR	ANAHEIM	CA	92807
0279-301-19	1165 E 3RD ST	SAN BERNARDINO	CA	92410	MANSON, MARGARET	PO BOX 987	SAN BERNARDINO	CA	92402
0279-301-25	236 N TIPPECANOE AVE	SAN BERNARDINO	CA	92410	HUANG, GEORGE	2348 MOUNTAIN BROOK DR	HACIENDA HEIGHTS	CA	91745
0279-301-26	8286 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	LOPEZ-PULIDO, ALEJANDRA	8286 N TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0279-301-63	1175 E 3RD ST	SAN BERNARDINO	CA	92410	MURPHY, ROBERT L	1197 E 3RD ST	SAN BERNARDINO	CA	92410
0279-311-20	162 N TIPPECANOE AVE	SAN BERNARDINO	CA	92410	VALENZUELA, SERGIO JEHOVANY LOPEZ	162 N TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0279-311-21	8364 TIPPECANOE AVE	SAN BERNARDINO	CA	92410	JIANG, TING	8364 TIPPECANOE AVE	SAN BERNARDINO	CA	92410
0273-211-14	1280 W BASE LINE ST	SAN BERNARDINO	CA	92411	VATAVE FAMILY TRUST	175 PRIMROSE PASS	NEWNAN	GA	30265
0273-212-25	1338 W BASE LINE ST	SAN BERNARDINO	CA	92411	ALLEN SR, MICHAEL	3119 PEPPER TREE LN	SAN BERNARDINO	CA	92404
0273-221-23	1400 W BASE LINE ST	SAN BERNARDINO	CA	92411	GARCIA, OMAR	222 S RANCHO AVE SPC 34	SAN BERNARDINO	CA	92410
0273-232-26	1544 W BASE LINE ST	SAN BERNARDINO	CA	92411	FAY, JUDY A	PO BOX 3833	SAN BERNARDINO	CA	92413
0281-102-11	1499 S TIPPECANOE AVE	SAN BERNARDINO	CA	92415	COUNTY OF SAN BERNARDINO	825 E 3RD ST # 207	SAN BERNARDINO	CA	92415
0266-441-28	5458 JASMINE ST	SAN BERNARDINO	CA	92418	KLEITZ, KENNETH	5458 JASMINE ST	SAN BERNARDINO	CA	92407
0281-401-14	1065 HARRIMAN PL	SAN BERNARDINO	CA	92418	CALIFORNIA STATE	13502 HAMBURGER LN	BALDWIN PARK	CA	91706

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
259-100-024	7875 RECHE CANYON RD	RIVERSIDE	CA	92507	OBRIEN, PATRICK X	7875 RECHE CANYON RD	RIVERSIDE	CA	92507
421-080-001	36251 HIGHWAY 60	RIVERSIDE	CA	92507	COUNTY OF RIVERSIDE	PO BOX 1180	RIVERSIDE	CA	92502
532-130-004	3850 INDUSTRIAL AVE	HEMET	CA	92545	DEUTSCH CO ELECTRONIC COMPONENTS DIVISION	3850 INDUSTRIAL AVE	HEMET	CA	92545
532-130-014	3850 INDUSTRIAL AVE	HEMET	CA	92545	BANNING DEVELOPMENT LLC	11041 GOLD STAR LN	SANTA ANA	CA	92705
532-130-015	3850 INDUSTRIAL AVE	HEMET	CA	92545	BANNING DEVELOPMENT LLC	11041 GOLD STAR LN	SANTA ANA	CA	92705
009-615-338		MORENO VALLEY	CA	92555	LAMAR, ADVERTISING	1831 COMMERCE CTR E	SAN BERNARDINO	CA	92405
422-020-003	12070 THEODORE ST	MORENO VALLEY	CA	92555	JACKSON, ROBERT N	9087 ARROW RTE STE 200	RANCHO CUCAMONGA	CA	91730
422-020-004	12130 THEODORE ST	MORENO VALLEY	CA	92555	BAUTISTA, GENARO	12130 THEODORE ST	MORENO VALLEY	CA	92555
422-020-005	12140 THEODORE ST	MORENO VALLEY	CA	92555	DAVIS, JIMMY DEAN	12140 THEODORE ST	MORENO VALLEY	CA	92555
422-020-006	12150 THEODORE ST	MORENO VALLEY	CA	92555	ALMS, BRADLEY S	23281 GERBERA ST	MORENO VALLEY	CA	92553
422-020-007	12170 THEODORE ST	MORENO VALLEY	CA	92555	AGUAYO, RICARDO	12170 THEODORE ST	MORENO VALLEY	CA	92555
422-020-009		MORENO VALLEY	CA	92555	PROFESSORS HIGHLANDERSON PROP PARTNERS	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
422-020-010	12400 THEODORE ST	MORENO VALLEY	CA	92555	PROP, RACEWAY	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
422-040-008		MORENO VALLEY	CA	92555	RACEWAY PROPERTIES	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
422-040-010		MORENO VALLEY	CA	92555	PAUW, ROBERT J	2052 BRONSON WAY	RIVERSIDE	CA	92506
422-040-014		MORENO VALLEY	CA	92555	TRINH, STEVEN J	12179 WOODBRIAR DR	MORENO VALLEY	CA	92555
422-040-015		MORENO VALLEY	CA	92555	MWD	PO BOX 54153	LOS ANGELES	CA	90054
422-070-005		MORENO VALLEY	CA	92555	HF PROPERTIES	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
422-070-006		MORENO VALLEY	CA	92555	HF PROPERTIES	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
422-070-029	13100 THEODORE ST	MORENO VALLEY	CA	92555	LONG, MELVIN	13100 THEODORE ST	MORENO VALLEY	CA	92555
422-070-031		MORENO VALLEY	CA	92555	URENA, SOCRATES	22184 ALESSANDRO BLVD	MORENO VALLEY	CA	92553
422-070-032	13200 THEODORE ST	MORENO VALLEY	CA	92555	MADRIGAL, JERONIMO G	23362 STONY CREEK WAY	MORENO VALLEY	CA	92557
422-070-033	30050 DRACAEA AVE	MORENO VALLEY	CA	92555	HF PROPERTIES	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
422-080-001		MORENO VALLEY	CA	92555	HF PROPERTIES	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
422-080-002		MORENO VALLEY	CA	92555	HF PROPERTIES	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
422-080-003		MORENO VALLEY	CA	92555	HF PROPERTIES	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
422-080-004		MORENO VALLEY	CA	92555	HF PROPERTIES	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
422-130-001		MORENO VALLEY	CA	92555	HF PROPERTIES	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
422-180-002		MORENO VALLEY	CA	92555	PETROVICH, MARK F	17221 W WHITMORE HALL LN	SURPRISE	AZ	85387
422-180-004		MORENO VALLEY	CA	92555	SOUTHERN CALIFORNIA GAS CO	555 W 5TH ST	LOS ANGELES	CA	90013
422-180-005		MORENO VALLEY	CA	92555	PARGA, ERLINDA VACA	10201 TRASK AVE	GARDEN GROVE	CA	92843

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
422-180-006		MORENO VALLEY	CA	92555	PARGA, ERLINDA VACA	10201 TRASK AVE	GARDEN GROVE	CA	92843
422-180-007		MORENO VALLEY	CA	92555	PARGA, ERLINDA VACA	10201 TRASK AVE	GARDEN GROVE	CA	92843
422-180-008		MORENO VALLEY	CA	92555	PARGA, ERLINDA VACA	10201 TRASK AVE	GARDEN GROVE	CA	92843
422-200-001		MORENO VALLEY	CA	92555	AHOME REAL ESTATE	135 E LIVE OAK AVE STE 100	ARCADIA	CA	91006
422-200-004		MORENO VALLEY	CA	92555	COLLINS, MICHAEL	2502 WILLOW N # 208	SIGNAL HILL	CA	90806
422-200-005		MORENO VALLEY	CA	92555	AHOME REAL ESTATE	135 E LIVE OAK AVE STE 100	ARCADIA	CA	91006
422-200-006		MORENO VALLEY	CA	92555	KOMAI, CAROLYN M	14212 UXBRIDGE ST	WESTMINSTER	CA	92683
422-200-007		MORENO VALLEY	CA	92555	HIGUCHI, GRANT J	961 LAS ROSAS DR	WEST COVINA	CA	91791
422-200-011		MORENO VALLEY	CA	92555	HAGA, MASAO	2513 DESCANSO WAY	TORRANCE	CA	90504
422-200-013		MORENO VALLEY	CA	92555	LOPEZ, CIRENIA	3872 ROOSEVELT ST	RIVERSIDE	CA	92503
422-200-014		MORENO VALLEY	CA	92555	DUONG, TAI NGOC	DUONG KY NGOC	TEMPLE CITY	CA	91780
422-210-003		MORENO VALLEY	CA	92555	IWANAGA, TAYEKO	16617 WILTON PL	TORRANCE	CA	90504
422-210-010		MORENO VALLEY	CA	92555	AHOME REAL ESTATE LLC	12801 SCHABARUM AVE	IRWINDALE	CA	91706
422-220-006		MORENO VALLEY	CA	92555	GREER, JOETTA	28445 N OAK SPRINGS CYN	CANYON COUNTRY	CA	91351
422-220-007		MORENO VALLEY	CA	92555	GREER, JOETTA	28445 N OAK SPRINGS CYN	CANYON COUNTRY	CA	91351
422-220-008		MORENO VALLEY	CA	92555	CRAIG, CAROL H	26418 IRONWOOD AVE	MORENO VALLEY	CA	92555
422-220-009		MORENO VALLEY	CA	92555	WESTERN RIVERSIDE COUNTY REG CON AUTHORITY	3403 10TH ST STE 500	RIVERSIDE	CA	92501
422-220-018		MORENO VALLEY	CA	92555	COUNTY OF RIVERSIDE	PO BOX 1180	RIVERSIDE	CA	92502
423-250-001		MORENO VALLEY	CA	92555	DENA, ALTA DAIRY	4299 MACARTHUR BLVD STE 211	NEWPORT BEACH	CA	92660
423-250-002		MORENO VALLEY	CA	92555	HF PROPERTIES	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
423-250-007		MORENO VALLEY	CA	92555	HF PROPERTIES	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
423-250-008	30755 ALESSANDRO BLVD	MORENO VALLEY	CA	92555	HF PROPERTIES	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
423-250-009	30901 ALESSANDRO BLVD	MORENO VALLEY	CA	92555	HF PROPERTIES	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
423-250-013		MORENO VALLEY	CA	92555	SAN DIEGO GAS & ELECTRIC CO	8335 CENTURY PARK CT	SAN DIEGO	CA	92123
423-260-001		MORENO VALLEY	CA	92555	SOUTHERN CALIFORNIA GAS CO	555 W 5TH ST	LOS ANGELES	CA	90013
423-260-002		MORENO VALLEY	CA	92555	SKINNER PROP PARTNERS	17780 COLLINS AVE # 2ND	SUNNY ISLES BEACH	FL	33160
423-260-003		MORENO VALLEY	CA	92555	HF PROPERTIES	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
423-260-004		MORENO VALLEY	CA	92555	HF PROPERTIES	14225 CORPORATE WAY	MORENO VALLEY	CA	92553

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
423-260-005		MORENO VALLEY	CA	92555	HF PROPERTIES	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
423-260-006		MORENO VALLEY	CA	92555	SAN DIEGO GAS & ELECTRIC CO	8335 CENTURY PARK CT	SAN DIEGO	CA	92123
423-260-007		MORENO VALLEY	CA	92555	EASTGATE PROP PARTNERS	18140 COLLINS AVE	SUNNY ISLES BEACH	FL	33160
423-260-008		MORENO VALLEY	CA	92555	HF PROPERTIES	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
423-260-009		MORENO VALLEY	CA	92555	HF PROPERTIES	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
423-310-001		MORENO VALLEY	CA	92555	HF PROPERTIES	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
473-100-002		MORENO VALLEY	CA	92555	JAUREGUI, RAUL	1340 W ORANGETHORPE AVE	FULLERTON	CA	92833
473-100-022		MORENO VALLEY	CA	92555	MILLS, NANCY ELIZABETH	PO BOX 2850	BIG BEAR CITY	CA	92314
473-100-023	27050 VISTA SUELTO RD	MORENO VALLEY	CA	92555	BARRON, BALTAZAR	PO BOX 1688	COLTON	CA	92324
473-100-024		MORENO VALLEY	CA	92555	HALLIGAN, MARCIA S	10502 GROVE OAK DR	SANTA ANA	CA	92705
473-100-026		MORENO VALLEY	CA	92555	SUNNYMEAD 240 LTD PARTNERSHIP	5837 DEER LAGOON RD	LANGLEY	WA	98260
473-150-002		MORENO VALLEY	CA	92555	ALVAREZ, JOSE	11991 PERRIS BLVD	MORENO VALLEY	CA	92557
473-150-006	27700 LOCUST AVE	MORENO VALLEY	CA	92555	HOWE, MARGARET ELSPEETH	27700 LOCUST AVE	MORENO VALLEY	CA	92555
473-150-015		MORENO VALLEY	CA	92555	MENIFEE, PASSIVE PARTNER	31548 BLUFF DR	LAGUNA BEACH	CA	92651
473-150-025		MORENO VALLEY	CA	92555	MENIFEE, PASSIVE PARTNER	31548 BLUFF DR	LAGUNA BEACH	CA	92651
473-150-030	27780 LOCUST AVE	MORENO VALLEY	CA	92555	HAY, SCOTT D	27780 LOCUST AVE	MORENO VALLEY	CA	92555
473-150-033	27820 LOCUST AVE	MORENO VALLEY	CA	92555	NEVATT, CHARLES R	27820 LOCUST AVE	MORENO VALLEY	CA	92555
473-150-035	27840 LOCUST AVE	MORENO VALLEY	CA	92555	MENDOZA, LIZET	27840 LOCUST AVE	MORENO VALLEY	CA	92555
473-150-036	27880 LOCUST AVE	MORENO VALLEY	CA	92555	SAYRE, HAROLD R	27880 LOCUST AVE	MORENO VALLEY	CA	92555
473-150-037	27860 LOCUST AVE	MORENO VALLEY	CA	92555	BREITKREUZ, FREDERICK K	27860 LOCUST AVE	MORENO VALLEY	CA	92555
473-150-039	27960 LOCUST AVE	MORENO VALLEY	CA	92555	MCCARTHY KIMBELL, BARBARA	27960 LOCUST AVE	MORENO VALLEY	CA	92555
473-150-040	27900 LOCUST AVE	MORENO VALLEY	CA	92555	RODILLAS, NICHOLAS C	27900 LOCUST AVE	MORENO VALLEY	CA	92555
473-150-041	27920 LOCUST AVE	MORENO VALLEY	CA	92555	WARNER, RAY E	27920 LOCUST AVE	MORENO VALLEY	CA	92555
473-150-042	27940 LOCUST AVE	MORENO VALLEY	CA	92555	TRESSLER, JONATHEN F	27940 LOCUST AVE	MORENO VALLEY	CA	92555
473-150-043		MORENO VALLEY	CA	92555	EASTERN, MUNICIPAL DIST	PO BOX 8300	PERRIS	CA	92572
473-150-050		MORENO VALLEY	CA	92555	SUNNYMEAD 240 LTD PARTNERSHIP	10502 GROVE OAK DR	SANTA ANA	CA	92705
473-150-051		MORENO VALLEY	CA	92555	SUNNYMEAD 240 LTD PARTNERSHIP	10502 GROVE OAK DR	SANTA ANA	CA	92705
473-150-052		MORENO VALLEY	CA	92555	TEMPEST	930 EUCLID ST APT 204	SANTA MONICA	CA	90403
473-150-053		MORENO VALLEY	CA	92555	SUNNYMEAD 240 LTD PARTNERSHIP	10502 GROVE OAK DR	SANTA ANA	CA	92705
473-150-066	27675 LOCUST AVE	MORENO VALLEY	CA	92555	CARTER, KENNETH ALLEN	27675 LOCUST AVE	MORENO VALLEY	CA	92555
473-150-067	11378 TRUST WAY	MORENO VALLEY	CA	92555	WILLIAMS, RANDALL D	11378 TRUST WAY	MORENO VALLEY	CA	92555

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
473-150-079		MORENO VALLEY	CA	92555	MONACO, PATRICK M	PO BOX 4608	RANCHO CUCAMONGA	CA	91729
473-150-080	27601 LOCUST AVE	MORENO VALLEY	CA	92555	NIEVES, JOSE LUIS	27601 LOCUST AVE	MORENO VALLEY	CA	92555
473-150-093	11399 MORENO BEACH DR	MORENO VALLEY	CA	92555	KELLEY, L C	11399 MORENO BEACH DR	MORENO VALLEY	CA	92555
473-171-022		MORENO VALLEY	CA	92555	CHEN, FEN YIN	48 E LONGDEN AVE	ARCADIA	CA	91006
473-174-001	28985 LOCUST AVE	MORENO VALLEY	CA	92555	BUOYE, STEVE	PO BOX 942	MENTONE	CA	92359
473-174-002		MORENO VALLEY	CA	92555	CO, MARCELLO	16571 SADDLEBROOK LN	MORENO VALLEY	CA	92551
473-174-003		MORENO VALLEY	CA	92555	CHANG, CHIU HUA	1980 HUNTINGTON DR	SAN MARINO	CA	91108
473-174-004		MORENO VALLEY	CA	92555	CHANG, CHIU HUA	1980 HUNTINGTON DR	SAN MARINO	CA	91108
473-174-008		MORENO VALLEY	CA	92555	CO, MARCELLO	16571 SADDLEBROOK LN	MORENO VALLEY	CA	92551
473-174-009		MORENO VALLEY	CA	92555	EASTERN, MUNICIPAL DIST	PO BOX 8300	PERRIS	CA	92572
473-180-001	28191 LOCUST AVE	MORENO VALLEY	CA	92555	STANTON, KEVIN	28191 LOCUST AVE	MORENO VALLEY	CA	92555
473-180-002	11277 WEBER AVE	MORENO VALLEY	CA	92555	SMITH, JULIE	11277 WEBER AVE	MORENO VALLEY	CA	92555
473-180-003	11287 WEBER AVE	MORENO VALLEY	CA	92555	MUIR, JOHN R	13566 GARCIA AVE	CHINO	CA	91710
473-180-004	11299 WEBER AVE	MORENO VALLEY	CA	92555	LOSS, DE W	3957 SAN MARCOS AVE	RIVERSIDE	CA	92504
473-180-035	11300 WEBER AVE	MORENO VALLEY	CA	92555	LALONDE, ARLENE T	26683 SUN CITY BLVD	SUN CITY	CA	92586
473-180-036	11288 WEBER AVE	MORENO VALLEY	CA	92555	PENALOZA, RICARDO	11288 WEBER AVE	MORENO VALLEY	CA	92555
473-180-037	11278 WEBER AVE	MORENO VALLEY	CA	92555	LODARSKI, MATTHEW D	11278 WEBER AVE	MORENO VALLEY	CA	92555
473-180-038	11266 WEBER AVE	MORENO VALLEY	CA	92555	HERNANDEZ, TONY T	11266 WEBER AVE	MORENO VALLEY	CA	92555
473-180-039	28125 LOCUST AVE	MORENO VALLEY	CA	92555	DELGADO, AGUSTIN	28125 LOCUST AVE	MORENO VALLEY	CA	92555
473-180-040	11260 CARRIE LN	MORENO VALLEY	CA	92555	JACOBS, RUSSELL ROBERT	11260 CARRIE LN	MORENO VALLEY	CA	92555
473-180-041	28155 LOCUST AVE	MORENO VALLEY	CA	92555	MCKEE, TOM E	28155 LOCUST AVE	MORENO VALLEY	CA	92555
473-200-010	11150 REDLANDS BLVD	MORENO VALLEY	CA	92555	CITY OF MORENO VALLEY	PO BOX 88005	MORENO VALLEY	CA	92552
473-210-001		MORENO VALLEY	CA	92555	CITY OF MORENO VALLEY	PO BOX 88005	MORENO VALLEY	CA	92552
473-210-005		MORENO VALLEY	CA	92555	BRISENO, JUAN	1567 WOOD RD	RIVERSIDE	CA	92508
473-210-006	29004 HIGHLAND BLVD	MORENO VALLEY	CA	92555	ALMOND, GARY W	29004 HIGHLAND BLVD	MORENO VALLEY	CA	92555
473-210-007	29100 HIGHLAND BLVD	MORENO VALLEY	CA	92555	JOHNSON, JOHN	29100 HIGHLAND BLVD	MORENO VALLEY	CA	92555
473-210-013	29051 HIGHLAND BLVD	MORENO VALLEY	CA	92555	FULGENZI, PATRICK T	29051 HIGHLAND BLVD	MORENO VALLEY	CA	92555
473-210-014	29101 HIGHLAND BLVD	MORENO VALLEY	CA	92555	AFANA, GEORGE J	29101 HIGHLAND BLVD	MORENO VALLEY	CA	92555
473-210-015	29163 HIGHLAND BLVD	MORENO VALLEY	CA	92555	PERREAULT, NATHAN CARL	29163 HIGHLAND BLVD	MORENO VALLEY	CA	92555
473-210-017	11390 REDLANDS BLVD	MORENO VALLEY	CA	92555	FLOWERS, KEITH O	11390 REDLANDS BLVD	MORENO VALLEY	CA	92555
473-210-018	11420 REDLANDS BLVD	MORENO VALLEY	CA	92555	ADKINS, RICHARD	11420 REDLANDS BLVD	MORENO VALLEY	CA	92555

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
473-220-001	11630 REDLANDS BLVD	MORENO VALLEY	CA	92555	WEAVER, PETER G	PO BOX 7101	MORENO VALLEY	CA	92552
473-220-014	29170 IRONWOOD AVE	MORENO VALLEY	CA	92555	INV, LCTH	1000 DOVE ST STE 300	NEWPORT BEACH	CA	92660
473-220-015	29300 IRONWOOD AVE	MORENO VALLEY	CA	92555	INV, LCTH	1000 DOVE ST STE 300	NEWPORT BEACH	CA	92660
473-220-016	11945 SINCLAIR ST	MORENO VALLEY	CA	92555	LCTH INVESTMENT LP	1000 DOVE ST STE 300	NEWPORT BEACH	CA	92660
473-220-017		MORENO VALLEY	CA	92555	PROFESSORS HIGHLANDERSON PROP PARTNERS	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
473-220-023		MORENO VALLEY	CA	92555	WESTERN RIVERSIDE CO REGIONAL CONS AUTH	3133 MISSION INN AVE	RIVERSIDE	CA	92507
473-220-024		MORENO VALLEY	CA	92555	WESTERN RIVERSIDE CO REGIONAL CONS AUTH	3133 MISSION INN AVE	RIVERSIDE	CA	92507
473-220-025		MORENO VALLEY	CA	92555	WESTERN RIVERSIDE CO REGIONAL CONS AUTH	3133 MISSION INN AVE	RIVERSIDE	CA	92507
473-220-033	11860 REDLANDS BLVD	MORENO VALLEY	CA	92555	TORRES, THOMAS	11860 REDLANDS BLVD	MORENO VALLEY	CA	92555
473-220-036	29068 IRONWOOD AVE	MORENO VALLEY	CA	92555	HERN, LINDA K	29068 IRONWOOD AVE	MORENO VALLEY	CA	92555
473-220-038	11790 REDLANDS BLVD	MORENO VALLEY	CA	92555	ALVAREZ, JESUS	438 W ELM ST	ONTARIO	CA	91762
473-220-040	11810 REDLANDS BLVD	MORENO VALLEY	CA	92555	DAVENPORT, MICAH	11810 REDLANDS BLVD	MORENO VALLEY	CA	92555
473-220-041	11820 REDLANDS BLVD	MORENO VALLEY	CA	92555	BAKER, RICHARD A	11820 REDLANDS BLVD	MORENO VALLEY	CA	92555
473-220-042	11840 REDLANDS BLVD	MORENO VALLEY	CA	92555	RIDDLE, TODD	11840 REDLANDS BLVD	MORENO VALLEY	CA	92555
473-220-043		MORENO VALLEY	CA	92555	LOUCKS, JOHN W	12612 WILLOW TREE AVE	MORENO VALLEY	CA	92553
473-220-050	29110 JUNIPER AVE	MORENO VALLEY	CA	92555	LUCAS, BONNIE J	29110 JUNIPER AVE	MORENO VALLEY	CA	92555
473-220-065	29019 CARILLO CT	MORENO VALLEY	CA	92555	WILLIAMSON, CHERYL	28108 BELFRY CIR	MORENO VALLEY	CA	92555
473-220-067	29060 JUNIPER AVE	MORENO VALLEY	CA	92555	ORTIZ, EDUARDO ALEJANDRO	29060 JUNIPER AVE	MORENO VALLEY	CA	92555
473-220-068	29020 CARILLO CT	MORENO VALLEY	CA	92555	LICEA, ELSA	29020 CARILLO CT	MORENO VALLEY	CA	92555
473-220-069	29060 CARILLO CT	MORENO VALLEY	CA	92555	BUOYE, STEVE	PO BOX 942	MENTONE	CA	92359
473-220-071		MORENO VALLEY	CA	92555	YBARRA, EDWARD T	9155 PEORIA LN	MORENO VALLEY	CA	92557
473-220-072		MORENO VALLEY	CA	92555	OH, IL NAM	12061 SPENCER DR	GARDEN GROVE	CA	92841
473-230-001	11235 HERMINIA CT	MORENO VALLEY	CA	92555	WELLS, KARLA J	11235 HERMINIA CT	MORENO VALLEY	CA	92555
473-230-002	11213 HERMINIA CT	MORENO VALLEY	CA	92555	HAVADJIA, MAKIS	16705 MORNINGVIEW DR	RIVERSIDE	CA	92504
473-230-003	11187 HERMINIA CT	MORENO VALLEY	CA	92555	KRAUSE, MARIA ELENA	11187 HERMINIA CT	MORENO VALLEY	CA	92555
473-230-006	11188 HERMINIA CT	MORENO VALLEY	CA	92555	HOUGH, JACK W	11188 HERMINIA CT	MORENO VALLEY	CA	92555
473-230-007	11214 HERMINIA CT	MORENO VALLEY	CA	92555	GONZALEZ, SILVIA	11214 HERMINIA CT	MORENO VALLEY	CA	92555
473-230-008	11236 HERMINIA CT	MORENO VALLEY	CA	92555	ELIZONDO, JOSE	1903 GLENSTONE AVE	HACIENDA HEIGHTS	CA	91745
473-230-009		MORENO VALLEY	CA	92555	PEREZ, INOCENCIO	1356 BELLAVISTA DR	WALNUT	CA	91789
473-241-001	28011 LOCUST AVE	MORENO VALLEY	CA	92555	FONTNO, THERESA A	28011 LOCUST AVE	MORENO VALLEY	CA	92555
473-241-002	28031 LOCUST AVE	MORENO VALLEY	CA	92555	CRAMER, MICHAEL LAWRENCE	PO BOX 54	O BRIEN	OR	97534

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
473-241-003	28051 LOCUST AVE	MORENO VALLEY	CA	92555	BRODEUR, RICHARD	28051 LOCUST AVE	MORENO VALLEY	CA	92555
473-241-004	28075 LOCUST AVE	MORENO VALLEY	CA	92555	GRAY, RONALD ALAN	28075 LOCUST AVE	MORENO VALLEY	CA	92555
473-241-005	28095 LOCUST AVE	MORENO VALLEY	CA	92555	FEDERAL HOME LOAN MORTGAGE CORPORATION	7105 CORPORATE DR	PLANO	TX	75024
473-241-006	28115 LOCUST AVE	MORENO VALLEY	CA	92555	GIL, JUAN F	28115 LOCUST AVE	MORENO VALLEY	CA	92555
473-241-007	28010 MORREY LN	MORENO VALLEY	CA	92555	ZIMMERMAN, CHARLES	28010 MORREY LN	MORENO VALLEY	CA	92555
473-241-008	28030 MORREY LN	MORENO VALLEY	CA	92555	MIDDLETON, JOHN E	28030 MORREY LN	MORENO VALLEY	CA	92555
473-241-009	28050 MORREY LN	MORENO VALLEY	CA	92555	SMITH, DORIS	28050 MORREY LN	MORENO VALLEY	CA	92555
473-241-010	28074 MORREY LN	MORENO VALLEY	CA	92555	ANNAS, CAROL L	28074 MORREY LN	MORENO VALLEY	CA	92555
473-241-011	28094 MORREY LN	MORENO VALLEY	CA	92555	KELLY, DOUGLAS EDWARD	28094 MORREY LN	MORENO VALLEY	CA	92555
473-241-012	28120 MORREY LN	MORENO VALLEY	CA	92555	LARSON, JOHN	28120 MORREY LN	MORENO VALLEY	CA	92555
473-250-003		MORENO VALLEY	CA	92555	KUO, HAI MING	PO BOX 2843	MALIBU	CA	90265
473-250-011	28300 LOCUST AVE	MORENO VALLEY	CA	92555	BARNIDGE, MYRNA S	28300 LOCUST AVE	MORENO VALLEY	CA	92555
473-250-020	28400 LOCUST AVE	MORENO VALLEY	CA	92555	HARRINGTON, FRANK A	28400 LOCUST AVE	MORENO VALLEY	CA	92555
473-250-021	28340 LOCUST AVE	MORENO VALLEY	CA	92555	PARKER MARCOTTE, PATRICIA L	28340 LOCUST AVE	MORENO VALLEY	CA	92555
473-250-022	28450 LOCUST AVE	MORENO VALLEY	CA	92555	PARKER MARCOTTE, PATRICIA L	28340 LOCUST AVE	MORENO VALLEY	CA	92555
473-250-024	28440 LOCUST AVE	MORENO VALLEY	CA	92555	INMAN, WILLIAM J	28440 LOCUST AVE	MORENO VALLEY	CA	92555
473-250-025	28460 LOCUST AVE	MORENO VALLEY	CA	92555	ESQUIVEL, JONATHAN D	28460 LOCUST AVE	MORENO VALLEY	CA	92555
473-250-031		MORENO VALLEY	CA	92555	STRAUB DISTRIBUTING CO INC	26182 CALLE ROBERTO	SAN JUAN CAPISTRANO	CA	92675
473-250-036	28230 LOCUST AVE	MORENO VALLEY	CA	92555	NELSON, TERRY	28230 LOCUST AVE	RANCHO BELAGO	CA	92555
473-250-037	11225 WEBER AVE	MORENO VALLEY	CA	92555	DANNY, DAVID M	4500 E PACIFIC COAST HWY # 4TH	LONG BEACH	CA	90804
473-250-046	28360 LOCUST AVE	MORENO VALLEY	CA	92555	SALVADOR, ELENUEL Q	28360 LOCUST AVE	MORENO VALLEY	CA	92555
473-250-047	28330 LOCUST AVE	MORENO VALLEY	CA	92555	CARY, HAROLD D	28330 LOCUST AVE	MORENO VALLEY	CA	92555
473-250-055		MORENO VALLEY	CA	92555	CALIF, GTE GTE	PO BOX 152206	IRVING	TX	75015
473-250-059	11233 QUINCY ST	MORENO VALLEY	CA	92555	COVARRUBIAS, LUIS MIGUEL	11233 QUINCY ST	MORENO VALLEY	CA	92555
473-260-001	11185 RAYMOND RD	MORENO VALLEY	CA	92555	ROBERTS, KENNETH E	11185 RAYMOND RD	MORENO VALLEY	CA	92555
473-260-013	11180 RAYMOND RD	MORENO VALLEY	CA	92555	DORMAN, GENE E	11180 RAYMOND RD	MORENO VALLEY	CA	92555
473-260-014	11206 RAYMOND RD	MORENO VALLEY	CA	92555	JERNIGAN, FLETCHER LINWOOD	11206 RAYMOND RD	MORENO VALLEY	CA	92555
473-260-015	11230 RAYMOND RD	MORENO VALLEY	CA	92555	HERRINGTON, GEORGE	11230 RAYMOND RD	MORENO VALLEY	CA	92555
473-261-001	11225 RAYMOND RD	MORENO VALLEY	CA	92555	HANDE, JENS	11225 RAYMOND RD	MORENO VALLEY	CA	92555
473-290-010	11657 REDLANDS BLVD	MORENO VALLEY	CA	92555	WALTEMEYER, DAVID L	PO BOX 6098	MORENO VALLEY	CA	92554
473-290-015		MORENO VALLEY	CA	92555	MAGNOLIA LTD PARTNERSHIP	1000 DOVE ST STE 100	NEWPORT BEACH	CA	92660

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
473-290-028	11557 REDLANDS BLVD	MORENO VALLEY	CA	92555	CHURCH OF JESUS, CHRIST LDS	50 E NORTH TEMPLE # 22ND	SALT LAKE CITY	UT	84150
473-310-005	11823 REDLANDS BLVD	MORENO VALLEY	CA	92555	ZIEMER, CHARLES A	11823 REDLANDS BLVD	MORENO VALLEY	CA	92555
473-310-010	28891 GRELCK DR	MORENO VALLEY	CA	92555	MULLEN, TROY D	28891 GRELCK DR	MORENO VALLEY	CA	92555
473-310-011	11935 REDLANDS BLVD	MORENO VALLEY	CA	92555	SAAWYER, GREGORY FREEMAN	11935 REDLANDS BLVD	MORENO VALLEY	CA	92555
473-310-015	28940 IRONWOOD AVE	MORENO VALLEY	CA	92555	PRINCE, JASPER JOHN	34180 POWELL HILLS LOOP	SHEDD	OR	97377
473-310-016		MORENO VALLEY	CA	92555	SAWYER, MILDRED F	PO BOX 1587	HELENDALE	CA	92342
473-310-018	11810 HICKENLOOPER CT	MORENO VALLEY	CA	92555	RADLE, FREDERICK	11810 HICKENLOOPER CT	MORENO VALLEY	CA	92555
473-310-019	28920 GRELCK DR	MORENO VALLEY	CA	92555	PERCIVAL, RICHARD M	28920 GRELCK DR	MORENO VALLEY	CA	92555
473-310-022	11817 REDLANDS BLVD	MORENO VALLEY	CA	92555	RAMOS, MARCOS M	11817 REDLANDS BLVD	MORENO VALLEY	CA	92555
473-310-024	11813 HICKENLOOPER CT	MORENO VALLEY	CA	92555	SCHADT, RICHARD KELLY	11813 HICKENLOOPER CT	MORENO VALLEY	CA	92555
473-340-001	11247 BONNIE VIEW AVE	MORENO VALLEY	CA	92555	ODEN, LEONARD	11247 BONNIE VIEW AVE	MORENO VALLEY	CA	92555
473-340-002	11231 BONNIE VIEW AVE	MORENO VALLEY	CA	92555	BEELER, MELISSA ALLYSON	11231 BONNIE VIEW AVE	MORENO VALLEY	CA	92555
473-340-003	11215 BONNIE VIEW AVE	MORENO VALLEY	CA	92555	TERRELL, TYLEISA	11215 BONNIE VIEW AVE	MORENO VALLEY	CA	92555
473-340-004	11197 BONNIE VIEW AVE	MORENO VALLEY	CA	92555	SADLER, DOUGLAS L	11197 BONNIE VIEW AVE	MORENO VALLEY	CA	92555
473-340-009	11200 BONNIE VIEW AVE	MORENO VALLEY	CA	92555	PHIPPS, WILLIAM V	11200 BONNIE VIEW AVE	MORENO VALLEY	CA	92555
473-340-010	11216 BONNIE VIEW AVE	MORENO VALLEY	CA	92555	AMAYA, ARNOLD	11216 BONNIE VIEW AVE	MORENO VALLEY	CA	92555
473-340-011	11232 BONNIE VIEW AVE	MORENO VALLEY	CA	92555	MIRELES, REYMUNDO E	11232 BONNIE VIEW AVE	MORENO VALLEY	CA	92555
473-340-012	11248 BONNIE VIEW AVE	MORENO VALLEY	CA	92555	MEDRANO, ADRIAN	11248 BONNIE VIEW AVE	MORENO VALLEY	CA	92555
473-361-009	11186 ALDREN CT	MORENO VALLEY	CA	92555	SMITH, ARTHA R	11186 ALDREN CT	MORENO VALLEY	CA	92555
473-361-012	11187 NIGHT SHADOW DR	MORENO VALLEY	CA	92555	MARTIN, BILL W	11187 NIGHT SHADOW DR	MORENO VALLEY	CA	92555
473-362-003	11187 ALDREN CT	MORENO VALLEY	CA	92555	MORGAN, JACK L	11187 ALDREN CT	MORENO VALLEY	CA	92555
473-362-004	11186 TWILIGHT WAY	MORENO VALLEY	CA	92555	FOLEY, ANNE MARIE	11186 TWILIGHT WAY	MORENO VALLEY	CA	92555
473-363-004	11187 TWILIGHT WAY	MORENO VALLEY	CA	92555	RICHARDSON, JOHN F	11187 TWILIGHT WAY	MORENO VALLEY	CA	92555
473-363-005	11203 TWILIGHT WAY	MORENO VALLEY	CA	92555	LONG, JAMES T	11203 TWILIGHT WAY	MORENO VALLEY	CA	92555
473-363-006	11229 TWILIGHT WAY	MORENO VALLEY	CA	92555	FRANZ, RICHARD J	11229 TWILIGHT WAY	MORENO VALLEY	CA	92555
473-364-001	28793 MARK RD	MORENO VALLEY	CA	92555	BERRY, DEAN RANDAL	28793 MARK RD	MORENO VALLEY	CA	92555
473-364-002	28767 MARK RD	MORENO VALLEY	CA	92555	COUCH, KENNETH P	28767 MARK RD	MORENO VALLEY	CA	92555
473-364-005	28715 MARK RD	MORENO VALLEY	CA	92555	CRUZ, JUANMANUEL	28715 MARK RD	MORENO VALLEY	CA	92555
473-364-006	28689 MARK RD	MORENO VALLEY	CA	92555	BECK, ROBERT LEE	28689 MARK RD	MORENO VALLEY	CA	92555
473-364-007	28663 MARK RD	MORENO VALLEY	CA	92555	KROM, MARK I	28663 MARK RD	MORENO VALLEY	CA	92555
473-364-008	28637 MARK RD	MORENO VALLEY	CA	92555	SMITH, RICHARD W	28637 MARK RD	MORENO VALLEY	CA	92555
473-364-009	28741 MARK RD	MORENO VALLEY	CA	92555	LAKES, JESSE L	28741 MARK RD	MORENO VALLEY	CA	92555

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
473-365-003	11186 NIGHT SHADOW DR	MORENO VALLEY	CA	92555	GROUNDS, DUANE WILLIAM	11186 NIGHT SHADOW DR	MORENO VALLEY	CA	92555
473-391-001	11285 QUINCY ST	MORENO VALLEY	CA	92555	NORRIS GROUP COMMUNITY REINVESTMENT LP	1845 CHICAGO AVE STE C	RIVERSIDE	CA	92507
473-391-002	11305 QUINCY ST	MORENO VALLEY	CA	92555	HALE, DARRYL O	11305 QUINCY ST	MORENO VALLEY	CA	92555
473-391-019	11334 LADD AVE	MORENO VALLEY	CA	92555	HOLLOWAY III, DAVID ANDREW	PO BOX 9292	MORENO VALLEY	CA	92552
473-391-020	11312 LADD AVE	MORENO VALLEY	CA	92555	FRANKLIN, SOLEDAD M	11312 LADD AVE	MORENO VALLEY	CA	92555
473-391-021	11290 EDMONSON AVE	MORENO VALLEY	CA	92555	PEOPLES, DONALD J	11290 EDMONSON AVE	MORENO VALLEY	CA	92555
473-391-022		MORENO VALLEY	CA	92555	RIVERSIDE COUNTY FLOOD CONTROL	1995 MARKET ST	RIVERSIDE	CA	92501
473-391-023	28411 LOCUST AVE	MORENO VALLEY	CA	92555	ANDERSON, DIANE	28411 LOCUST AVE	MORENO VALLEY	CA	92555
473-391-024	28493 LOCUST AVE	MORENO VALLEY	CA	92555	YEUNG, CARSON	28493 LOCUST AVE	MORENO VALLEY	CA	92555
473-401-001	11291 EDMONSON AVE	MORENO VALLEY	CA	92555	GOMEZ, JOSE H	11291 EDMONSON AVE	MORENO VALLEY	CA	92555
473-401-002	11313 EDMONSON AVE	MORENO VALLEY	CA	92555	HANSON, HARLAN C	11313 EDMONSON AVE	MORENO VALLEY	CA	92555
473-401-003	11335 EDMONSON AVE	MORENO VALLEY	CA	92555	ROSS, DAVID T	11335 EDMONSON AVE	MORENO VALLEY	CA	92555
473-401-013	28295 LOCUST AVE	MORENO VALLEY	CA	92555	EWENS, JOHN F	28295 LOCUST AVE	MORENO VALLEY	CA	92555
473-401-017		MORENO VALLEY	CA	92555	HADDAD, ED	29848 LIVE OAK CANYON RD	REDLANDS	CA	92373
473-401-018	28361 LOCUST AVE	MORENO VALLEY	CA	92555	GARBOT, GLENN E	28361 LOCUST AVE	MORENO VALLEY	CA	92555
473-401-021		MORENO VALLEY	CA	92555	BRUNO, NICHOLAS V	28270 KALMIA AVE	MORENO VALLEY	CA	92555
473-411-001	11318 CROCKER CIR	MORENO VALLEY	CA	92555	TENORIO, RICHARD	11318 CROCKER CIR	MORENO VALLEY	CA	92555
473-411-002	11302 CROCKER CIR	MORENO VALLEY	CA	92555	WHITESIDE, HUESTON C	11302 CROCKER CIR	MORENO VALLEY	CA	92555
473-411-003	11272 CROCKER CIR	MORENO VALLEY	CA	92555	MCCALLICK, WILLIAM A	11272 CROCKER CIR	MORENO VALLEY	CA	92555
473-411-004	11271 CROCKER CIR	MORENO VALLEY	CA	92555	RCMV LLC	14427 MERIDIAN PKWY STE E	RIVERSIDE	CA	92518
473-411-005	11301 CROCKER CIR	MORENO VALLEY	CA	92555	RICE, CHRIS M	11317 CROCKER CIR	MORENO VALLEY	CA	92555
473-411-006	11317 CROCKER CIR	MORENO VALLEY	CA	92555	RICE, CHRISTOPHER	11317 CROCKER CIR	MORENO VALLEY	CA	92555
473-411-007	11316 LINDLEY LN	MORENO VALLEY	CA	92555	MCCAULEY, MICHAEL	11316 LINDLEY LN	MORENO VALLEY	CA	92555
473-411-008	11308 LINDLEY LN	MORENO VALLEY	CA	92555	RUIZ, ROSA	11308 LINDLEY LN	MORENO VALLEY	CA	92555
473-411-009	11270 LINDLEY LN	MORENO VALLEY	CA	92555	CARRIERE, BRIAN	11270 LINDLEY LN	MORENO VALLEY	CA	92555
473-412-001	11269 LINDLEY LN	MORENO VALLEY	CA	92555	LOPEZ, KIRK R	11269 LINDLEY LN	MORENO VALLEY	CA	92555
473-412-002	11299 LINDLEY LN	MORENO VALLEY	CA	92555	DHOUTI, LEHAD	11299 LINDLEY LN	MORENO VALLEY	CA	92555
473-412-003	11315 LINDLEY LN	MORENO VALLEY	CA	92555	MOUNTAIN SHADOW SUPPORT GROUP INC	135 VALLECITOS DE ORO STE D	SAN MARCOS	CA	92069
473-412-004	11316 EVANS CT	MORENO VALLEY	CA	92555	LOPEZ, TIM R	11316 EVANS CT	MORENO VALLEY	CA	92555
473-412-005	11308 EVANS CT	MORENO VALLEY	CA	92555	TAFOYA, LEO	11308 EVANS CT	MORENO VALLEY	CA	92555
473-412-006	11270 EVANS CT	MORENO VALLEY	CA	92555	UNDERWOOD, ROSE MARIE	11270 EVANS CT	MORENO VALLEY	CA	92555

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
473-412-007	11269 EVANS CT	MORENO VALLEY	CA	92555	BARRIOS, EVER	11269 EVANS CT	MORENO VALLEY	CA	92555
473-412-008	11299 EVANS CT	MORENO VALLEY	CA	92555	HARRIS, DEWAYNE EDWARD	11299 EVANS CT	MORENO VALLEY	CA	92555
473-412-009	11315 EVANS CT	MORENO VALLEY	CA	92555	PESQUEIRA, RICHARD	11315 EVANS CT	MORENO VALLEY	CA	92555
474-040-008		MORENO VALLEY	CA	92555	LIANG, AN	18902 TRUCKE WAY	WALNUT	CA	91789
478-220-001		MORENO VALLEY	CA	92555	HF PROPERTIES	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
478-220-014	13241 THEODORE ST	MORENO VALLEY	CA	92555	CRITES, EARL D	13241 THEODORE ST	MORENO VALLEY	CA	92555
478-220-015		MORENO VALLEY	CA	92555	PROP, SUNNYMEAD	PO BOX 186	EAST BRUNSWICK	NJ	8816
478-220-028	29826 COTTONWOOD AVE	MORENO VALLEY	CA	92555	PROP, SUNNYMEAD	PO BOX 186	EAST BRUNSWICK	NJ	8816
478-230-007	13631 THEODORE ST	MORENO VALLEY	CA	92555	PROP, SUNNYMEAD	PO BOX 186	EAST BRUNSWICK	NJ	8816
478-230-008		MORENO VALLEY	CA	92555	CLEARY, PAUL H	1614 VIA SAGE	SAN CLEMENTE	CA	92673
488-250-006		MORENO VALLEY	CA	92555	REDLANDS 8 PROP	14 ESTRELLA	IRVINE	CA	92614
488-250-007		MORENO VALLEY	CA	92555	EASTERN, MUNICIPAL DIST	PO BOX 8300	PERRIS	CA	92572
488-260-001		MORENO VALLEY	CA	92555	HALL, ROSALYNE	44835 VIA ESPERANZA	TEMECULA	CA	92590
488-260-002		MORENO VALLEY	CA	92555	HALL, ROSALYNE	44835 VIA ESPERANZA	TEMECULA	CA	92590
488-260-006	29263 IRONWOOD AVE	MORENO VALLEY	CA	92555	EVANGELICAL FREE CHURCH OF, MORENO VALLEY	29263 IRONWOOD AVE	MORENO VALLEY	CA	92555
488-260-009		MORENO VALLEY	CA	92555	INV, LCTH	1000 DOVE ST STE 300	NEWPORT BEACH	CA	92660
488-260-023		MORENO VALLEY	CA	92555	HF PROPERTIES	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
488-260-025		MORENO VALLEY	CA	92555	HF PROPERTIES	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
488-260-026		MORENO VALLEY	CA	92555	HF PROPERTIES	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
488-260-027		MORENO VALLEY	CA	92555	INV, LCTH	1000 DOVE ST STE 300	NEWPORT BEACH	CA	92660
488-260-028		MORENO VALLEY	CA	92555	OSULLIVAN, DOLORES	361 KINLEY ST	LA HABRA	CA	90631
488-260-029		MORENO VALLEY	CA	92555	GOSPEL, LIVING	6601 COMPTON AVE	LOS ANGELES	CA	90001
488-260-030		MORENO VALLEY	CA	92555	HF PROPERTIES	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
488-260-036		MORENO VALLEY	CA	92555	INV, LCTH	1000 DOVE ST STE 300	NEWPORT BEACH	CA	92660
488-260-037		MORENO VALLEY	CA	92555	RAMBOLDT, SONG	2 ROLLIG VIEW LN	FALLBROOK	CA	92028
488-260-038	29175 IRONWOOD AVE	MORENO VALLEY	CA	92555	TRINITY BAPTIST CHURCH OF SUNNYMEAD	29175 IRONWOOD AVE	MORENO VALLEY	CA	92555
488-350-010		MORENO VALLEY	CA	92555	PROP, SUNNYMEAD	PO BOX 186	EAST BRUNSWICK	NJ	8816
488-350-019		MORENO VALLEY	CA	92555	HF EDUCATIONAL PARTNERS	17780 COLLINS AVE	SUNNY ISLES BEACH	FL	33160
488-350-047		MORENO VALLEY	CA	92555	HF EDUCATIONAL PARTNERS	17780 COLLINS AVE	SUNNY ISLES BEACH	FL	33160
488-350-048		MORENO VALLEY	CA	92555	HF EDUCATIONAL PARTNERS	17780 COLLINS AVE	SUNNY ISLES BEACH	FL	33160

APPENDIX E (Continued)

APN	SITE ADDR	SITE CITY	SITE STATE	SITE ZIP	OWNER_NAME_1	MAIL ADDR	MAIL CITY	MAIL STATE	MAIL ZIP
488-350-049		MORENO VALLEY	CA	92555	HF EDUCATIONAL PARTNERS	17780 COLLINS AVE	SUNNY ISLES BEACH	FL	33160
488-350-051		MORENO VALLEY	CA	92555	HIGHLAND FAIRVIEW PARTNERS I	14225 CORPORATE WAY	MORENO VALLEY	CA	92553
474-040-004		MORENO VALLEY	CA	92557	DICK, RICHARD N	5035 PRINCESS ANNE RD	LA CANADA	CA	91011