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4.8 HYDROLOGY AND WATER QUALITY

Would the project:		Potentially Significant Impact	Potentially Significant Unless APMs Incorporated	Less than Significant Impact	No Impact
a.	Violate any other water quality standards or waste discharge requirements?	☐	☐	☑	☐
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)?	☐	☐	☐	☑
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?	☐	☐	☑	☐
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?	☐	☐	☐	☑
e.	Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☑	☐
f.	Otherwise substantially degrade water quality?	☐	☐	☑	☐
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?	☐	☐	☐	☑
h.	Place within a 100-year flood hazard area, structures that would impede or redirect flood flows?	☐	☐	☐	☑
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?	☐	☐	☐	☑
j.	Expose people or structures to inundation by seiche, tsunami or mud flow?	☐	☐	☐	☑

4.8.1 Introduction

This section of the PEA provides information about existing surface water, groundwater and analysis of potential impacts to hydrology, and water quality from construction, operation and

maintenance of the Proposed Project. The Proposed Project would result in less than significant impacts to hydrology and water quality with implementation of the Proposed Project's SWPPP, which is required by law, as well as SDG&E's *BMP Manual*.

4.8.2 Methodology

The hydrology and water quality in the Proposed Project area were evaluated by reviewing aerial photographs, FEMA maps for flood zones, and the *San Diego County General Plan*, in addition to the Biological Technical Report prepared for the Proposed Project. The San Diego RWQCB *Water Quality Control Plan for the San Diego Basin (9)* was reviewed to ensure compliance with state and local regulations. Wetland resources were identified during reconnaissance and habitat assessment surveys conducted in March 2012 and wetlands delineation field studies conducted in 2011 and 2012 (refer to Biological Technical Report included as Appendix 4.4-A).

4.8.3 Existing Conditions

In California, the regulation, protection and administration of water quality are carried out by the SWRCB and nine California RWQCBs. The Proposed Project is located within the San Diego Region governed by the San Diego RWQCB. The San Diego RWQCB, under the SWRCB, implements policies and programs that protect the quality of the regional water. These programs include preserving the existing water quality, enhancing water quality, and protecting the beneficial uses of regional water, as defined in the *Water Quality Control Plan for the San Diego Basin (9)*.

The San Diego Region includes most of San Diego County, parts of southwestern Riverside County and southwestern Orange County and is divided into 11 major hydrologic units. The Proposed Project is located within the San Dieguito hydrologic unit and the San Diego River hydrologic unit. Encompassing an area of about 350 square miles, the San Dieguito hydrologic unit includes the San Dieguito River and its tributaries, along with Santa Ysabel and Santa Maria Creeks, Lake Hodges, Sutherland and San Dieguito Reservoirs, and one coastal lagoon, the San Dieguito Slough. The San Diego River hydrologic unit encompasses an area of about 440 square miles, drained by the San Diego River. El Capitan, San Vicente, Cuyamaca, Jennings, and Murray reservoirs are the major storage facilities. San Vicente Reservoir, Murray Reservoir, Jennings, and Murray Reservoir store mainly Colorado River water, whereas, El Capitan mainly stores local runoff and some Colorado River water. Cuyamaca Reservoir stores only local runoff.

TL 637 is located within the unincorporated communities of Ramona and Santa Ysabel, California. The elevation range along TL 637 ranges from approximately 2,550 to 3,140 feet amsl.

The drainage features and wetland areas are fed by direct precipitation; dry season nuisance flows, stormwater runoff and/or snow melt from Volcan Mountain. The stream flow in the area of the Proposed Project is ephemeral and streams tend to become active after rainfall. The average monthly rainfall in the area varies from approximately 4.6 inches in January to less than 0.25 inch in June. Weather in the Proposed Project area is characterized by mild, wet winters and mild, dry summers, with most of the rainfall occurring between the months of November and

March. The topography of the area is varied, with streams generally occurring in the valleys between hills or in floodplain areas.

Four watersheds exist within the Proposed Project Survey Area: the Santa Maria, San Vicente, San Diego River, and Santa Ysabel watersheds (refer to Appendix 4.4-A of the Biological Resources section). The groundwater within the San Dieguito and San Diego River HUs in the vicinity of the Proposed Project site is characterized by the 27 groundwater basins that are produced from unconsolidated alluvial aquifer units. However, water demand is currently exceeding the amount of available groundwater resources in the region.

4.8.3.1 Regulatory Setting

According to the Biological Technical Report (Appendix 4.4-A) prepared for the Proposed Project, eleven poles (Pole Nos. P148, P149, P150, P103, P104, P105, P106, R107, P114, P152 and P129) are located within wet meadows that have been determined to be jurisdictional by the USACE and the San Diego RWQCB. Six poles (Pole Nos. R10, R169, R171, D167, R11, and R13) are located within a streambed/waters of the U.S. and State that has been determined to be jurisdictional by the CDFW, USACE, and the RWQCB. Steel plates will also be used to span over two jurisdictional areas to provide temporary access during construction. Project activity associated with all 17 poles and temporary steel plates to provide access will be carried out under non-notifying CWA Section 404 Nationwide Permit 12 issued by USACE, and a CWA Section 401 Certification from the RWQCB (File No. 11C-114). The temporary impacts (0.04 acre) associated with the removal of six poles within CDFW jurisdiction will not substantially adversely affect an existing fish or wildlife resource; therefore, a Streambed Alteration Agreement notification was not submitted.

The following sections describe applicable federal, state, and local water quality requirements.

Federal

Clean Water Act

The CWA (33 USC Section 1251 *et seq.*), formerly the Federal Water Pollution Control Act of 1972, was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and certain non-point sources discharges into surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). The Proposed Project is under the jurisdiction of the San Diego RWQCB.

Section 401 of the Clean Water Act

Section 401 of the CWA requires that any activity, including river or stream crossings during road, pipeline, or power line construction, which may result in a discharge into a State waterbody, must be certified by the RWQCB. This certification ensures that the proposed activity does not violate state and/or federal water quality standards.

Section 404 of the Clean Water Act

Under Section 404 of the CWA, USACE regulates the discharge of dredged and/or fill material into waters of the United States. Waters of the United States include navigable waterways and wetlands adjacent to navigable waterways, and non-navigable waterways and wetlands adjacent to non-navigable waters that are contiguous with navigable waterways. The term "waters of the United States" is defined by 33 CFR Part 328 and currently includes (1) all navigable waters (including all waters subject to the ebb and flow of the tide), (2) all interstate waters and wetlands, (3) all other waters (e.g., lakes, rivers, intermittent streams) that could affect interstate or foreign commerce, (4) all impoundments of waters mentioned above, (5) all tributaries to waters mentioned above, (6) the territorial seas, and (7) all wetlands adjacent to waters mentioned above.

Nationwide Permits

Nationwide Permits are general Section 404 permits for categories of activities which have minimal impact on aquatic resources and meet certain conditions. Nationwide Permit 12, Utility Line Activities, authorizes activities required for the construction, maintenance, repair and removal of utility lines and associated facilities in waters of the United States, provided the activities do not result in the loss of greater than one-half acre of waters of the United States. Nationwide Permit 12 requires a preconstruction notification to the USACE district engineer before beginning the activity if the proposed activity results in discharges that result in the loss of greater than one-tenth acre of waters of the United States. The Proposed Project's activity associated with the 17 poles in waters of the United States and temporary steel plates to provide access will not result in the loss of more than one-tenth acre of waters of the United States. The activity will therefore be carried out under non-notifying Nationwide Permit 12 issued by USACE.

National Flood Insurance Program

FEMA is responsible for determining flood elevations and floodplain boundaries based on USACE studies. FEMA is also responsible for distributing the Flood Insurance Rate Maps (FIRM) used in the National Flood Insurance Program (NFIP). These maps identify the locations of special flood hazard areas, including the 100-year floodplain. FEMA allows non-residential development in floodplains, but construction activities are restricted within flood hazard areas depending on the potential for flooding within each area. Federal regulations governing development in a floodplain are set forth in Title 44, Part 60 of the CFR and enable FEMA to require municipalities that participate in the NFIP to adopt certain flood hazard reduction standards for construction and development in 100-year floodplains.

Forest System Lands

The SWRCB designated the USFS as the Water Quality Management Agency for Forest System lands in California in 1981. The USFS meets its obligations for compliance with water quality standards by implementing state-certified and USEPA-approved BMPs. Practice 7-5 requires that Special Use Permits include measures to protect water quality, including conformance with other water quality agency permit requirements.

State

Streambed Alteration Agreements

California Fish and Wildlife Code Sections 1600–1616 require a Streambed Alteration Agreement for any project that may obstruct the natural flow of a river, stream, or lake; substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or deposit debris where it may pass into a river, stream, or lake. A project applicant must submit a complete notification package to CDFW describing the portions of a project that would:

- Substantially obstruct or divert the natural flow of a river, stream, or lake;
- Substantially change the bed, channel, or bank of a river, stream, or lake;
- Use any material from the bed, channel, or bank of a river, stream, or lake; or
- Deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

The impacts associated with the six poles within CDFW jurisdiction will not substantially adversely affect an existing fish or wildlife resource; therefore, a Streambed Alteration Agreement notification was not submitted.

California Porter Cologne Water Quality Control Act

The Porter Cologne Water Quality Control Act of 1967, Water Code Section 13000 et seq., requires the SWRCB and the nine RWQCBs to adopt water quality criteria to protect state waters. These criteria include the identification of beneficial uses, narrative and numerical water quality standards, and implementation procedures. The criteria for the project area are contained in the *Water Quality Control Plan for the San Diego Basin (9)*. Applicable constraints in the water quality control plans relate primarily to the avoidance of altering the sediment discharge rate of surface waters, and the avoidance of introducing toxic pollutants to the water resource. A primary focus of water quality control plans is to protect designated beneficial uses of waters, which range from drinking water quality to recreation and wildlife habitat. In addition, anyone proposing to discharge waste that could affect the quality of the waters of the state must make a report of the waste discharge to the RWQCB or SWRCB as appropriate, in compliance with Porter-Cologne.

National Pollutant Discharge Elimination System (NPDES) – Construction Stormwater Permits

The NPDES was authorized by the CWA and is administered in California by the SWRCB through the nine RWQCBs. The purpose of NPDES is to control the discharge of pollutants from point sources into waters of the United States. The SWRCB has issued a California Construction General Permit (Construction General Permit, Order No. 2009-009) under NPDES that applies to most construction activities in California. Coverage under the Construction General Permit is required for projects that disturb one acre or greater of soil, or less than one acre but part of a larger common plan of development or sale. The project applicant must submit a Notice of Intent to the SWRCB and a SWPPP that complies with the Construction General Permit requirements and receive a SWRCB-issued WDID number before starting construction activities. The project applicant must implement the SWPPP during construction, including

requirements for inspections and monitoring, and must revise the SWPPP and implement revisions as needed to protect storm water quality.

The SWPPP describes:

- The project location, site features, and the identification of materials and activities that may result in pollutant discharges;
- BMPs to be implemented during construction. The BMPs are selected to control erosion, discharge of sediments, and other potential impacts associated with construction activities;
- An inspection and maintenance program for BMPs; and
- A sampling and analysis plan for monitoring pollutant discharges to waterbodies.

The project applicant must submit a Notice of Termination to the SWRCB after completing a project subject to the Construction General Permit.

State Water Resources Control Board

The Proposed Project is within the San Diego Regional Board of the SWRCB. Each Regional Board adopts a Basin Plan intended to designate beneficial uses for surface and groundwaters, and sets narrative and numerical objectives for protection of the beneficial uses. Beneficial use designations include: Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), Industrial Process Supply (PROC), Industrial Service Supply (IND), Groundwater Recharge (GWR), Freshwater Replenishment (FRSH), Navigation (NAV), Hydropower Generation (POW), Contact Water Recreation (REC-1), Non-contact Water Recreation (REC-2), Commercial and Sport Fishing (COMM), Aquaculture (AQUA), Warm Freshwater Habitat (WARM), Cold Freshwater Habitat (COLD), Inland Saline Water Habitat (SAL), Estuarine Habitat (EST), Marine Habitat (MAR), Wildlife Habitat (WILD), Preservation of Biological Habitats of Special Significance (BIOL), Rare, Threatened, or Endangered Species (RARE), Migration of Aquatic Organisms (MIGR), Spawning, Reproduction, and/or Early, Development (SPWN), and Shellfish Harvesting (SHELL).

In addition to a general antidegradation water quality objective which basically states that water quality that is better than stated objectives shall be maintained, the San Diego RWQCB has specific inland water quality objectives for water temperature, agricultural supply beneficial use, ammonia, bacteria, biostimulatory substances (e.g., nitrogen and phosphorus), boron, chlorides, color, dissolved oxygen, floating material, fluoride, pH, inorganic chemicals, iron, manganese, methylene blue, nitrate, oil and grease, organic chemicals, sodium, pesticides, phenolic compounds, radioactivity, drinking water, sediment, suspended solids, sulfate, taste and odor, total dissolved solids, toxicity, toxic pollutants, trihalomethanes, and turbidity. There are also specific groundwater objectives listed by groundwater basin.

Local

County of San Diego Watershed Protection, Stormwater Management and Discharge Control Ordinance

San Diego County Code of Regulatory Ordinances Chapter 8 of Division 7 of Title 6 and the Stormwater Standards Manual were adopted in August 2003. The purposes of these ordinances are to:

- protect the health, safety, and general welfare of the County of San Diego residents;
- to protect water resources and to improve water quality;
- to cause the use of management practices by the County and its citizens that will reduce the adverse effects of polluted runoff discharges on waters of the state;
- to secure benefits from the use of stormwater as a resource; and
- to ensure the County is compliant with applicable state and federal law.

The ordinance contains discharge prohibitions and requirements that vary depending on the type of land use activity and location in the County. The Stormwater Standards Manual of the ordinance sets out in more detail, by project category, what dischargers must do to comply with the ordinance and to receive permits for projects and activities that are subject to the ordinance. The ordinance and Stormwater Standards Manual define the requirements that are legally enforceable by the County in the unincorporated area of San Diego County.

The *Ramona Community Plan* (2010) provides guidance for the community of Ramona and the surrounding area. The *Ramona Community Plan* is a portion of the *San Diego County General Plan* that provides goals and policies for the community.

The *Ramona Community Plan* contains the following relevant policies and goals:

> **Policy COS 1.1.6** Maintain watercourses with drainage areas of one to five square miles in their natural state, avoiding the use of pipes or concrete channels.

For all other policies related to hydrology and water quality, the *Ramona Community Plan* defers to the *County of San Diego General Plan*.

Central Mountain Subregional Plan

The *Central Mountain Subregional Plan* (2011) provides guidance to the communities of Cuyamaca, Descanso, Guatay, Mount Laguna, and Pine Valley, and covers an area of approximately 203,000 acres. The *Central Mountain Subregional Plan* is a portion of the *San Diego County General Plan* that provides goals and policies for that area of the county.

The *Central Mountain Subregional Plan* contains the following relevant goals and policies:

> Community Character Policy 6: Creeks, rivers, and wetlands shall be preserved as scenic open space and should be maintained in as natural a state as possible.

Water Supply and Service Policy 2: Projects that would adversely affect groundwater supply should not be permitted, or should be fully mitigated if allowed.

Water Supply and Service Policy 3: Projects that would adversely impact groundwater quality shall not be permitted.

North Mountain Subregional Plan

The *North Mountain Subregional Plan* (2011) provides guidance to the communities of Santa Ysabel, Warner Springs, Palomar Mountain, Mesa Grande, Sunshine Summit, Ranchita, and Oak Grove. As noted in the community plan, a majority of the area is characterized by large areas of open space with some scattered rural residential development. The *North Mountain Subregional Plan* is a portion of the *San Diego County General Plan* that provides goals and policies for the specific communities within the planning area.

The *North Mountain Subregional Plan* contains the following relevant goals and policies:

Land Use Policy 2: Require development to demonstrate compliance with Conservation and Open Space Element Policies COS 4.4 and 5.3 and that the groundwater supply will not be adversely impacted.

Conservation Policy 2: Cumulative effects of new development should be carefully regulated and the quality of groundwater constantly monitored.

Public Safety and Seismic Safety Policy 8: Encourage shaded fuel breaks and other forms of vegetation management to reduce fire damage.

County of San Diego General Plan

The *County of San Diego General Plan* provides direction for future growth in the unincorporated areas of San Diego County, and provides policies related to land use, mobility, conservation, housing, safety, and noise. The *County of San Diego General Plan Land* Use Element provides a framework for managing future development in the County so that it is thoughtful of the existing character of the current communities and the sensitive natural resources within the County.

The *County of San Diego General Plan* contains the following relevant policies:

- **COS-1.8 Multiple-Resource Preservation Areas.** Support the acquisition of large tracts of land that have multiple resource preservation benefits, such as biology, hydrology, cultural, aesthetics, and community character. Establish funding mechanisms to serve as an alternative when mitigation requirements would not result in the acquisition of large tracts of land.

- **COS-3.2 Minimize Impacts of Development.** Require development projects to:
    - Mitigate any unavoidable losses of wetlands, including its habitat functions and values; and

  - Protect wetlands, including vernal pools, from a variety of discharges and activities, such as dredging or adding fill material, exposure to pollutants such as nutrients, hydromodification, land and vegetation clearing, and the introduction of invasive species.

- **COS-4.1 Water Conservation.** Require development to reduce the waste of potable water through use of efficient technologies and conservation efforts that minimize the County's dependence on imported water and conserve groundwater resources.

- **COS-5.1 Impact to Floodways and Floodplains.** Restrict development in floodways and floodplains in accordance with policies in the Flood Hazards section of the Safety Element.

- **COS-5.5 Impacts of Development to Water Quality.** Require development projects to avoid impacts to the water quality in local reservoirs, groundwater resources, and recharge areas, watersheds, and other local water sources.

Water Quality Control Plan for the San Diego Basin (9)

The Proposed Project is located within the San Diego Region governed by the San Diego RWQCB. The San Diego RWQCB, under the SWRCB, implements policies and programs that protect the quality of the regional water; these programs include preserving the existing water quality, enhancing water quality, and protecting the beneficial uses of regional water. The regional plan that sets the standards for compliance is the *Water Quality Control Plan for the San Diego Basin (9)*. The Basin Plan was prepared in accordance with the criteria in the California Porter-Cologne Water Quality Control Act, and other pertinent state and federal rules and regulations.

The *Water Quality Control Plan for the San Diego Basin (9)* describes water quality objectives for surface water in the Proposed Project area. Wildlife habitat, municipal, industrial, and agricultural supplies, and recreation are among the beneficial uses that the objectives seek to protect. The quality of surface water is affected by stormwater runoff and discharges from industrial, commercial, agricultural, and residential activities in the region. The San Diego RWQCB uses permits and other programs to regulate and reduce pollution of surface waters.

4.8.3.2 Hydrology and Water Quality Setting

Surface Water and Groundwater Resources

San Diego County's watersheds and geologic nature are characterized by its lagoons, lakes, reservoirs, rivers, and creeks. These water bodies capture the region's surface water runoff and become a blend of natural runoff and imported water. In addition to supporting natural habitat and supplying residents with potable water, these water bodies supply water for fire suppression and serve as popular recreation areas. Watersheds support lakes and reservoirs, which offer a variety of recreational activities, including fishing, boating, sailing, bike and horseback riding, and picnicking.

Chambers Group scientists conducted surveys along the Proposed Project, targeting suspected jurisdictional areas identified during the literature review from aerial and USGS topographic maps. Potential USACE, RWQCB, and CDFW jurisdictional areas were field-checked for the presence of definable channels and/or wetland vegetation, riparian habitat, soils, and hydrology. Field checks were not limited to suspected jurisdictional areas identified during the literature review; the entire Proposed Project Survey Area was assessed. Waters of the United States were identified pursuant to criteria outlined in Section 401 and Section 404 of the CWA. "Waters of the State" regulated by CDFW were identified pursuant to criteria outlined in Section 1600 of the Fish and Game Code. Sixty-seven drainages or features, potentially subject to USACE, CDFW, and RWQCB jurisdiction, are located within the Proposed Project area. All but 17 of these features have been avoided.

Watersheds

Four watersheds exist within the Proposed Project Survey Area: the Santa Maria, San Vicente, San Diego River, and Santa Ysabel watersheds (refer to Appendix 4.4-A of the Biological Resources section). The Santa Maria watershed is located at the western end of the Proposed Project in the unincorporated community of Ramona. The San Vicente watershed begins at the origin of San Vicente Creek east of Littlepage Road and spans the survey area to Simon Park in the unincorporated community of Ramona. The San Diego River watershed originates at the San Diego River located in the unincorporated community of Santa Ysabel and is fed by rainwater and snowmelt from Volcan Mountain. The Santa Ysabel watershed originates in Volcan Mountain in the unincorporated community of Santa Ysabel and is fed by rainwater and snowmelt from Volcan Mountain.

Santa Maria Creek, San Vicente Creek, the San Diego River, and Santa Ysabel Creek are relatively permanent waters[1] leading to several reservoirs and lakes. Santa Maria Creek does not flow directly within the Proposed Project but is fed by several ephemeral drainages that direct surface water only immediately after rain events. San Vicente Creek originates within the Proposed Project; however, perennial flow does not establish until after the inflow from Dye Creek, which is outside the Proposed Project Survey Area. The San Diego River does not flow directly within the Proposed Project but is fed by several ephemeral drainages and Dye Creek.

Eleven poles (Pole Nos. P148, P149, P150, P103, P104, P105, P106, R107, P114, P152 and P129) are located within wet meadows that have been determined jurisdictional by USACE and RWQCB. Six poles (Pole Nos. R10, R169, R171, D167, R11, and R13) are located within a streambed/water of the Unites States adjacent to Creelman Road that has been determined jurisdictional by all three agencies, USACE, RWQCB and CDFW.

Precipitation

Rainfall across San Diego County is variable, with most rain falling from November to April. Generally, the average rainfall is highest in the mountains and least along the coast and in the desert. Most of the county experiences light rainfall, although some of the central mountain areas receive more than 30 inches per year. The average seasonal precipitation along the coast is 10 inches or less. The amount increases with elevation as moist air is lifted and rain falls over

[1] The USACE defines relatively permanent waters as waters that typically flow year-round or have continuous flow at least seasonally (i.e., for at least three months per year).

the mountains. Some reporting points in the Cuyamaca and Volcan Mountain measure more than 35 inches per year, with areas on Mt. Palomar receiving up to 45 inches. Totals diminish rapidly with decreasing elevation on the eastern slopes of the mountains (rain shadow), with some desert stations reporting as low as 2.5 inches per season.

Groundwater

There are three types of aquifers within San Diego County; fractured rock aquifers, alluvial and sedimentary aquifers, and desert basins. Fractured rock underlines approximately 73 percent of the unincorporated area of San Diego County. Water-producing fracture locations and orientations in fractured rock aquifers are difficult to identify and predict, making the characteristics of different aquifers vary significantly. Alluvial and sedimentary aquifers comprise 13 percent of the unincorporated area of San Diego County. These aquifers are usually found in river and stream valleys, near the coast line, around lagoons and in the intermountain valleys. Desert basins make up 14 percent of the unincorporated area of San Diego County. These basins are located in the easternmost portions of the county and are characterized by extremely limited recharge, but typically have large storage capacities.

Surface Waters

Six poles (Pole Nos. R10, R169, R171, D167, R11, and R13) are located within a streambed/water of the United States adjacent to Creelman Road that has been determined jurisdictional by all three agencies, USACE, RWQCB, and CDFW.

Dye Creek is the only perennial stream within the Proposed Project area. There are several intermittent drainages including drainages in the Proposed Project area; the remaining drainages are characterized as ephemeral drainage features.

Wetlands

A total of 11 wetland areas are within a 50 foot radius around the proposed pole sites and other facilities. All wetland areas observed within the survey area are disturbed due to grazing activities and are comprised primarily of non-native grasses with scattered sedge and rush species. The vegetation is low lying due to grazing activities and provides minimal cover for wildlife species.

Floodplains

The Proposed Project does not cross or lie within the 100-year flood zones of any river. Flood zone information for the Proposed Project area is located on FEMA FIRMs.

Dam Failure Inundation Areas

The OES is responsible for the identification of inundation areas for dam failures in California. The Proposed Project is not located within an inundation area for dam failure.

4.8.4 Potential Impacts

This section describes potential impacts to hydrology and water resources as a result of the Proposed Project. Potential impacts would be less than significant through compliance with regulatory requirements for protection of surface water quality, and implementation of the SWPPP and BMPs, all of which are design features of the Proposed Project.

4.8.4.1 Significance Criteria

Thresholds of impact significance were derived from Appendix G of the *CEQA Guidelines*. Under these guidelines, the Proposed Project could have a potentially significant impact to hydrology and water quality if it would:

a) Violate any water quality standards or waste discharge requirements;

b) Substantially deplete groundwater supplies or interferes 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);

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 that would result in substantial erosion or siltation on- or off-site;

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 that would result in flooding on- or off-site;

e) Create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;

f) Otherwise substantially degrade water quality;

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;

h) Place structures within a 100-year flood hazard area which would impede or redirect flood flows;

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; or

j) Cause inundation by seiche, tsunami, or mudflow.

4.8.4.2 Question 8a - Violate any water quality standards or waste discharge requirements?

Construction – Less than Significant Impact

The Proposed Project would not violate any water quality standards or waste discharge requirements. No new sources of point discharge water pollution would result from the proposed construction and upgrade of the existing power line.

The Proposed Project would disturb more than one acre and therefore requires coverage under an NPDES permit for storm water discharges during construction. SDG&E would obtain coverage under the Construction General Permit (Order No. 2009-009) and comply with its relevant requirements, including implementation of a SWPPP with BMPs for water quality protection. The Proposed Project would fall under the Linear Underground/Overhead Project (LUP) requirements of the Construction General Permit. LUP activities covered under the Construction General Permit include, but are not limited to, those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, poles, cables, wires, connectors, switching equipment, regulating equipment, transforming equipment, and associated ancillary facilities). This includes, but is not limited to: underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road re-establishment, cable/wire pull sites, substation construction, substructure installation, construction of foundations, pole installations, welding, concrete and/or pavement repair or replacement, and stockpile/borrow locations.

The Construction General Permit requires prevention of unauthorized discharges and implementation of a SWPPP with BMPs needed to prevent discharges from construction activities that would otherwise violate water quality standards. The Construction General Permit further requires inspections, monitoring, and reporting to ensure that BMPs are implemented and effective and modified if needed to ensure protection of water quality. SDG&E would implement BMPs consistent with the Construction General Permit requirements and its *BMP Manual*. The *SDG&E Subregional NCCP*, also contains protocols for avoiding and minimizing potential erosion and water quality issues. Specific requirements for LUPs are provided in the Order and Attachment A of the Construction General Permit (Order No. 2009-009). Other than the Construction General Permit, no waste discharge requirements apply to construction of the Proposed Project because no discharges other than stormwater are anticipated.

The Proposed Project would not violate any water quality standard or waste discharge requirement because SDG&E will comply with the regulatory requirements for protection of water quality, including implementation of the SWPPP and BMPs in accordance with SDG&E's *BMP Manual* and the *SDG&E Subregional NCCP*. Therefore, potential impacts would be less than significant.

Operation & Maintenance – No Impact

SDG&E currently maintains and operates existing electric power, distribution, and substation facilities throughout the Proposed Project site and the Proposed Project is the reconstruction of existing electric facilities within existing SDG&E ROW and Substation property. SDG&E's existing facilities and operations and maintenance activities are included in the baseline for evaluating the impacts of the Proposed Project. Operations and maintenance activities for the Proposed Project would decrease slightly compared to baseline conditions due to the increase reliability of the new power line components included in a typical wood to steel replacement project, the installation of fewer poles along the alignment, and the relocation of poles outside of jurisdictional features. Operation of the Proposed Project would not violate any water quality standards or waste discharge requirements. No new sources of point discharge water pollution would result from the operation or maintenance of the Proposed Project. Therefore, no impacts are anticipated.

4.8.4.3 Question 8b - Substantially deplete groundwater supplies or interferes 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)?

Construction – No Impact

The water demand from construction of the Proposed Project would be minor and short-term, would be met through existing municipal sources, and would not result in new ground water pumping. Surface disturbance would be limited and negligible compared to the affected watershed areas, so there would be no impact on ground water recharge.

Dewatering may be required during construction where localized shallow groundwater is encountered in structure foundation excavations or other project excavations. Dewatering may have localized effects on groundwater levels, but the effects would be isolated to a small area due to the short duration of pumping. Dewatering is not expected to affect area wells, which rely on deeper water-bearing zones. Potential dewatering on the Proposed Project is further discussed in Section 3.4.6. Pumped water that is not potentially contaminated with sediments or other materials would be discharged in accordance with requirements of the Construction General Permit. The water would be discharged near the extraction location and thereby returned to the local groundwater. Potentially contaminated water would be handled and disposed offsite in accordance with applicable state and federal laws. For these reasons, there would be no net deficit in aquifer volume or lowering of the groundwater table and no impact on ground water supplies or recharge. Therefore, no impacts related to groundwater supplies would occur.

Operation & Maintenance – No Impact

SDG&E currently maintains and operates existing electric power, distribution, and substation facilities throughout the Proposed Project site and the Proposed Project is the reconstruction of existing electric facilities within existing SDG&E ROW and Substation property. SDG&E's existing facilities and operations and maintenance activities are included in the baseline for evaluating the impacts of the Proposed Project. Operations and maintenance activities for the Proposed Project would decrease slightly compared to baseline conditions due to the increase reliability of the new power line components included in a typical wood to steel replacement project, the installation of fewer poles along the alignment, and the relocation of poles outside of jurisdictional features. Operation of the Proposed Project would not violate any water quality standards or waste discharge requirements. Any future potential maintenance related construction projects would be evaluated under G.O. 131-D and CEQA for purposes of assessing whether further CPUC approval is required. There would be no net deficit in aquifer volume or lowering of the groundwater table and no impact on ground water supplies or recharge. Therefore, no impacts related to groundwater supplies would occur.

4.8.4.4 Question 8c - 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 that would result in substantial erosion or siltation on- or off-site?

Construction – Less than Significant Impact

Eleven poles (Pole Nos. P148, P149, P150, P103, P104, P105, P106, R107, P114, P152 and P129) are located within wet meadows that have been determined to be jurisdictional by USACE and RWQCB. Six poles (Pole Nos. R10, R169, R171, D167, R11, and R13) are located within a streambed/waters of the U.S. and the State that has been determined to be jurisdictional by CDFW, USACE and RWQCB. Steel plates will also be used to span over two jurisdictional areas to provide temporary access during construction. Project activity associated with all 17 poles and temporary steel plates will be carried out under non-notifying Nationwide Permit 12 issued by USACE, and a Section 401 Certification from the RWQCB. The impacts associated with the removal of six poles within CDFW jurisdiction will not substantially adversely affect an existing fish or wildlife resource. Therefore, a Streambed Alteration Agreement notification was not submitted and impacts are less than significant.

In addition, appropriate BMPs will be implemented to prevent erosion and offsite sedimentation into the 17 potentially jurisdictional areas. With implementation of project design features and ordinary construction restrictions, including BMPs, the Proposed Project would not substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion or siltation onsite or offsite. Erosion and siltation would be controlled and minimized, as discussed above, through the implementation of SDG&E standard operating procedures and protocol and BMPs, to be documented in the SWPPP. Therefore, impacts would be less than significant.

Operation & Maintenance – No Impact

Once construction of the Proposed Project is complete, the operation and maintenance associated with the Proposed Project would not substantially alter the existing drainage pattern of the site or area. SDG&E currently maintains and operates existing electric power, distribution, and substation facilities throughout the Proposed Project site and the Proposed Project is the reconstruction of existing electric facilities within existing SDG&E ROW and Substation property. SDG&E's existing facilities and operations and maintenance activities are included in the baseline for evaluating the impacts of the Proposed Project. Operations and maintenance activities for the Proposed Project would decrease slightly compared to baseline conditions due to the increase reliability of the new power line components included in a typical wood to steel replacement project, the installation of fewer poles along the alignment, and the relocation of poles outside of jurisdictional features. Operation of the Proposed Project would not violate any water quality standards or waste discharge requirements. Any future maintenance-related construction projects would be evaluated under G.O. 131-D and CEQA for purposes of assessing whether further CPUC approval is required. Therefore, no impacts are anticipated.

4.8.4.5 Question 8d - 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 that would result in flooding on- or off-site?

Construction – No Impact

The Proposed Project would not substantially alter the existing drainage patterns of the affected areas in a manner that would result in flooding onsite or offsite. Minor road re-establishment of existing access roads may be required at the Proposed Project sites to ensure that existing access is adequate to accommodate installation of the new steel poles. However, such road work would be conducted only to maintain existing access roads that have since revegetated or rutted. These proposed road work and pole removal activities would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite. Therefore, no impacts related to flooding are anticipated.

Operation & Maintenance – No Impact

SDG&E currently maintains and operates existing electric power, distribution, and substation facilities throughout the Proposed Project site and the Proposed Project is the reconstruction of existing electric facilities within existing SDG&E ROW and substation property. SDG&E's existing facilities and operations and maintenance activities are included in the baseline for evaluating the impacts of the Proposed Project. Operations and maintenance activities for the Proposed Project would decrease slightly compared to baseline conditions due to the increase reliability of the new power line components included in a typical wood to steel replacement project, the installation of fewer poles along the alignment, and the relocation of poles outside of jurisdictional features. Operation of the Proposed Project would not violate any water quality standards or waste discharge requirements. Any future maintenance-related construction projects would be evaluated under G.O. 131-D and CEQA for purposes of assessing whether further CPUC approval is required. Therefore, no impacts are anticipated.

4.8.4.6 Question 8e - Create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Construction – Less than Significant Impact

The Proposed Project would not contribute a substantial amount of runoff that would exceed the capacity of the existing or planned storm water drainage systems. The Proposed Project would not increase impervious surfaces or otherwise alter the site so as to contribute to the volume of stormwater runoff on the sites. Additionally, in accordance with standard operating procedures and protocols, SDG&E would prepare a SWPPP and implement construction BMPs in order to avoid and minimize potential impacts to water quality. The Proposed Project would include changes to onsite grading and drainage but would not increase runoff or alter drainage patterns on- or off-site (see response to Question 8c, above). The Proposed Project would not adversely impact the capacity of existing storm water drainage systems because no substantive increase in runoff is expected and grading is designed to return runoff to existing drainages. As the Proposed Project will not result in the exceedance of the stormwater drainage capacity, the Proposed Project will not require modifications to the existing drainage systems.

SDG&E would comply with the Construction General Permit and would implement a SWPPP with BMPs for water quality protection. The Construction General Permit requires prevention of unauthorized discharges and implementation of BMPs needed to prevent discharges of polluted runoff. The Construction General Permit also requires inspections, monitoring, and reporting to ensure that polluted runoff is not occurring from the construction site.

SDG&E would implement BMPs in accordance with the Construction General Permit and its *BMP Manual*. Construction of the Proposed Project would not be a substantial source of polluted runoff considering the regulatory requirements for protection of water quality, including implementation of the SWPPP and BMPs. Therefore, potential impacts would be less than significant.

Operation & Maintenance – No Impact

SDG&E currently maintains and operates existing electric power, distribution, and substation facilities throughout the Proposed Project site and the Proposed Project is the reconstruction of existing electric facilities within existing SDG&E ROW and Substation property. SDG&E's existing facilities and operations and maintenance activities are included in the baseline for evaluating the impacts of the Proposed Project. Operations and maintenance activities for the Proposed Project would decrease slightly compared to baseline conditions due to the increase reliability of the new power line components included in a typical wood to steel replacement project, the installation of fewer poles along the alignment, and the relocation of poles outside of jurisdictional features. Operation of the Proposed Project would not violate any water quality standards or waste discharge requirements. Any future maintenance-related construction projects would be evaluated under G.O. 131-D and CEQA for purposes of assessing whether further CPUC approval is required. Therefore, no impacts are anticipated.

4.8.4.7 Question 8f - Otherwise substantially degrades water quality?

Construction and Operation & Maintenance – Less than Significant Impact

Construction of the Proposed Project would comply with the Construction General Permit, which includes implementation of a SWPPP with BMPs to prevent degradation of water quality from storm water runoff and other permitted discharges. No other discharges to surface or ground water are anticipated during construction. The Proposed Project would not otherwise substantially degrade water quality. Implementation of project design features and ordinary construction restrictions, including BMPs, would ensure that potential impacts to water quality remain less than significant. See the discussion of 4.8.4.2 and 4.8.4.6 above.

SDG&E currently maintains and operates existing electric power, distribution, and substation facilities throughout the Proposed Project site and the Proposed Project is the reconstruction of existing electric facilities within existing SDG&E ROW and Substation property. SDG&E's existing facilities and operations and maintenance activities are included in the baseline for evaluating the impacts of the Proposed Project. Operations and maintenance activities for the Proposed Project would decrease slightly compared to baseline conditions due to the increase reliability of the new power line components included in a typical wood to steel replacement project, the installation of fewer poles along the alignment, and the relocation of poles outside of jurisdictional features. Operation of the Proposed Project would not violate any water quality

standards or waste discharge requirements. Any future maintenance-related construction projects would be evaluated under G.O. 131-D and CEQA for purposes of assessing whether further CPUC approval is required. Therefore, no impacts are anticipated.

4.8.4.8 Question 8g - Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary, Flood Insurance Rate Map or other flood hazard delineation map?

Construction and Operation & Maintenance – No Impact

The Proposed Project does not involve the construction of housing. Therefore, no housing would be constructed within a 100-year flood hazard area as a result of the Proposed Project. Therefore, no impacts related to placement of housing in a 100-year floodplain would occur.

4.8.4.9 Question 8h – Place structures within a 100-year flood hazard area which would impede or redirect flood flows?

Construction and Operation & Maintenance – No Impact

The Proposed Project alignment is not located within in an area with the potential for 100-year floods. In addition, the proposed maintenance activities would not result in a significant impact due to the character of the work required (i.e., removal and installation of poles within the SDG&E ROW). No new structures would be constructed that would impede or redirect flood flow within a 100-year flood hazard area. As a result, the Proposed Project would not impact flood flows. Therefore, no impacts to 100-year floodplains would occur.

4.8.4.10 Question 8i - 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?

Construction and Operation & Maintenance – No Impact

The County of San Diego Multi-Jurisdictional Hazard Mitigation plan identifies dam failure risk levels based on dam inundation map data. No dam inundation areas are located in the vicinity of the project area. In addition, the proposed maintenance activities would not result in exposure of people or structures to a risk of significant loss from flooding due to the character of the work required (i.e., removal and installation of poles within the SDG&E ROW).

The Proposed Project is an unmanned utility project and would not involve any construction within a dam inundation zone, nor does the pole replacement project involve the construction of facilities that involve people. Therefore, impacts related to loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or a dam, are not anticipated.

4.8.4.11 Question 8j – Cause inundation by seiche, tsunami, or mudflow?

Construction and Operation & Maintenance – No Impact

The Proposed Project, due to its inland locations and surrounding land characteristics, has little to no potential for being exposed to inundation by a seiche, tsunami, or mudflow. The Multi-

Jurisdictional Hazard Mitigation plan identifies areas that would be subject to tsunami, coastal erosion, and landslide. None of these areas are located in the vicinity of the Proposed Project area. Therefore, no impacts related to seiche, tsunami, or mudflow would occur.

4.8.5 Project Design Features and Ordinary Construction/Operating Restrictions

With implementation of the ordinary construction restrictions (as outlined within Section 3.8), potential impacts relating to hydrology and water quality will remain less than significant.

4.8.6 Applicant Proposed Measures

The Proposed Project has no potentially significant impacts relating to hydrology and water quality; therefore, no APMs are proposed.

4.8.7 Detailed Discussion of Significant Impacts

Based upon the preceding analysis, no significant impacts relating to hydrology and water quality are anticipated from the Proposed Project.

4.8.8 References

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San Diego Regional Water Quality Control Board. 1994. Water Quality Control Plan for the San Diego Basin. (With April 4, 2011 Amendments)

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