STATE WATER RESOURCES CONTROL BOARD

WATER QUALITY ORDER NO. 2012-0007-DWQ

WDID NO. SB12009IN

WASTE DISCHARGE REQUIREMENTS FOR SOUTHERN CALIFORNIA EDISON COMPANY FOR ANTELOPE TRANSMISSION PROJECT: SEGMENT 3B, KERN COUNTY

The State Water Resources Control Board (State Water Board) finds:

1. Discharger

Southern California Edison (hereinafter Discharger or SCE) submitted a Report of Waste Discharge (ROWD) to construct the Antelope Transmission Project Segment 3B (Project), located in Kern County, California, on April 3, 2012. The ROWD was deemed complete on May 11, 2012. The Discharger proposes to discharge fill material to waters of the state associated with construction activity at the Project site.

2. Project Location

The Project is located within the Lahontan Regional Water Quality Control Board's (Lahontan Regional Water Board) boundaries in southern Kern County and will extend approximately 9.6 miles from the proposed Highwind Substation, near the town of Tehachapi just south of SR-58, and will terminate at the Windhub Substation west of the city of Mojave (See Attachment D, Figure 1). The U.S. Geological Survey (USGS) 7.5 minute topographic quadrangles, sections, townships, and ranges, and latitude and longitude of the Project are identified in Attachment C. The Project is within the Tehachapi Wind Resource Area, which includes existing wind farms, access roads, and other developed areas.

3. Receiving Waters

The Project area consists of ephemeral drainages that typically originate in the foothills and along steep slopes, with much of the low-lying areas being subject to flash flooding. The topography along the Project alignment is mostly rolling hills and steep mountainous areas with scattered homes or small ranches. The elevation ranges from approximately 2,600 to 4,900 feet above mean sea level. The Project area spans two watersheds: the Fremont Hydrologic Unit (HU) 625.00 and the Antelope HU 626.00. The northern portion of the Segment 3B Project alignment, including the Highwind Substation, is located in the East Tehachapi Hydrologic Area (HA) 625.30 of the Fremont HU. Proctor Dry Lake and Mendibury Creek are the receiving waters for drainages identified in this area. The southern portion of the Project alignment is located in the Chafee HA 626.10 of the Antelope HU. Oak Creek and Rosamond Dry Lake are the receiving waters identified in this area. Oak Creek is the only perennial stream that crosses the Project alignment. Oak Creek is located near the southern portion of the alignment and parallels Construct 3B-33 eastward to Construct 3B-67. Proctor Valley Dry Lake, Rosamond Dry Lake, Oak Creek, and Mendibury Creek are all considered isolated (non-federal) waters.

4. Project Description

The Project is part of the Tehachapi Renewable Transmission Project (TRTP), which is also being constructed by SCE, and will assist in meeting California's Renewable Portfolio Standards goals of 33% renewable energy by the year 2020. TRTP will provide new and upgraded transmission infrastructure for the distribution of electricity generated from wind and solar energy facilities in the Tehachapi Wind Resource Area of California. The TRTP involves a total of 173 miles of transmission line segments along new and existing rights-of-way (ROWs) in southern Kern County, portions of Los Angeles County (including the Angeles National Forest), and the southwestern portion of San Bernardino County, California. The Project is the last component of the Antelope Transmission Project Segments 1, 2, and 3 to be constructed and provides connectivity to Segment 10 of the TRTP. The Project will consist of a new 220 kilovolt (kV) transmission line that originates at the proposed Highwind Substation (a 500/220/66 kV substation) and extends to the Windhub Substation. SCE plans to complete the Project in the fourth quarter of 2012, or earlier, if possible. Construction activities include installation of new structures (transmission towers, outfall structures at Highwind Substation, McCarthy drains, riprap, gabion retaining walls, and concrete v-ditches), temporary and permanent access roads, paved wet crossings, guard poles, wire stringing, zinc ribbons for Alternating Current (AC) Gas Pipeline Mitigation (AC mitigation), crane pads, and impacts associated with other activities. More details about the Project and Project impacts are described in Attachments B–G of this Order.

5. Regulatory Authority and Reason for Action

The U.S. Army Corps of Engineers (Corps) issued a letter stating proposed Project activities will not occur within waters of the U.S. and the Project is not subject to Corps jurisdiction under Section 404 of the Clean Water Act; therefore, a Section 404 permit is not required for the Project (issued August 1, 2012, File No. SPL-2012-00214-SLP). However, the waters affected by the Project are waters of the state, as defined by section 13050 of the California Water Code, and are therefore subject to state requirements. Should some Project areas be subject to federal jurisdiction, this Order shall also serve as the water quality certification issued pursuant to section 401 of the Clean Water Act.

These Waste Discharge Requirements (WDRs), issued pursuant to Water Code section 13263, regulate the proposed discharge of fill material, including structural material and/or earthen wastes, to waters of the state. WDRs are necessary to adequately address potential and planned impacts to waters of the state, and to ensure compliance with applicable water quality control plans and polices.

6. Basin Plans

In accordance with section 13245 of the Water Code, the State Water Board has approved the Water Quality Control Plans for the Lahontan Region (Lahontan Basin Plan). The Basin Plan defines beneficial uses and water quality objectives for waters of the state, including surface waters and ground waters. This Order is in compliance with and implements the Basin Plan.

7. Anti-Degradation

The State Water Board established California's anti-degradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The permitted discharge is consistent with Resolution No. 68-16. Minimal water quality degradation may be allowed if: any change in water quality is consistent with the maximum benefit to the people of the State; the degradation will not unreasonably affect present and anticipated beneficial uses; the degradation will not result in violation of the Lahontan Basin Plan; and, discharges must use the best practicable treatment or control to avoid pollution or a condition of nuisance.

Discharges from the Project may cause minimal degradation, but will be substantially controlled through the application of Best Management Practices (BMPs) for construction and post-construction activities. The State Water Board expects that control measures will be implemented in an iterative manner as needed to meet applicable receiving water quality objectives. The slight changes in water quality are consistent with the maximum benefit to the people of the state, as reviewed in the California Environmental Quality Act (CEQA) findings below.

This Order contains requirements to ensure beneficial uses are maintained or enhanced, such as the mitigation and monitoring requirements for impacts to waters of the State. Implementation of the Habitat Mitigation and Monitoring Plan (HMMP) (see Mitigation Conditions below) will determine whether degradation of water quality is occurring due to the Project and allow for corrections to be made as needed. The Project BMPs, the Storm Water Pollution Prevention Plan (SWPPP), and the HMMP are designed to ensure and verify that the highest level of water quality is maintained.

8. California Environmental Quality Act

On March 15, 2007 the California Public Utilities Commission (CPUC), as lead agency, certified a Final Environmental Impact Report (FEIR) for the Antelope Transmission Project Segments 2 and 3 (State Clearinghouse No. SCH 2006041160) for the Project in accordance with the CEQA. In making its determinations and findings, the State Water Board must presume that the CPUC certified environmental document comports with the requirements of CEQA and is valid. (Pub. Resources Code, § 21167.3, subd. (b).) The FEIR and Notice of Determination may be viewed at the following Web sites:
http://www.cpuc.ca.gov/Environment/info/aspen/atp2-3/EIR/TOC.htm
http://www.ceqanet.ca.gov/NODdescription.asp?DocPK=632246

The State Water Board has determined that none of the factors that would trigger the need for subsequent or supplemental environmental analysis of the Project under Public Resources Code section 21166 or California Code of Regulations, title 4, sections 15162 and 15163, exist at this time. The State Water Board concludes that the Project (1) does not have the potential to create a new significant effect not previously analyzed, (2) will not be undertaken under a substantial change in the circumstances requiring major revisions to previous CEQA document, and (3) will not be undertaken without consideration of any new information of substantial importance previously unknown at the time of the original Mitigated Negative Declaration.

Individual Project Impacts

The State Water Board has reviewed and considered the FEIR and any proposed mitigation measures for individual Project impacts and finds that the FEIR provided by CPUC is adequate. Except as described below (Cumulative Impacts), changes or alterations have been required in, or incorporated into the Project which avoid or substantially lessen the significant environmental effect identified in the FEIR that are within the purview of the State Water Board. The FEIR includes a Mitigation Monitoring Program, approved and adopted by the CPUC, for the mitigation measures it recommends for the Project. Mitigation measures and applicant proposed measures (APMs) from the FEIR which address water quality impacts are listed in Attachment G. They include development of a Construction SWPPP with accidental spill control procedures, establishment of an environmental training program, implementation of flood and erosion structure damage protection measures, implementation of compensatory mitigation for impacts on special-status species, and cessation of Project construction activities during heavy precipitation. Additionally, as required by the requirements of these WDRs and as described in Attachment B and C, a compensatory mitigation and monitoring plan to mitigate unavoidable individual Project impacts to water quality to a less than significant level shall be implemented in accordance with the forthcoming HMMP, and a monitoring and reporting plan for Mendibury Creek shall be prepared and implemented. State Water Board has determined that the Project will not result in any significant adverse non-cumulative environmental impacts.

Cumulative Impacts

The FEIR evaluates seven cumulative impacts pertaining to water quality that are significant and unavoidable. The seven cumulative impacts are as follows:

Hydrology and Water Quality section of the FEIR

- Water quality degradation would result from soil erosion and sedimentation caused by construction activities. (Impact H-1)
- Degradation of water quality would result from the accidental release of hazardous materials during construction activities. (Impact H-2)
- Degradation of water quality would result from the accidental release of hazardous materials during operational activities. (Impact H-3)
- Existing groundwater resources would be disturbed through Project-related excavation activities. (Impact H-4)
- Increased surface water runoff would result through the introduction of new impermeable areas. (Impact H-5)
- Flood hazards would be created through the placement of permanent aboveground structures in a flood hazard area, a floodplain, or a watercourse. (Impact H-7)

Biological Resources section of the EIR

- Effects 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 Wildlife Service (Criterion BIO1).

The FEIR contains mitigation measures for Project impacts H-1 through H-4, and H-7 and the application of these mitigation measures will lessen impacts individually. However, the FEIR notes that the application of proposed Project-related mitigation measures to other past, present and foreseeable future projects is not feasible and therefore this Project's

incremental effect could potentially be cumulatively considerable, even with mitigation. The FEIR evaluated impact H-5 for individual project impacts as a less-than-significant impact and no mitigation was proposed for this impact. This impact would be considered cumulatively significant if at least one other ongoing or reasonably foreseeable future project would introduce new impervious areas that could increase runoff into the same waterways affected by the Project. The FEIR notes that approximately 341 new projects are planned or ongoing within five miles of the proposed Project route (note that FEIR was certified in March 2007). The vast majority of these projects are residential developments, which would require the introduction of new impervious areas. Mitigation could have been proposed for these past, present and foreseeable future projects to require that in areas where a project would result in a decreased permeability of ground cover or ground surface area, the construction material used should allow maximum permeability while fulfilling its intended purpose. However, although this mitigation could theoretically minimize the potential for projects to create surface runoff from new impermeable areas, it would not be feasible to implement such mitigation on these projects, given development standards and practices at the time the FEIR was approved.

Mitigation measures for the proposed Project addressing impacts to biological resources (Criterion BIO1), including effects on Mendibury Creek and any desert wash habitat, would be implemented during construction and operation of the proposed Project in order to avoid or reduce impacts of the proposed Project to a less than significant level. However, based on the continued expansion of residential housing and community developments in the Project vicinity, the proposed Project's incremental effects on biological resources could be cumulatively considerable. No additional feasible mitigation measures beyond those identified in the FEIR are available to reduce the Project's contribution to cumulative impacts.

Statement of Overriding Considerations

As stated above, State Water Board has determined that changes have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the FEIR based on the mitigated measures, APMs, and Mitigation Monitoring Program in the FEIR, and the requirements of the WDRs described under **Individual Project Impacts** above. However, specific economic, legal, social, technological, or other considerations make the mitigation measures or any Project alternatives infeasible to avoid or substantially lessen incremental effects that may be cumulatively considerable to hydrology, water quality and biological resources, as noted above.

In the State Water Board's judgment, the Project and its benefits outweigh its cumulative unavoidable significant impacts regarding water quality and biological resources. The following statement identifies the reasons why, in State Water Board's judgment, the benefits outweigh such unavoidable significant impacts. Any one of these reasons is sufficient to justify approval of the project. Thus, even if a court were to conclude that not every reason is supported by substantial evidence, the State Water Board would stand by its determination that each individual reason is sufficient. The substantial evidence supporting the various benefits can be found in the CPUC's Opinion Granting a Certificate of Public Convenience and Necessity for Decision 07-03-045 (http://docs.cpuc.ca.gov/WORD_PDF/FINAL_DECISION/65666.PDF).

The State Water Board recognizes the benefits of the Project, which outweigh the impacts of the Project, listed below. The Project will:

- enable compliance with the State's Renewable Portfolio Standard (RPS) Program, which requires retail sellers of electricity such as SCE and PG&E to increase their sale of electricity produced by renewable energy sources to 20 percent by 2010;
- enable the interconnection of various wind generation projects in the Antelope Valley-Tehachapi region to the SCE transmission system;
- eliminate existing constraints to the transmission of renewable energy from the Tehachapi and Antelope Valley areas to Southern California; and
- eliminate potential system-wide power flow and reliability problems due to overloading of the existing transmission system.

Specifically, without system improvements provided by the Project, SCE and others could not deliver the necessary significant amounts of wind power from the region. As discussed above, wind provides one of the most economical sources of renewable power, and the Tehachapi area offers the largest wind resource in California and has the undeveloped potential of generating about 1,400 gigawatt-hours per year, with about 4,500 MWs of installed capacity. Additionally, there is significant industry commitment to develop the area for RPS purposes; utilities have received winning bids from, and SCE has signed contracts with, developers of wind projects, the output of which cannot be fully delivered without increased transmission capacity that the proposed project will provide.

As described in CPUC's Opinion Granting a Certificate of Public Convenience and Necessity, the CPUC finds that the unavoidable impacts are acceptable in light of these substantial benefits. Each benefit set forth above constitutes an overriding consideration warranting approval of the project, independent of the other benefits, despite each and every significant unavoidable impact.

State Water Board adopts the mitigated measures and the APMs in the FEIR, and the requirements of this Order as described above in **Individual Project Impacts**, and finds that any residual or remaining effects on the environment resulting from the Project, identified as significant and unavoidable in the preceding findings of fact, are acceptable due to the benefits set forth in this Statement of Overriding Considerations.

In accordance with California Code of Regulations, title 14, section 15094, the State Water Board will file a Notice of Determination with the State Clearinghouse within five days from the issuance of this Order.

IT IS HEREBY ORDERED that, pursuant to Water Code section 13263, the Discharger must comply with the following:

STANDARD CONDITIONS

1. These WDRs are subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to the Water Code, section 13330, and the California Code of Regulations (Cal. Code Regs.), title 23, section 2050 and following.

2. These WDRs are not intended and shall not be construed to apply to any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license, unless the pertinent WDR application was filed pursuant to Cal. Code Regs., title 23, section 3855, subdivision (b), and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
3. These WDRs are conditioned upon total payment of any fee required under Cal. Code Regs., title 23, and owed by the applicant.

ADDITIONAL CONDITIONS

1. SCE shall comply with all water quality objectives required by regional and statewide water quality control plans and policies.
2. BMPs
   a) As applied in these WDRs, waters of the state comprise all water bodies, including wetlands and ephemeral, intermittent and perennial stream channels, in all flow conditions, including effluent dominated and seasonally dry.
   b) Appropriate BMPs shall be implemented and maintained throughout Project activities to minimize sediment disturbance and suspension within surface waters. These BMPs are described in the Project SWPPPs for the substation and transmission line construction and AC gas pipeline mitigation, and in the FEIR (December 2006) for the Antelope Transmission Project Segments 2 and 3. All BMP materials shall be on site prior to construction activity and ready for use. BMPs shall be in full compliance with all specifications governing their proper design, installation, operation, and maintenance.
   c) Substances resulting from construction activities that could be harmful to aquatic life, including but not limited to petroleum lubricants and fuels; cured and uncured cements; epoxies, paints and other protective coating materials; Portland cement, concrete, or asphalt concrete, and washings and cuttings thereof shall not be discharged to waters of the state.
   d) Vehicles shall not be driven or equipment operated in waters of the state on the Project site, except as necessary to complete the proposed Project.
   e) Fueling, lubrication, maintenance, storage, and staging of vehicles and equipment shall be outside of waters of the state, and shall not result in a discharge or a threatened discharge to waters of the state.
   f) A daily log shall be maintained to note the presence and absence of waste releases from vehicles and equipment within or adjacent to waters of the state. Copies of the daily log shall be available on site. Daily visual inspections for waste releases of all vehicles and equipment parked or operating within or adjacent to waters of the state shall be conducted before the vehicles or equipment are operated for the work day. Spillage and leaks shall be reported in the daily log when they occur. Presence of any spillage from leaks shall be reported in the daily log and contaminated soils shall be removed immediately from the site and disposed of at an approved area or facility. State Water Resources Control Board (State Water Board) and Lahontan Regional Water Board may request this information at any time.

g) Any waste releases from vehicles or equipment of 5 gallons or more shall be reported to the State Water Board and the Lahontan Regional Water Board within 24 hours with an explanation of how the spillage was remedied.

h) All work areas shall be effectively isolated from streamflows using suitable control measures before commencement of any in-water work. The diverted streamflow shall not be contaminated by construction activities. Structures for isolating the in-water work area and/or diverting the streamflow (e.g., cofferdam, geo-textile silt curtain) shall not be removed until all disturbed areas are cleaned of debris and stabilized.

i) In the event of rain, the in-water work area shall be temporarily stabilized before streamflow exceeds the capacity of the diversion structure. The streambed shall be stabilized so that the disturbed areas will not come in contact with the streamflow.

j) If revegetation of disturbed areas is required, viable seed of native species collected in the Freemont and/or Antelope watersheds shall be used.

k) When the Project is completed, any trash, excess material or other debris shall be removed from the work area and disposed of properly.

3. SCE shall obtain coverage under the new National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activities (Order 2009-0009-DWQ as amended by 2010-0014-DWQ)(Construction Storm Water Permit), which became effective on July 1, 2010.

4. SCE shall implement the APMs and Mitigation Measures described in the FEIR (December 2006) for the Antelope Transmission Project: Segments 2 and 3 (see Attachment G).

5. Designs and details for all water body crossings and modifications shall be submitted to State Water Board for review and approval at least 30 days prior to installation of crossings and modifications to water bodies. Water body crossings and modifications shall not be implemented until State Water Board have approved the crossing designs.

6. Bridges, culverts, dip crossings, or other structures shall be installed so that water flow is not impaired. Bottoms of temporary culverts shall be placed at stream channel grade and bottoms of permanent culverts shall be placed at or below stream channel grade.

7. Storm drain lines/culverts and other stream crossing structures shall be designed and maintained to accommodate at least a 50-year, 24-hour storm event, including associated bedload and debris movement. The storm drain lines/culverts, the outfall structure, and other stream crossing structures shall be properly aligned within the stream and otherwise engineered, installed, and maintained, to ensure resistance to washout and to prevent erosion and/or fill of the stream. Water velocity shall be dissipated at outfalls to reduce erosion.

8. Cofferdams and water barrier construction shall be adequate to prevent seepage into or from the work area. Cofferdams or water barriers shall not be made of earth or other substances subject to erosion or that contain pollutants. When dewatering is necessary to create a temporary dry construction area, the water shall be pumped through a sediment-settling device before it is returned to the water body. The enclosure and the supportive material shall be removed when the work is completed, and removal shall proceed from downstream to upstream.

9. Flow diversions shall be done in a manner that shall prevent pollution and/or siltation and provide flows to downstream reaches. Said flows shall be of sufficient quality and quantity, and of appropriate temperature, to support fish or other aquatic life normally present both above and below the diversion. Diversions shall be engineered, installed, and maintained to ensure resistance to washout and erosion of the water body. Normal flows shall be restored to the affected stream immediately upon completion of work at that location. All flow diversion facilities shall be removed and the site restored to pre-project conditions.
10. If groundwater dewatering is required for the Project, SCE shall consult with the Lahontan Regional Water Board to determine if additional permits are required.
11. During surface water diversions or dewatering, upstream and downstream monitoring for the following constituents shall be implemented:

    - pH
    - temperature
    - dissolved oxygen
    - turbidity
    - total suspended solids (TSS)

    Analysis must be performed using approved U.S. Environmental Protection Agency methods, where applicable. These constituents shall be measured at least once prior to diversion and then monitored on a daily basis during the first week of diversion and/or dewatering activities, and then on a weekly basis thereafter, until instream work is complete. Turbidity measurements shall be collected 1 hour after barrier installation and 1 hour after barrier removal as part of the regular daily and weekly measurements.

    Results of the analysis shall be submitted to the State Water Board within 30 days after completing the surface water diversion or dewatering. A map or drawing indicating the locations of the sampling points shall be included with each submittal. Diversion activities shall not result in the degradation of beneficial uses or violation of water quality objectives of the receiving waters. Constituent measurements must comply with the limits below. Any violations of these limits may result in corrective and/or enforcement actions, including increased monitoring and sample collection.

    a) pH

    For waters of the state in the Lahontan Basin with designated beneficial uses of COLD or WARM, changes in normal ambient pH levels shall not exceed 0.5 pH units. For all other waters of the Region, the pH shall not be depressed below 6.5 or raised above 8.5 as a result of controllable water quality factors.

    b) Temperature

    For waters of the state in the Lahontan Basin, the natural receiving water temperature of all waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such an alteration in temperature does not adversely affect the water for beneficial uses. The maximum allowable upper limits are as follows:

    Waters designated WARM shall not be altered by more than five degrees Fahrenheit (5°F) above or below the natural temperature. For waters designated COLD, the temperature shall not be altered.

c) Dissolved Oxygen

For waters of the state in the Lahontan Basin, the dissolved oxygen content of surface waters shall not be depressed by more than 10%, nor shall the minimum dissolved oxygen concentration be less than 80% of saturation.

d) Turbidity

For waters of the state in the Lahontan Basin, waters shall be free of changes in turbidity that cause nuisance or adversely affect the water for beneficial uses. The maximum allowable upper limit is as follows:

Increases in turbidity shall not exceed natural levels by more than 10%.

e) Suspended Materials

For the Lahontan Basin, surface waters shall not contain suspended materials in concentrations that cause a nuisance or adversely affect beneficial uses as a result of controllable water quality factors. For natural high quality waters, the maximum allowable upper limit is as follows:

The concentration of total suspended materials shall not be altered to the extent that such alterations are discernible at the 10% significance level.

12. A copy of these WDRs must be provided to the contractor and all subcontractors who will work at the work site, and must be in their possession at the work site. The Project proponent and all contractors and subcontractors shall be familiar with all requirements of these WDRs.

MITIGATION CONDITIONS

1. Amount of impacts. Total Project impacts are 0.40 acre, including 0.19 acre and 1,321 linear feet of permanent impacts and 0.20 acres and 1,863 linear feet of temporary impacts on jurisdictional waters (acreage totals may not be exact due to rounding)(See Attachment E).
2. SCE responsibilities. SCE shall retain responsibility for all compensatory mitigation requirements for the Project as required herein and shall direct any agreement(s) to obtain services related to fulfilling these responsibilities.
3. Mitigation Plan. SCE shall prepare a HMMP to guide and report compensatory mitigation activities for temporary and permanent impacts to waters of the state. The HMMP shall include the following:

a) HMMP submittal dates. A draft HMMP shall be submitted for State Water Board approval within 6 months of issuance of these WDRs. A Final HMMP shall be submitted for State Water Board approval within 24 months of issuance of the WDRs.

b) The HMMP content.

I. Protection in perpetuity. The HMMP shall describe the mechanisms of protection and management of the compensatory mitigation site(s) in perpetuity.

II. Management and reporting plans for compensatory mitigation sites. The HMMP shall include interim and long-term management and reporting plans for the compensatory mitigation site(s) as follows:

(a) Site selection. A description of the factors considered during the site selection process. This should include consideration of watershed needs, and the practicability of accomplishing ecologically self-sustaining aquatic resource restoration, establishment, enhancement, and/or preservation at the compensatory mitigation site.

(b) Baseline information. A map of suitable scale and description of the ecological characteristics of the compensatory mitigation project site(s) and how that replaces the functions and services of the impact site(s). This may include descriptions of historical and existing plant communities, historical and existing hydrology, soil conditions, and other site characteristics appropriate to the type of water body proposed as mitigation.

(c) Determination of credits/financing. A description of the amount of financing to be provided, including a brief explanation of the rationale for this determination. In addition, a description of the type or mechanism of financing.

(d) Site work plan. Detailed written specifications and work descriptions for the development of the compensatory mitigation site(s), including timing, sources of water (include proof of pertinent water right(s), if applicable), methods for establishing desired plant communities, erosion control measures, etc.

(e) Maintenance plan. A description and schedule of maintenance requirements to ensure the continued viability of the aquatic resources once initial construction is completed.

(f) Performance standards. Ecologically based standards that will be used to determine whether the compensatory mitigation objectives are being met.

(g) Monitoring and reporting requirements. A description of parameters to be monitored in order to determine whether the compensatory mitigation is on track to meet performance standards and whether adaptive management is needed. A schedule for monitoring and reporting must be included.

(h) Long-term management plan. A description of how the compensatory mitigation sites(s) will be managed after performance standards have been achieved to ensure the long-term sustainability of the resource, including long-term financing mechanisms and the party responsible for long-term management.

(i) Adaptive management plan. A management strategy to address unforeseen changes in site conditions or other components of the compensatory mitigation site(s). The adaptive management plan will guide decisions for revising the compensatory mitigation plans and implementing measures to address both foreseeable and unforeseen circumstances.

4. Temporary Project impacts.

    a) SCE shall stabilize and restore all temporarily disturbed areas according to the requirements of the Construction Storm Water Permit.

    b) In addition to requirement 4 a) above, SCE shall treat all temporary impacts to waters of the state in accordance with the HMMP which shall provide the following two options:

        I. SCE shall either provide additional off-site compensatory mitigation for temporary impacts to waters of the state in accordance with the timeframes described in Mitigation Condition 5 below; or

        II. SCE shall develop and implement a long-term management and monitoring plan for the on-site restoration of temporary impacts to waters of the state within 6 months of the issuance of this Order.

5. Timeframes. SCE shall be responsible for meeting the following requirements within the timeframes described below:

    a) An agreement demonstrating acquisition and purchase of compensatory mitigation sites.

        I. Agreement. SCE shall execute an agreement with a mitigation sponsor (sponsor) to purchase and manage the compensatory mitigation sites for the Project. A copy of the draft agreement between SCE and the sponsor shall be provided to the State Water Board for review within 6 months of issuance of these WDRs. The agreement shall clearly indicate the party or parties responsible for the implementation, performance, and long-term management of the compensatory mitigation site(s) in accordance with the HMMP. SCE shall remain responsible for all compensatory mitigation requirements as described herein. The sponsor is responsible for implementing the compensatory mitigation as described in the HMMP.

        II. The agreement shall provide for adequate funding from SCE to purchase and maintain the compensatory mitigation site(s) to satisfy the compensatory mitigation requirements of the Project as described in the HMMP.

    b) Compensatory Mitigation timing. All compensatory mitigation site(s) shall be acquired or secured by the sponsor within 12 months of issuance of these WDRs. Any delay in acquiring or securing the compensatory mitigation site(s) by the sponsor shall require an amendment to these WDRs and may result in higher mitigation ratio requirements to offset the additional temporal loss of waters of the state. SCE shall be responsible for satisfying any mitigation requirements for additional temporal losses.

    c) If SCE is unable to provide a draft copy of an agreement with a sponsor within 6 months of the issuance of these WDRs, or acquire and secure compensatory mitigation as described in the Mitigation Conditions herein or as determined by the State Water Board as adequate within 12 months of issuance of these WDRs, SCE will be in violation of these WDRs and subject to administrative civil liabilities under the California Water Code, section 13350.

6. Compensatory Mitigation Site Approval.

    a) State Water Board approval shall be obtained prior to acquiring or securing any compensatory mitigation site(s). State Water Board shall provide a decision on the proposed mitigation site within 60 days, after receiving complete information on the

mitigation site as described below. As part of the approval process, the following shall be provided by SCE:

I. Delineation maps and a tabular accounting of the acreage, linear feet of channel, and type of waters of the state on the compensatory mitigation site(s) based on a delineation that has been field-verified.

II. A description of the condition of all waters of the state on the compensatory mitigation site(s).

7. Conservation Easement Deed.

   a) A copy of the Conservation Easement Deed for the land preserve will be provided to State Water Board within 18 months of issuance of these WDRs. The Conservation Easement Deed will indicate the "Grantor" (property owner) and "Grantee" (holder) of the Conservation Easement Deed.

   b) For the purposes of independent review, the holder of the Conservation Easement Deed shall not be the mitigation sponsor. SCE shall provide sufficient funds to the holder of the Conservation Easement Deed to allow the holder to monitor the preserve in perpetuity and to ensure compliance with the conservation easement and report to the agencies. Funds shall be provided by SCE to the holder within 18 months of issuance of these WDRs.

   c) The Conservation Easement Deed must ensure that the property for compensatory mitigation will be retained in perpetuity and maintained as described in the HMMP.

   d) The Conservation Easement Deed must provide the Assessor's Parcel Numbers for all the properties in the preserve.

8. Endowment funding for the interim and long-term management of the land preserve.

   a) The endowment holder shall not be the mitigation sponsor.

   b) SCE must provide to the State Water Board proof of full funding for the endowment fund for the interim and long-term management of the compensatory mitigation sites in accordance with the HMMP within 18 months of issuance of the WDRs.

9. Letter of credit.

   a) Within 6 months of issuance of these WDRs, SCE shall provide the State Water Board an irrevocable letter of credit in an amount determined by the State Water Board to be sufficient for the value of (1) the acquisition of site(s) in the land required for compensatory mitigation, (2) the estimated amount of the endowment fund, and (3) the estimated amount of the conservation easement endowment. SCE shall prepare a draft letter of credit and submit it to the State Water Board for its approval within 90 days of issuance of the WDRs. The letter of credit shall allow the State Water Board to immediately draw on the letter of credit if the State Water Board determines in its sole discretion that SCE has failed to meet its mitigation obligations.

   b) SCE's bank shall finalize and execute the letter of credit after the State Water Board approves the draft letter of credit.

   c) If SCE has not met its mitigation obligations within 60 days prior to the letter of credit's expiration date, SCE shall confirm with its bank that the expiration date will be extended. If the bank elects not to extend the expiration date, SCE shall establish a new letter of credit to replace the original letter of credit. The new letter of credit shall be subject to

the State Water Board's approval following the same procedure described in the requirements above. SCE shall have a letter of credit in place, as described above, until SCE has met its mitigation obligations.

d) If SCE is unable to establish a letter of credit, it shall arrange a different security instrument with the State Water Board.

10. Temporary and permanent mitigation reporting requirements.

a) SCE shall provide proof to State Water Board that the Notice of Termination associated with Construction Storm Water Permit for the Project has been approved by the State Water Board.

b) Mitigation and monitoring reporting shall be conducted for the compensatory mitigation site(s) and submitted to the State Water Board. A report shall be provided to the State Water Board after the completion of baseline surveys of aquatic resources at the compensatory mitigation sites, and annual reports of the compensatory mitigation sites shall be provided during the interim management period. During the long-term management period, mitigation and monitoring reporting for compensatory mitigation sites shall be prepared every 5 years until all long-term performance measures of the HMMP have been met with the approval of the State Water Board. It is the obligation of SCE to provide the reporting. The reports will document conditions on the mitigation sites so changes can be tracked and management issues identified and addressed. The reports shall include the following:

I. All reports shall include the file number of these WDRs: SBXXXXXIN.

II. Photographs and Surveys. SCE shall submit a baseline survey and photo documentation showing the condition of waters of the state and habitats in the upland areas following final acquisition of properties. Baseline surveys and photo documentation shall be conducted annually during the interim management period, and every five years during the long-term management period. This information shall be included in the mitigation and monitoring reports.

III. Results of general preserve conditions, global positioning system (GPS) recordation of jurisdictional waters, and changes in hydrology. Any recommendations for habitat enhancement measures, changes in the monitoring program, or issues such as weed removal and erosion control will be included in the report.

IV. All reports shall include the annual monitoring report by the easement holder documenting compliance with the conservation easement.

c) Monitoring and Reporting Plan for Mendibury Creek (Feature 3B-1-S-1)

I. SCE shall develop a monitoring and reporting plan for annual cross-section measurements at selected locations in Mendibury Creek adjacent to the Highway Substation site for a 5-year period. The purpose of the plan is to monitor potential post-project erosion and channel stability within Mendibury Creek.

II. SCE shall obtain approval on the monitoring and reporting plan by the State Water Board prior to plan implementation.

III. SCE shall submit a monitoring and reporting plan for Mendibury Creek for State Water Board approval within 30 days of issuance of these WDRs.

ADMINISTRATIVE CONDITIONS

1. The State Water Board reserves the right to suspend, cancel, or modify and reissue these WDRs, after providing notice to SCE and/or responsible contractor/subcontractor, if the State Water Board determines that the Project fails to comply with any of the terms or requirements of these WDRs.
2. A copy of these WDRs, the application, and supporting documentation must be available at the Project site during construction for review by site personnel and agencies. A copy of these WDRs also must be provided to the contractor and all subcontractors who will work at the Project site. All personnel performing work on the proposed Project shall be familiar with the content of these WDRs and its posted location on the Project site.
3. SCE shall grant State Water Board and Lahontan Water Board staffs, or an authorized representative upon presentation of credentials and other documents as may be required by law, permission to enter the Project site at reasonable times, to ensure compliance with the terms and requirements of these WDRs and/or to determine the impacts the Project may have on waters of the state.

VIOLATIONS

1. SCE, or its contractor, or subcontractors shall verbally report any noncompliance to the WDR Program Manager of the State Water Board within 24 hours of the time when SCE or its contractor, or subcontractors become aware of the circumstances of noncompliance.
2. SCE or its contractor, or subcontractors shall report all violations of any terms or requirements of this Order in writing to the State Water Board and Lahontan Regional Water Board within seven (7) consecutive days from the time SCE becomes aware of the violation. The written report shall contain:
    a) A description of the violation and its cause.
    b) The period of the violation event, including dates and times, and if the violation has not been corrected, the anticipated time the violation is expected to continue.
    c) Steps taken or planned to reduce, eliminate, and prevent recurrence of the violation.
3. In the event of any violation or threatened violation of the requirements of this Order, the violation shall be subject to any remedies, penalties, processes, or sanctions as provided for under State law.
4. In response to a suspected violation of any requirement of this Order, the State Water Board may require the holder of any permit or license subject to these WDRs to furnish, under penalty of perjury, any technical or monitoring reports the State Water Board deems appropriate, provided that the burden, including the cost of the reports, shall be in reasonable relationship to the need for the reports and the benefits to be obtained from the reports.
5. In response to any violation of the requirements of this Order, the State Water Board may add to or modify the requirements of this Order as appropriate to ensure compliance.

STATE WATER BOARD AUTHORITY

The State Water Board may revise or modify this Order for reasons including, but not limited to, revised application for activities at the TRTP site, and ensuring consistency with changes in the State Water Board's riparian and wetland policy. The State Water Board delegates

the authority to approve any necessary changes to this Order and its attachments as set forth above and as necessary to implement the Project to the Executive Director. The Executive Director may delegate these responsibilities to the Chief Deputy Director or the Deputy Director of the Division of Water Quality.

CERTIFICATION

The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on August 21, 2012.

AYE:	Chairman Charles R. Hoppin Vice Chair Frances Spivy-Weber Board Member Tam M. Doduc Board Member Steven Moore Board Member Felicia Marcus
NAY:	None
ABSENT:	None
ABSTAIN:	None

Jeanine Townsend
Clerk to the Board

Attachments to Board Order No: 2012-0007-DWQ

Attachment A:	Signatory Requirement
Attachment B:	Project Information Sheet
Attachment C:	Supplemental Project Information Sheet
Attachment D:	Maps
Attachment E:	Project Impact Tables
Attachment F:	Mitigation Tables
Attachment G:	Mitigation Measures and Applicant Proposed Measures

Attachment A

Signatory Requirements

SIGNATORY REQUIREMENTS

All Documents Submitted In Compliance With This Order Shall Meet The Following Signatory Requirements:

1. All applications, reports, or information submitted to the State Water Resources Control Board (State Water Board) must be signed and certified as follows:

   (a) For a corporation, by a responsible corporate officer of at least the level of vice- president.
   (b) For a partnership or sole proprietorship, by a general partner or proprietor, respectively.
   (c) For a municipality, or a state, federal, or other public agency, by either a principal executive officer or ranking elected official.

2. A duly authorized representative of a person designated in Items 1.a through 1.c above may sign documents if:

   (a) The authorization is made in writing by a person described in Items 1.a through 1.c above.
   (b) The authorization specifies either an individual or position having responsibility for the overall operation of the regulated activity.
   (c) The written authorization is submitted to the State Water Board Executive Director.

3. Any person signing a document under this section shall make the following certification:

   "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Attachment B

Project Information Sheet

Project Identifiers	
WDID No:	SBXXXXXIN
Reg. Meas. ID:	
Place ID:	
Party ID:	
USACOE No:	
Other File No:	

PROJECT INFORMATION	
Details	
Application Received Date:	**April 3, 2012**
Application Completed Date:	**May 11, 2012**
Additional Info Completed Date:	
Applicant:	**Southern California Edison**
Applicant Representative(s):	**Hazem Gabr**
Project Title:	**Antelope Transmission Project: Segment 3B (Segment 3B)**
Regulating Water Board:	**SB – State Water Board**
Type of Project:	**Utilities → Overhead (large)**
Project Description:	
The Segment 3B Project will consist of a new 220kV transmission line that originates at a new 500/220/66 kV substation (Highwind Substation). The project includes the Alternating Current (AC) Gas Pipeline Mitigation (AC mitigation) component, which is required to protect existing gas pipelines from induced AC effects by the energized Segment 3B transmission. The Segment 3B Project is the last component of the ATP Segments 1, 2, and 3 to be constructed and provides connectivity to Segment 10 of the Tehachapi Renewable Transmission Project (TRTP).	
Location	
City:	**Near the Town of Tehachapi and the City of Mojave .**
County:	**Kern County.**
Cross Streets:	**See Attachment C, Supplemental Information Sheet.**
Section, Township, Range:	**See Attachment C, Supplemental Information Sheet.**
Zip code:	**See Attachment C, Supplemental Information Sheet.**
Directions:	**See Attachment C, Supplemental Information Sheet.**
Latitude(s) and Longitude(s):	**See Attachment C, Supplemental Information Sheet.**
Public Notice	
Water Board Public Notice: Information regarding this project was noticed on the State Water Board's website from May 11, 2012 to June 10, 2012 ____ No Comments were received. ____ Comments were responded to in writing.	
Fees	
Application Fee Provided: A certification fee of $944 was submitted on April 3, 2012 as required by 23 CCR §3833b(2)(A) and by 23 CCR § 2200(e). An additional fee of $3,231.00 (IF APPLICABLE) to offset additional design impacts was received on _____ as required by 23 CCR § 3833b(2)(A) and by 23 CCR § 2200(e).	

Hydrologic Information	
Receiving Water(s):	**See Attachment C, Supplemental Information Sheet.**
Hydrologic Unit(s):	**Freemont Hydrologic Unit (HU) within the East Tehachapi Hydrologic Area (HA), Antelope Valley HU within the Chafee HA.**
Water Body Type(s):	**Riparian, streambed, wetland.**

Designated Beneficial Use(s)													
X	AGR	X	COMM		FRSH		MIGR		RARE		SPWN		
	AQUA		CUL	X	GWR	X	MUN	X	REC-1	X	WARM		
	ASBS		EST	X	IND		NAV	X	REC-2		WET		
	BIOL		FISH		LWRM		POW		SAL	X	WILD		
	COLD		FLD		MAR		PRO		SHELL		WQE		

Candidate, Sensitive, or Special Status Species
See Attachment C, Supplemental Information Sheet.

Other Permits/Licenses/Agreements/Plans
Federal (Type and Permit/License Number):
Approved Jurisdictional Determination (JD) from the U.S. Army Corps of Engineers (Corps) is pending.
State (Type and Permit/License/Agreement Number):
California Department of Fish and Game, Streambed Alteration Agreement / pending approval by CDFG. **California General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), State Water Resources Control Board (SWRCB) Order No. 2009-0009–DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002, as a Linear Underground/Overhead Project (LUP), Type 1/Segment 3B transmission line (WDID # 6B15C362656) and the Highwind Substation (WDID# 6B15C361498).**
Other County, City, etc. (Type and Permit/License Number):
Any Required Documents or Plan Submittals (SWPPP, Mitigation & Monitoring, etc.):
See Attachment C, Supplemental Information Sheet.

NEPA and/or CEQA Compliance	
Document type:	Final EIR for the ATP Project Segments 2 and 3
Lead Agency:	CPUC
Date completed:	December 26, 2006
State Clearinghouse Number:	No. 2006041160

IMPACTS

Describe Potential Water Quality Impacts:

See Attachment C, Supplemental Information Sheet, and Attachment E, Comparison of Impacts to Mitigation.

Final Project Impacts (Fill)*

Waterbody Type	Permanent			Temporary		
	Acres**	Linear Feet	Cubic Yards	Acres**	Linear Feet	Cubic Yards
Lake						
Ocean						
Riparian						
Streambed	0.183	1220.5	250	0.171	1747.5	16.5
Vernal Pool						
Wetland	0.0058	N/A	1	0.0285	N/A	<0.5

* Include all three measurements (acres, linear feet and cubic yards) for all federal and non-federal waterbody types.
** Provide acres to three decimal places (e.g., 0.006).

Final Project Impacts (Dredge*/Excavation)**

Waterbody Type	Permanent			Temporary		
	Acres***	Linear Feet	Cubic Yards	Acres***	Linear Feet	Cubic Yards
Lake						
Ocean						
Riparian						
Streambed	0.004	100.5	51.7	0.005	115.5	50
Vernal Pool						
Wetland						

* For projects that will occur annually please provide the total volume to be dredged for the entire certification period (typically 5 years).
** Include all three measurements (acres, linear feet and cubic yards) for all federal and non-federal waterbody types.
*** Provide acres to three decimal places (e.g., 0.006).

Impact Comparison*

	Fill				Dredge			
	Permanent		Temporary		Permanent		Temporary	
	Initial	Final	Initial	Final	Initial	Final	Initial	Final
*Impacts (Acres)***	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

* Include impacts to both federal and non-federal waters.
** Provide acres to three decimal places (e.g., 0.006).

MITIGATION
Describe Avoidance and Minimization for Impacts to Waters:
See Attachment C, Supplemental Information Sheet.
Describe Compensatory Mitigation for Impacts to Waters (temporary and permanent):
See Attachment C, Supplemental Information Sheet.

Compensatory Mitigation (Proponent Provided)

Waterbody Type	Acres Established		Acres Restored		Acres Enhanced		Acres Preserved	
	Temp.*	Perm.	Temp.*	Perm.	Temp.*	Perm.	Temp.*	Perm.
Lake								
Ocean								
Riparian								
Streambed			0.20				Proposed 0.20	Proposed 0.21
Vernal Pool								
Wetland								

* Report as mitigation for temporary impacts at a 1:1 ratio any required conditions to restore the site (e.g., re-vegetating or re-contouring).

Compensatory Mitigation (Mitigation Bank)

Waterbody Type	Acres Established	Acres Restored	Acres Enhanced	Acres Preserved
Lake				
Ocean				
Riparian				
Streambed				
Vernal Pool				
Wetland				

Compensatory Mitigation (In-Lieu)

Waterbody Type	Acres Established	Acres Restored	Acres Enhanced	Acres Preserved
Lake				
Ocean				
Riparian				
Streambed				
Vernal Pool				
Wetland				

Proponent Provided Mitigation Information (If Applicable)*		
	Site 1	**Site 2**
Mitigation Site Location(s):	**See Attachment C**	
Mitigation Site Lat/Long(s):		
Name of Watershed & Hydrologic Unit:		
Mitigation Site City and County:		
*If more than two sites, please provide additional information in the additional information table located at the end of this form.		

Mitigation Bank Information (If Applicable)*		
	Bank 1	**Bank 2**
Mitigation Bank Name:	**See Attachment C**	
Name of Mitigation Bank Operator:		
Address of Mitigation Bank Office:		
Mitigation Bank Location(s):		
Mitigation Bank Lat/Long(s):		
Name of Watershed & Hydrologic Unit:		
Mitigation Bank City and County:		
Mitigation purchase amount ($):		
*If more than two sites, please provide additional information in the additional information table located at the end of this form.		

In-Lieu Mitigation Information (If Applicable)*		
	Program 1	**Program 2**
Name of approved in-lieu fee mitigation sponsor:		
Address of In-lieu mitigation sponsor:		
Description of in-lieu mitigation arrangements:		
In-lieu mitigation location:		
In-lieu mitigation Lat/Long(s):		
In-lieu mitigation City and County:		
Name of Watershed & Hydrologic Unit:		
*If more than two sites, please provide additional information in the additional information table located at the end of this form.		

Additional Mitigation Information (Proponent, Bank, or In-Lieu)		
	Site 1	**Site 2**
Mitigation Site Name:		
Name of Mitigation Site Operator:		
Address of Mitigation Site Office:		
Mitigation Site Location(s):		
Mitigation Site Lat/Long(s):		
Name of Watershed & Hydrologic Unit:		
Mitigation Site City and County:		
Mitigation purchase amount ($):		

Attachment C

Supplemental Project Information Sheet

Attachment C
Supplemental Project Information Sheet
(Information Provided by Southern California Edison)

Cross Streets:	**Highwind Substation**: 19927 Jameson Road (off Tehachapi Willow Springs Road)
Section, Township, Range:	Segment 3B begins in Section 36, Township 32 South, Range 33 East of the Tehachapi South U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle, and terminates in Section 20, Township 11 North, Range 13 West, as shown on the Monolith USGS 7.5-minute topographic quadrangle. **Highwind Substation**: USGS Quad Tehachapi South; Township 32S; Range 33E, Section 25,26
Zip Code:	**Highwind Substation**: 93536
Directions:	**Highwind Substation**: From Interstate 215 (I-215), take exit 15 for CA-74 toward Hemet. Turn left onto CA-74 E. Turn right onto Menifee Road.
Latitude(s) and Longitude(s):	**Highwind Substation**: -118.3854356 / 35.1095313
Receiving Water(s):	The Project area consists of ephemeral drainages that typically originate in the foothills and along steep slopes, with much of the low-lying areas being subject to flash flooding. The entire Project area spans two watersheds: the Fremont Hydrologic Unit (HU) and the Antelope HU. The northern portion of the Segment 3B Project alignment, including the Highwind Substation, is located in the East Tehachapi Hydrologic Area (HA) 625.30 in the Fremont HU 625.00, which includes the receiving waters of Proctor Dry Lake and Mendibury Creek. The southern portion of the Project alignment is located in the Chafee HA in the Antelope HU 626.00, which includes the receiving waters of Oak Creek and Rosamond Dry Lake. Oak Creek, the only perennial stream that crosses the Project alignment, is located near the southern portion of the alignment and parallels Construct 3B-33 eastward to Construct 3B-67. Proctor Valley Dry Lake, Rosamond Dry Lake, Oak Creek, and Mendibury Creek are all considered isolated (non-federal) waters. The Basin Plan designates beneficial uses for surface waters in the Lahontan Regional Water Quality Control Board Region. Beneficial uses of surface waters in the Project area and vicinity that could be affected by the Project were identified for Proctor Dry Lake, the Chafee HA, and Oak Creek, and are summarized in *Attachment B*. Beneficial uses of groundwaters in the Antelope Valley and Fremont Valley

groundwater basins that could be affected by the Project include Municipal and Domestic Water Supply (MUN), Agricultural Supply (AGR), Industrial Service Supply (IND), and Freshwater Replenishment (FRSH).

None of the surface waters or downstream receiving waters in the Segment 3B Project alignment is listed on the 2010 U.S. Environmental Protection Agency, Clean Water Act, Section 303d, list of impaired surface waters.

Candidate, Sensitive, or Special-Status Species:

Several special-status plant and wildlife species are known to occur within and adjacent to the proposed Project area. It was determined that a Section 7 Biological Opinion (BO) would not be required by the U.S. Fish and Wildlife Service (USFWS) because Project activities would not result in an adverse effect on a federally listed threatened, endangered, proposed, petitioned, or candidate species and Project activities would not affect occupied designated critical habitat. It was also determined that an Incidental Take Permit (per Section 2081 of Fish and Game Code) would not be required by California Department of Fish and Game because Project activities would not result in the take of species under the California Endangered Species Act.

According to several biological resources survey reports conducted by SCE and a review of the ATP Segments 2 & 3 Final EIR, several special-status plant and wildlife species have the potential to occur in the Segment 3B Project area. Nine special-status plant species have the potential to occur in the Segment 3B area, and the following three plants of the nine were identified during focused surveys: Mojave Indian paintbrush (*Castilleja plagiotoma*), adobe yampah (*Perideridia pringlei*), and Bakersfield cactus (*Opuntia basilaris* var. *treleasei*). No impacts will occur on Bakersfield cactus, and all individual plants will be avoided during construction. Furthermore, no impacts are anticipated for Mojave Indian paintbrush and adobe yampah. Forty-one special-status wildlife species have the potential to occur within the Segment 3B Project area. Of these special-status wildlife species, 11 were confirmed to be present: Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter striatus*), golden eagle (*Aquila chrysaetos*), burrowing owl (*Athene cunicularia*), ringtail (*Bassariscus astutus*), merlin (*Falco columbarius*), prairie falcon (*Falco mexicanus*), desert tortoise (*Gopherus agassizii*), loggerhead shrike (*Lanius ludovicianus*), LeConte's thrasher (*Toxostoma lecontei*), and desert kit fox (*Vulpes macrotis*). All potential impacts on these species will be avoided.

Desert tortoise habitat is the only species habitat that occurs in the vicinity of jurisdictional waters and is anticipated to be affected by the construction of the Project alignment. Desert tortoise habitat will be monitored, and all impacts will be avoided. For those impacts that result in a loss of desert tortoise habitat, SCE will identify appropriate

mitigation lands for habitat preservation, as described below in the description of compensatory mitigation.

Any Required Documents or Plan Submittals (SWPPP, Mitigation and Monitoring, etc.):

SCE is currently covered under the California General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), State Water Resources Control Board Order No. 2009-0009–DWQ; National Pollutant Discharge Elimination System General Permit No. CAS000002, as a Linear Underground/Overhead Project (LUP), Type 1 for the Segment 3B Project. SCE prepared two stormwater pollution prevention plans (SWPPPs), one for the Segment 3B transmission line (WDID # 6B15C362656) and one for the Highwind Substation (WDID# 6B15C361498).

In addition, mitigation measures (MM) and Applicant-Proposed Measures (APMs) have been incorporated into the Project to reduce the extent of impacts. APMs represent a commitment by SCE that was included in the original application to the California Public Utilities Commission (CPUC) on December 9, 2004 (A.04-12-008) and considered part of the proposed Project. Additional mitigation measures were adopted for the Project if it was determined during preparation of the EIR that the APMs did not fully mitigate the impacts for which they were presented. A current final version of the Mitigation Measures and APMs for biological resources, hydrology, geology and soils, and hazardous materials is provided in Attachment G. Changes may be made to the document as construction progresses.

Describe Potential Water Quality Impacts:

The Project will affect 27 features that are waters of the state. The U.S. Army Corps of Engineers (Corps) claims that all of the affected features are isolated waters (non-federal waters). The Corps official jurisdictional determination is pending. One wetland area (a surface water delineated as a "wetland" in the Corps of Engineers Wetlands Delineation Manual, 1987) is expected to be affected by Project activities (installation of new McCarthy drain on access road from Construct 26). The proposed Project will result in 0.19 acre of permanent impacts and 0.20 acres of temporary impacts on waters of the state. Temporary impacts due to vegetation trimming and/or grading in existing access roads are excluded from compensatory mitigation totals. A detailed breakout of temporary and permanent impacts by feature is provided in Attachment B, Tables 1-3.

Temporary impacts from construction activities will be from the installation of new structures (transmission towers, outfall structures at Highwind Substation, McCarthy drains, riprap, gabion retaining walls, and concrete v-ditches), temporary access roads, guard poles, wire stringing, zinc ribbons for Alternating Current (AC) Gas Pipeline Mitigation (AC mitigation), crane pads, and impacts associated with other activities. Permanent impacts will be from the installation of the tower footings and other new structures, access roads, paved wet crossings, and operation of the new Highwind Substation.

Construction of the proposed Project would require excavation and grading activities for construction of Project facilities. Disturbance of soil during construction could result in soil erosion and lowered water quality through increased turbidity and sediment deposition into local streams. APMs HYD-1 to HYD-2 and Mitigation Measures H-1a, H-1d, and H-7 are intended to reduce the amount of erosion and sedimentation that would result from construction. With implementation of the APMs defined above and the required SWPPP, construction-related water quality degradation from soil erosion and sedimentation would be less than significant and no mitigation is required, unless impacts occur within waters of the state.

For portions of the Project located on very steep terrain, there is concern that construction of the power line would result in increased erosion in these areas, with long-term adverse water quality impacts. Implementation of the APMs and the required SWPPP would address short-term construction impacts. However, long-term impacts still may occur in some sensitive areas because of the steepness of the terrain. Implementation of Mitigation Measure H-7 would reduce potentially significant impacts to less-than-significant levels.

Accidental spills or disposal of potentially harmful materials used during construction could occur during refueling or as a result of equipment damage. Spilled liquids could wash into and pollute

surface waters or groundwater. Materials that potentially could contaminate the construction area through spills or leaks include diesel fuel, gasoline, lubrication oil, hydraulic fluids, antifreeze, transmission fluid, lubricating grease, and other fluids. Impacts on water quality from construction-related activities would be reduced to less than significant with the implementation of the Project SWPPPs; APMs HYD-2 to HYD-4; Mitigation Measures HAZ-1a (Implement an Environmental and Training and Monitoring Program), HAZ-1b (Implement a Hazardous Substance Control and Emergency Response Plan), HAZ-1d (Emergency Spills Supplies and Equipment for Construction Activities), HAZ-2a (Implement Spill Prevention, Countermeasure, and Control Plans), and HAZ-2b (Emergency Spill Supplies and Equipment for Operation and Maintenance Activities).

Construction of Project-related facilities could result in additional runoff through creation of impervious areas and compaction of soils. Impervious areas and compacted soils generally are less able to absorb rainfall, so increased flood peaks are a common occurrence in developed areas. Project construction may result in small local increases in runoff, but the total area affected by construction would be very small in comparison with the total watershed. Implementation of Mitigation Measure H-7 would ensure that the adverse effects associated with increased runoff from new impervious areas would be less than significant.

Oil from electrical equipment at substations and the series capacitors could be released accidentally and contaminate local surface water and/groundwater. However, implementation of APM HYD-4 (Use of Oil-Absorbent Materials to Contain and Control Any Minor Releases of Transformer Oil) would address this occurrence. In addition, the implementation of Mitigation Measure HAZ-2b (Emergency Spill Supplies and Equipment for Operation and Maintenance Activities) would reduce this impact to less than significant.

Encroachment of a Project structure into a water flow path could result in erosion damage to the encroaching structure. This impact likely would occur only if transmission line towers or other permanent Project features were constructed in or closely adjacent to a watercourse. Although the Project description states that watercourses would be avoided by design where possible, complete avoidance may be difficult in some areas. APMs BIO-3, BIO-5, and BIO-6 and Mitigation Measure B-3a were designed by SCE to avoid the adverse local effects related to floodplain encroachment by avoiding streambeds and streambanks where possible, ensuring foundations are adequate to resist scour, and constructing diversion dikes in severe cases.

A summary of APMs and MMs is provided in *Attachment G – Mitigation Measures and Applicant Proposed Measures*.

Describe Avoidance and Minimization for Impacts to Waters:

Through final design and engineering, the Project avoids several features that would have been permanently or temporarily affected by the original design.

SCE identified APMs that avoid and minimize impacts on waters of the state and water quality prior to submittal of the application to CPUC. Additionally, the overall approach to addressing waters of the state in the Project area is to prioritize avoidance and minimization of impacts on waters with mitigation/compensation employed only where impacts are unavoidable.

A whole suite of avoidance, minimization, restoration, and compensatory mitigation measures has been and will be implemented to reduce unavoidable impacts on water resources to the maximum extent possible, including but not limited to facility micro-siting measures, design revisions, construction monitoring, water quality, and construction site best management practices (BMPs).

Describe Compensatory Mitigation for Impacts to Waters (temporary and permanent):

Temporary impacts will be restored onsite and will also be compensated for offsite. Onsite restoration of temporary impacts will involve revegetation and site stabilization. Revegetation will include application of an erosion control seed mix consisting of weed-free, native plant species appropriate for the Tehachapi/Mojave region that is compliant with the Project SWPPP and the ATP Segment 2 and 3 FEIR (FEIR; December 2006). The seed mix proposed for jurisdictional waters will be provided to CDFG and State Water Board staff prior to application. As required in the SWPPP, monitoring of the erosion control seed mix growth and site stabilization will be conducted on a daily basis until the site achieves 70 % vegetative cover. Once the site has reached 70 % cover, weekly monitoring will be conducted until the Notice of Termination is finalized by the Regional Water Quality Control Board. A Habitat Restoration and Revegetation Plan (HRRP; July 2008) was provided with the application package that covers ATP Segments 2 and 3. The HRRP will be used for all temporary disturbance areas requiring stabilization and revegetation. An HRRP Addendum is being prepared by the SCE to address the Segment 3B jurisdictional waters impacts and provide updated calculations and methodologies. In addition to onsite restoration, compensatory mitigation will also occur for temporary impacts at an offsite location. Therefore, 0.20 acre of waters of the state will be restored onsite and 0.20 acre of compensatory mitigation will occur for waters of the state offsite. For offsite mitigation, SCE proposes to purchase an area with comparable desert wash habitat (i.e., Mojave desert wash scrub). The area should provide the functions and values equal to those waters that are temporarily impacted by the Project.

For 0.19 acre of permanent impacts on waters of the state, 0.21 acre is proposed to be mitigated offsite. A separate entity is expected to

manage all offsite mitigation lands, including those proposed for jurisdictional waters, native habitat, and special-status species (desert tortoise) mitigation. A designated Land Manager, and subsequent Land Managers upon transfer, will manage and monitor the compensatory mitigation areas in perpetuity to protect their habitat and conservation values in accordance with the WDRs. The proposed total compensatory mitigation for temporary and permanent impacts is 0.41 acre.

A Summary of Temporary and Permanent Impacts to State-Jurisdictional Waters and Proposed Onsite Restoration and Offsite Mitigation is provided in *Attachment F- Mitigation Tables*.

SCE will mitigate for both temporary and permanent impacts to waters of the state according to the requirements described in the WDRs.

No California Rapid Assessment Method (CRAM) analyses have been conducted for any Segment 3B Project impacts because CRAM's applicability in arid stream systems like those observed in the Segment 3B watersheds can be somewhat limited. Per the CRAM Riverine Module (Vers. 6; 2012): "There may be a limit to the applicability of this module in low order (i.e., headwater) streams, in very arid environments, and in desert streams that tend not to support species-rich plant communities with complex horizontal and vertical structure. CRAM may be systematically biased against such naturally simple riverine systems." (Available:http://www.cramwetlands.org/documents/2012-04-17_CRAM%20Field%20Book%20Riverine.pdf).

Mitigation Site Location(s):

Restoration will occur where waters of the state are temporarily affected. Offsite mitigation for permanent impacts on state waters is proposed to occur through purchases of land for preservation. The location of purchased land has not yet been decided but will be considered to address all potential impacts, including those on state waters, native habitat, and special-status species (desert tortoise) mitigation. SCE is currently reviewing available land parcels that would meet mitigation requirements, including native vegetation communities and desert wash habitat.

Attachment D
Maps

Figure 1: Project Overview

Figure 2: Project Vicinity & Watersheds

Figure 3: Index Map with Sheet Numbers

Figure 4: Representative Map of Impacts to Waters under the Water Board and CDFG Jurisdictions (Highwind Substation - outfall structures) *[Source: Sheet 1 of Figure 3, WDR Permit Application Package]*

Figure 5: Representative Map of Impacts to Waters under the Water Board and CDFG Jurisdictions (Construct 8 – permanent tower footing O&M area in drainage) *[Source: Sheet 3 of Figure 3, WDR Permit Application Package]*

Figure 6: Representative Map of Impacts to Waters under the Water Board and CDFG Jurisdictions (Construct 13 – Installation of three McCarthy drains) *[Source: Sheet 4 of Figure 3, WDR Permit Application Package]*

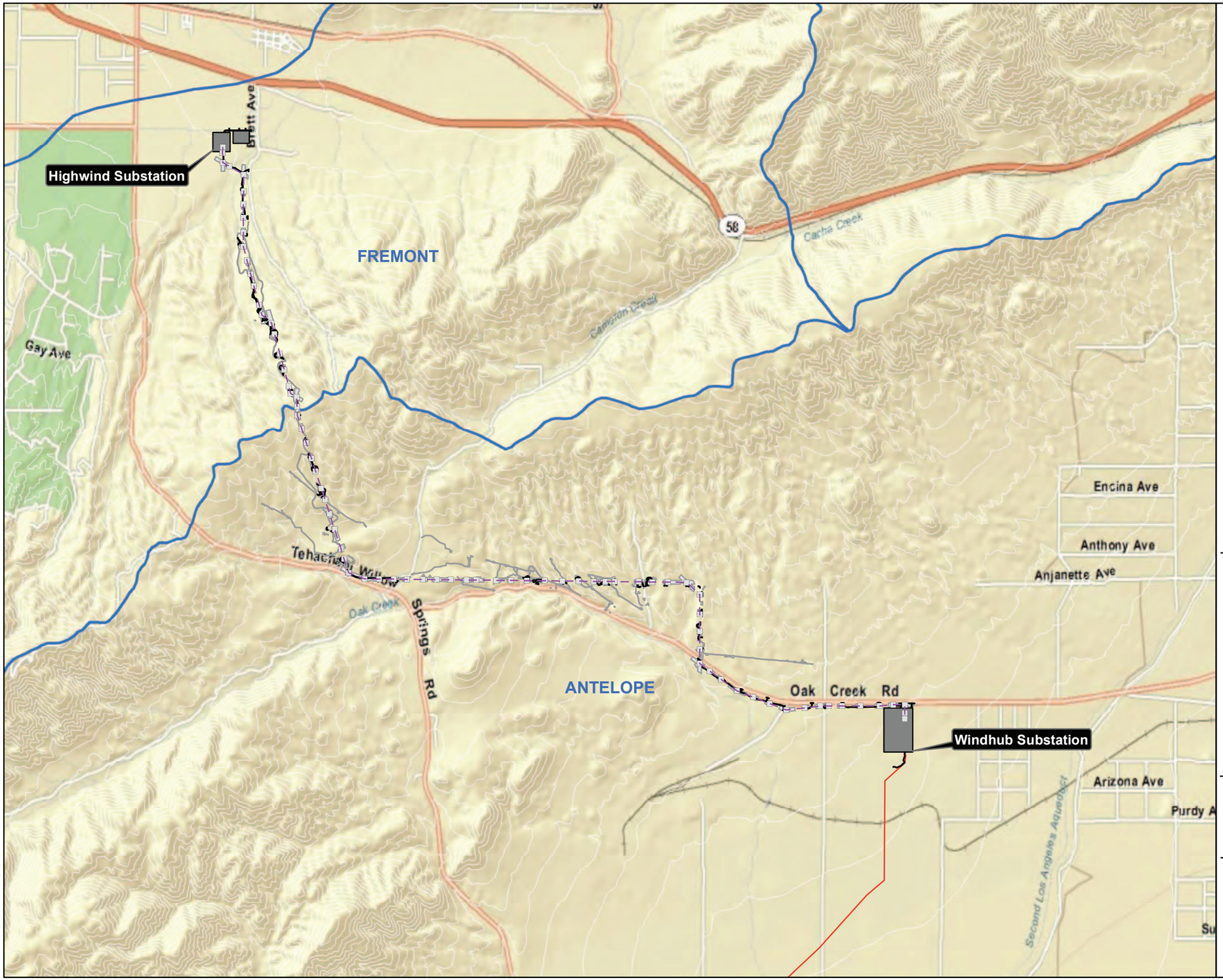
Figure 7: Representative Map of Impacts to Waters under the Water Board and CDFG Jurisdictions (Construct 16 – New Access Road plus installation of two McCarthy drains; Construct 17 – widening of existing access road, installation of new McCarthy drain and maintenance grading of existing access road) *[Source: Sheet 6 of Figure 3, WDR Permit Application Package]*

Figure 8: Representative Map of Impacts to Waters under the Water Board and CDFG Jurisdictions (Construct 27 – Installation of new McCarthy drain in wetland habitat) *[Source: Sheet 14 of Figure 3, WDR Permit Application Package]*

Figure 9: Representative Map of Impacts to Waters under the Water Board and CDFG Jurisdictions (Construct 33 –Construct 33 and permanent O&M area located within stream channel and will be converted to rip-rap lined channel for approximately 32 feet) *[Source: Sheet 20 of Figure 3, WDR Permit Application Package]*

Figure 10: Representative Map of Impacts to Waters under the Water Board and CDFG Jurisdictions (Constructs 44-46 – widening of existing access road, AC Mitigation – zinc ribbon installation, maintenance grading, as well as installation of concrete v-ditch and new concrete outlet, gabion retaining wall, and McCarthy drain) *[Source: Sheet 23 of Figure 23, WDR Permit Application Package]*

Figure 1
Project Area Map
Attachment D
Antelope Transmission Project – Segment 3B



Legend

- Segment 3B
- Segment 3A
- Segment 2
- New Structure

Impact Areas

- Permanent
- Temporary
- Watershed
- Topo

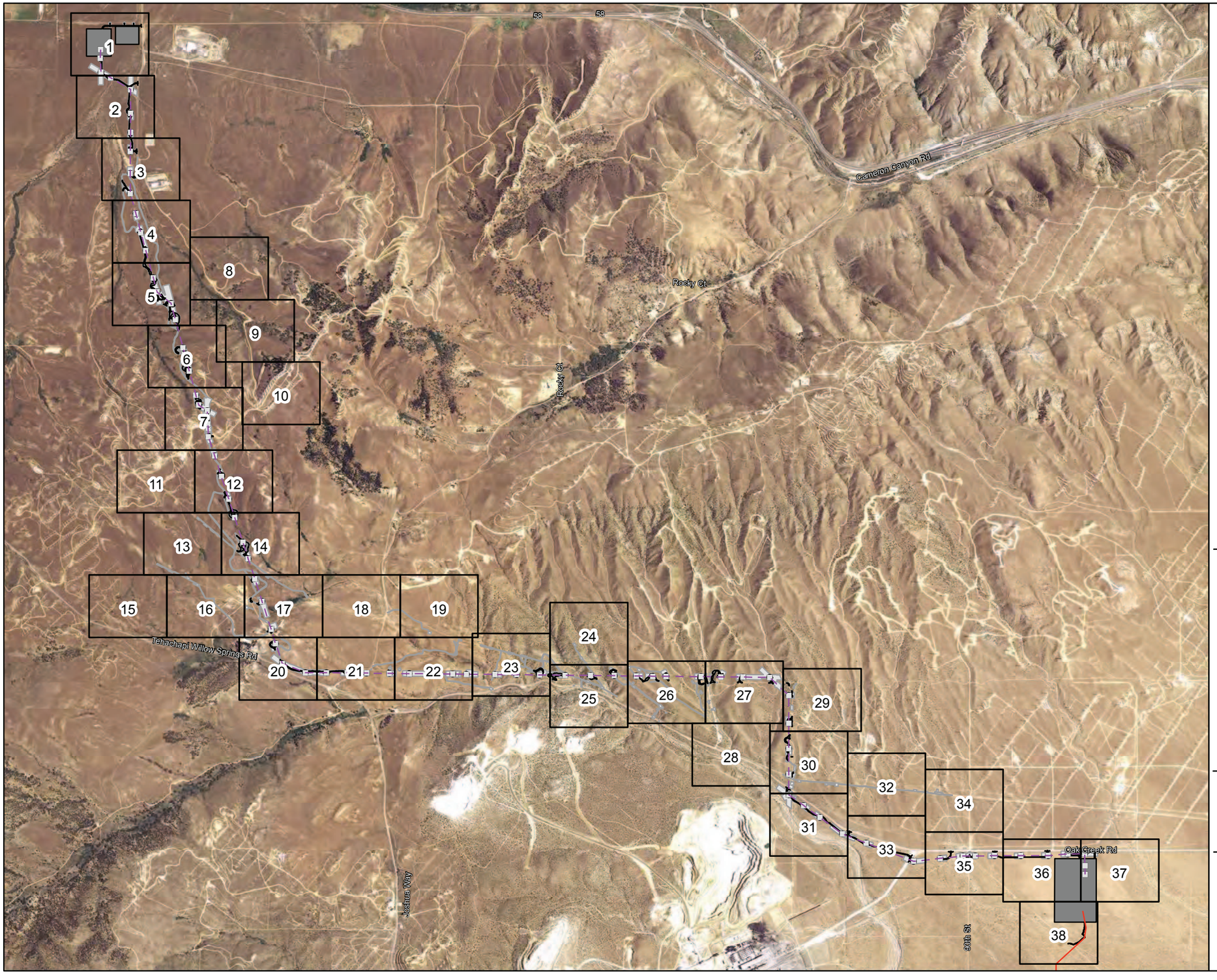
Source: Figure 2, WDR Permit Application Package

N

0 2,250 4,500

Feet

Figure 2
Project Vicinity & Watersheds
Attachment D
Antelope Transmission Project – Segment 3B



Legend

- Segment 3B
- Segment 3A
- Segment 2
- New Structure

Impact Areas

- Permanent
- Temporary
- Mapbook Index

Source: Figure 3, WDR Permit Application Package

N

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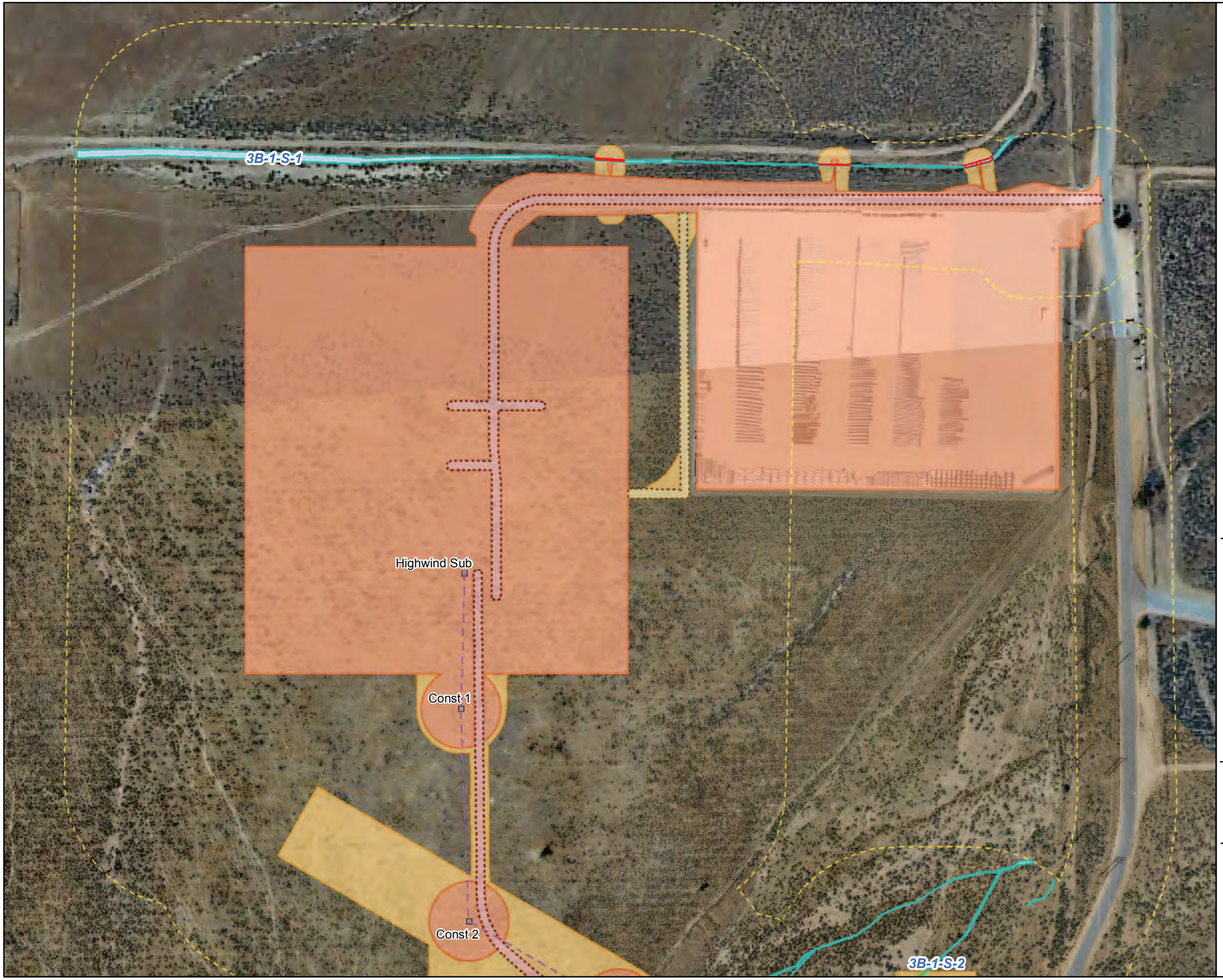
Feet

Figure 3
Index Map with Sheet Numbers
Attachment D
Antelope Transmission Project – Segment 3B



Legend

- Segment 3B
- Segment 3A
- Segment 2
- New Structure

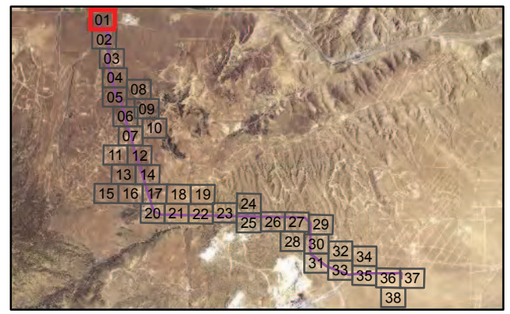
Jurisdictional Waters

- State Streambed (CDFG/SWRCB)
- CDFG Riparian
- Wetland
- Survey Area

Impacts

- Avoided - No Impact
- Impacts to Jurisdictional Waters
- Permanent
- Temporary
- Permanent Road
- Temporary Road

Source: Sheet 1 of Figure 3, WDR Permit Application Package



N

0 100 200

Feet

Figure 4
Representative Map of Impacts to Waters under the Water Board and CDFG Jurisdictions (Highwind Substation – outfall structures)
Attachment D
Antelope Transmission Project – Segment 3B

Legend

- Segment 3B
- Segment 3A
- Segment 2
- New Structure

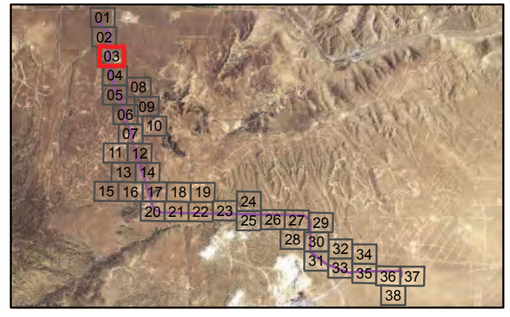
Jurisdictional Waters

- State Streambed (CDFG/SWRCB)
- CDFG Riparian
- Wetland
- Survey Area

Impacts

- Avoided - No Impact
- Impacts to Jurisdictional Waters
- Permanent
- Temporary
- Permanent Road
- Temporary Road

Source: Sheet 3 of Figure 3, WDR Permit Application Package



N

0 100 200

Feet

Figure 5
Representative Map of Impacts to Waters under the Water Board and CDFG Jurisdictions (Construct 8 – permanent tower footing O&M area in drainage)
Attachment D
Antelope Transmission Project – Segment 3B

Legend

- Segment 3B
- Segment 3A
- Segment 2
- New Structure

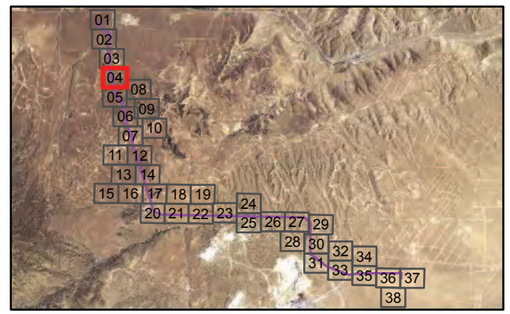
Jurisdictional Waters

- State Streambed (CDFG/SWRCB)
- CDFG Riparian
- Wetland
- Survey Area

Impacts

- Avoided - No Impact
- Impacts to Jurisdictional Waters
- Permanent
- Temporary
- Permanent Road
- Temporary Road

Source: Sheet 4 of Figure 3, WDR Permit Application Package



N

0 100 200

Feet

Figure 6
Representative Map of Impacts to Waters under the Water Board and CDFG Jurisdictions (Constructs 10–12 – Installation of three McCarthy drains)
Attachment D
Antelope Transmission Project – Segment 3B

Legend

- Segment 3B
- Segment 3A
- Segment 2
- New Structure

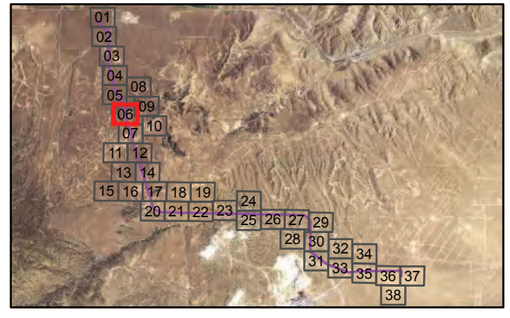
Jurisdictional Waters

- State Streambed (CDFG/SWRCB)
- CDFG Riparian
- Wetland
- Survey Area

Impacts

- Avoided - No Impact
- Impacts to Jurisdictional Waters
- Permanent
- Temporary
- Permanent Road
- Temporary Road

Source: Sheet 6 of Figure 3, WDR Permit Application Package



N

0 100 200

Feet

Figure 7
Representative Map of Impacts to Waters under the Water Board and CDFG Jurisdictions (Constructs 17 and 18 – New Access Road plus installation of two McCarthy drains, widening of existing access road, installation of new McCarthy drain and maintenance grading of existing access road)
Attachment D
Antelope Transmission Project – Segment 3B

Legend

- Segment 3B
- Segment 3A
- Segment 2
- New Structure

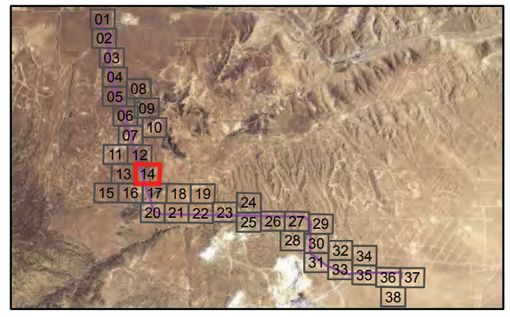
Jurisdictional Waters

- State Streambed (CDFG/SWRCB)
- CDFG Riparian
- Wetland
- Survey Area

Impacts

- Avoided - No Impact
- Impacts to Jurisdictional Waters
- Permanent
- Temporary
- Permanent Road
- Temporary Road

Source: Sheet 14 of Figure 3, WDR Permit Application Package



N

0 100 200

Feet

Figure 8
Representative Map of Impacts to Waters under the Water Board and CDFG Jurisdictions (Construct 27 – Installation of new McCarthy drain in wetland habitat)
Attachment D
Antelope Transmission Project – Segment 3B

Legend

- Segment 3B
- Segment 3A
- Segment 2
- New Structure

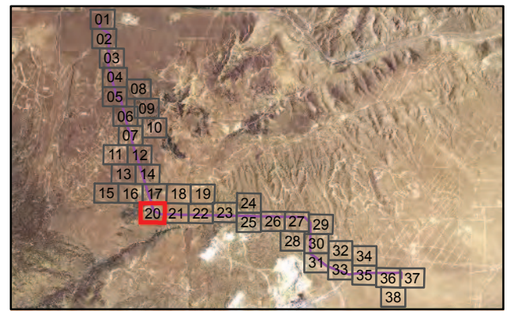
Jurisdictional Waters

- State Streambed (CDFG/SWRCB)
- CDFG Riparian
- Wetland
- Survey Area

Impacts

- Avoided - No Impact
- Impacts to Jurisdictional Waters
- Permanent
- Temporary
- Permanent Road
- Temporary Road

Source: Sheet 20 of Figure 3, WDR Permit Application Package

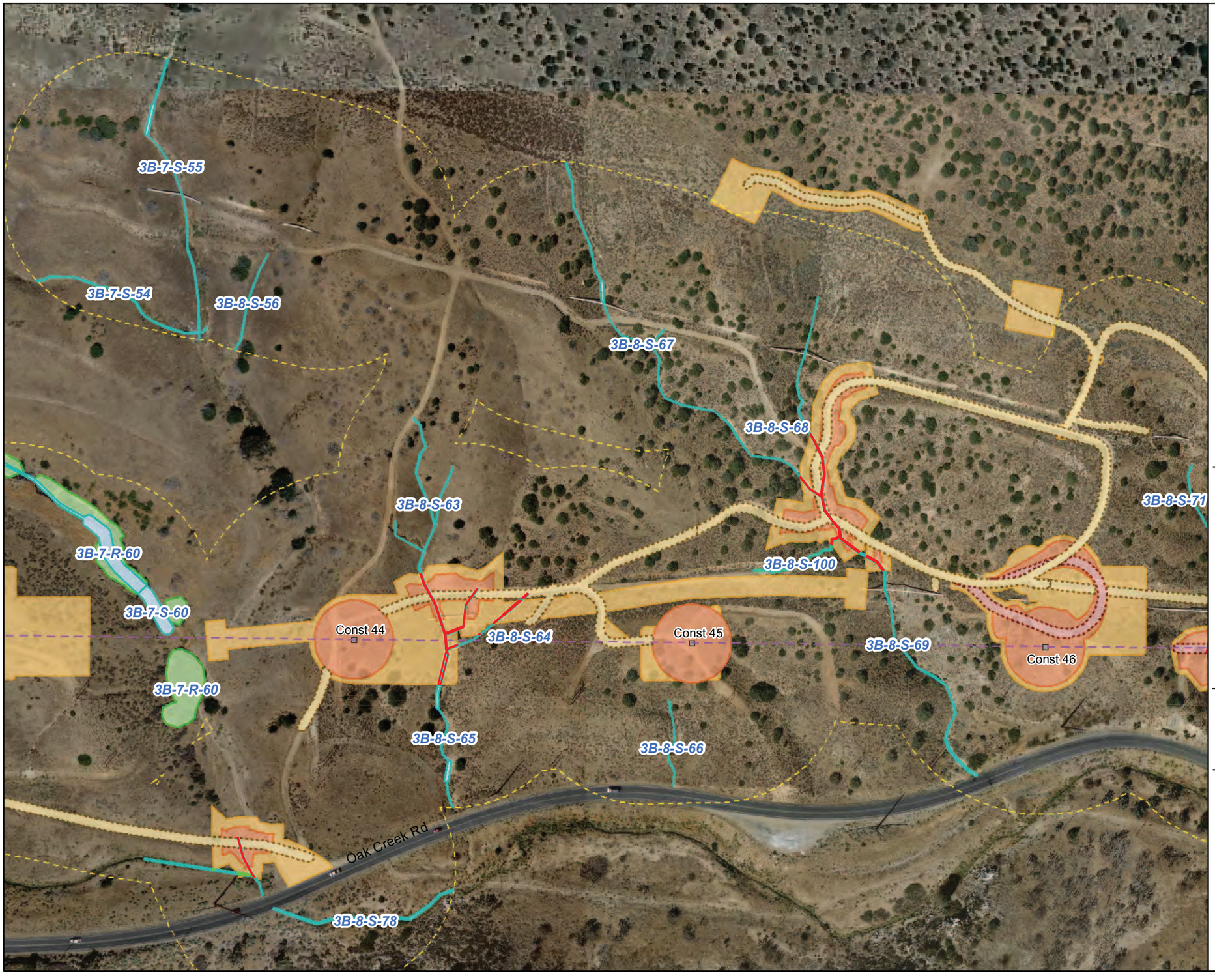


N

0 100 200

Feet

Figure 9
Representative Map of Impacts to Waters under the Water Board and CDFG Jurisdictions (Construct 33 – Construct 33 and permanent O&M area located within stream channel and will be converted to rip-rap lined channel for approximately 32 feet)
Attachment D
Antelope Transmission Project – Segment 3B



Legend

- Segment 3B
- Segment 3A
- Segment 2
- New Structure

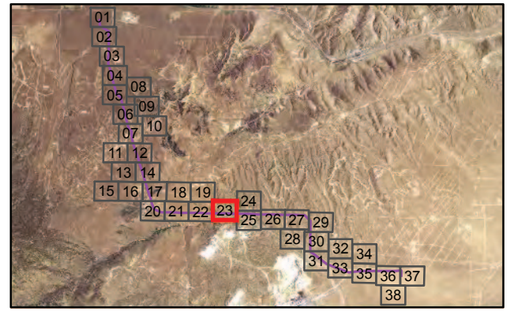
Jurisdictional Waters

- State Streambed (CDFG/SWRCB)
- CDFG Riparian
- Wetland
- Survey Area

Impacts

- Avoided - No Impact
- Impacts to Jurisdictional Waters
- Permanent
- Temporary
- Permanent Road
- Temporary Road

Source: Sheet 23 of Figure 3, WDR Permit Application Package



N

0 100 200

Feet

Figure 10
Representative Map of Impacts to Waters under the Water Board and CDFG Jurisdictions (Constructs 44-46 – widening of existing access road, AC Mitigation – zinc ribbon installation, maintenance grading, as well as installation of concrete v-ditch and new concrete outlet, gabion retaining wall, and McCarthy drain)
Attachment D
Antelope Transmission Project – Segment 3B

Attachment E

Project Impact Tables

Attachment E
Project Impact Tables
(Information Provided by Southern California Edison)

Table 1. Summary of Fill and Excavation, and Temporary and Permanent, Impacts by Feature Type

Jurisdictional Feature Type	Fill/ Discharge[1]			Dredge/ Excavation[1]			Segment 3B Project		
	Ln. ft.	Acres	Cu. yards	Ln. ft.	Acres	Cu. yards	Permanent (acre)	Temporary (acre)	Total (acre)
Non-Wetland Waters									
Dry Washes	2,819	0.353	241.5	216	0.009	101.7	0.186	0.175	0.362
Streams without Riparian	88	0.002	25	—	—	—	0.001	0.001	0.002
Streams with Riparian	—	—	—	—	—	—	—	—	—
Non-Wetland Waters Subtotal	2,968	0.355	266.5	216	0.009	101.7	0.187	0.176	0.364
Wetlands									
Wetlands	—	0.034	1	—	—	—	0.006	0.029	0.034
Total[2]	2,968	0.389	267.5	216	0.009	101.7	0.19	0.20	0.40[2]

Notes,
[1] Assumes McCarthy drains require 1 cubic yards of fill each. All maintenance grading is considered negligible as it only reallocates existing material onsite. Only fill and/or excavation calculated within the actual jurisdictional feature are included.
[2] Totals represent the sum of column values. May not total due to rounding.

Table 2. Impact Acreage by Tower Number for Segment 3B

Tower/ Construct Number	Associated Components	Non-Wetland Waters (acre)		Wetlands (acre)		Total
		Permanent	Temporary	Permanent	Temporary	
Highwind Substation	Outfall Structures	0.0019	0.0119	—	—	0.0138
8	Permanent tower footings, temporary structure work area, new McCarthy drain; new rip-rap lined channel	0.1018	0.0717	—	—	0.1735
13	Three new McCarthy drains	0.0004	0.0023	—	—	0.0027
16	New access road and two new McCarthy drains	0.0014	0.0019	—	—	0.0033
17	Access road widening, replacement of existing culvert, new McCarthy drain plus maintenance grading	0.002	0.0025	—	—	0.0045
26	New McCarthy drain	0.001	0.0006	—	—	0.0016
27	New McCarthy drain	—	—	0.0058	0.0285	0.0343
31	AC Mitigation - Zinc Ribbon Installation	0	0.0027	—	—	0.0027
33	Permanent O&M area and temporary structure work area; new rip-rap lined channel	0.0195	0.0016	—	—	0.0211
39 - Access Road	Maintenance grading of the existing access road; AC Mitigation	0	0.0021	—	—	0.0021
41 and 42 – Access Road	New McCarthy drain	0.0021	0.0004	—	—	0.0025
44	Access road widening, two new McCarthy drains; structure work area for Construct 44; AC Mitigation: zinc ribbon installation work area; and maintenance grading	0.0033	0.0215	—	—	0.0248
44 – Access Road	Road widening, replace existing culvert, new wet crossing, and new McCarthy drain	0.001	0.0009	—	—	0.0019

Table 2. Continued

Tower/ Construct Number	Associated Components	Non-Wetland Waters (acre)		Wetlands (acre)		Total
		Permanent	Temporary	Permanent	Temporary	
46	Access road widening, new concrete v-ditch and new concrete outlet; gabion retaining wall; new McCarthy drain; New access road and maintenance grading	0.0135	0.0141	—	—	0.0276
48	New McCarthy drain	0.0004	0.0007	—	—	0.0011
49	New McCarthy drain	0.0021	0.0044	—	—	0.0065
51	New McCarthy drain	0.0015	0.0009	—	—	0.0024
53	Maintenance grading of the existing access road	0	0.0079	—	—	0.0079
57	New concrete wet crossing within widened access road, new McCarthy drain	0.0353	0.0282	—	—	0.0635
Total[1]		0.19	0.18	0.01	0.03	0.40[1]

Notes:
[1] Totals represent the sum of column values. May not total due to rounding.

Table 3. Total Impacts to Waters of the U.S. and the State, and Mitigation Requirements for Segment 3B

Impacts per Habitat Type	Streambed/Wetland Impacts (acres)		Mitigation Ratios		Total Temp Mitigation (acre)	Total Perm. Mitigation (acre)	Total Mitigation (acre)
	Temp.	Perm.	Temp.	Perm.			
California Annual Grassland	0.0025	0.0021	1:1	1:1	0.0025	0.0021	0.0046
Desert Bunchgrass Grassland	0.0016	0.0195	1:1	1:1	0.0016	0.0195	0.0211
Disturbed/Developed	0.0079	0.0000	None	None	None	None	None
Joshua Tree Woodland	0.0006	0.0001	2:1	2:1	0.0012	0.0002	0.0014
Mojave Desert Wash Scrub	0.0284	0.0356	1:1	1:1	0.0284	0.0356	0.0640
Mojave Mixed Woody Scrub	0.0105	0.0036	1:1	1:1	0.0105	0.0036	0.0141
Mojavean Juniper Woodland and Scrub	0.0179	0.0166	2:1	2:1	0.0358	0.0332	0.0690
Rabbitbrush Scrub	0.0741	0.1047	1:1	1:1	0.0741	0.1047	0.1788
Southern Willow Scrub	0.0293	0.0063	1:1	1:1	0.0293	0.0063	0.0356
Sparsely Vegetated Streambed	0.0149	0.0029	1:1	1:1	0.0149	0.0029	0.0178
Unvegetated (Existing Access Roads)	0.0171	0.0016	None	None	None	None	None
Total[1]	0.20	0.19	--	--	0.20	0.21	0.41

Notes:
[1] Totals represent the sum of column values. May not total due to rounding.

Attachment F

Mitigation Tables

Attachment F
Mitigation Tables
(Information Provided by Southern California Edison)

Table 1. Summary of Onsite Restoration for Temporary Impacts to State-Jurisdictional Waters

Jurisdictional Feature Type	Segment 3B Impacts (acre)	Proposed Onsite Restoration (acre)
California Annual Grassland	0.0025	0.0025
Desert Bunchgrass Grassland	0.0016	0.0016
Disturbed/Developed	0.0079	0.0079
Joshua Tree Woodland	0.0006	0.0006
Mojave Desert Wash Scrub	0.0284	0.0284
Mojave Mixed Woody Scrub	0.0105	0.0105
Mojavean Juniper Woodland and Scrub	0.0179	0.0179
Rabbitbrush Scrub	0.0741	0.0741
Southern Willow Scrub	0.0293	0.0293
Sparsely Vegetated Streambed	0.0149	0.0149
Unvegetated (Existing Access Roads)	0.0171	0.0171
Total[1]	0.20	0.20

Notes:
[1]May not total due to rounding.

Table 2. Summary of Temporary Impacts to State-Jurisdictional Waters and Proposed Offsite Mitigation

Jurisdictional Feature Type	Segment 3B Impacts (acre)	Mitigation Ratio	Proposed Mitigation (acre)
California Annual Grassland	0.0025	1:1	0.0025
Desert Bunchgrass Grassland	0.0016	1:1	0.0016
Disturbed/Developed	0.0079	None	None
Joshua Tree Woodland	0.0006	2:1	0.0012
Mojave Desert Wash Scrub	0.0284	1:1	0.0284
Mojave Mixed Woody Scrub	0.0105	1:1	0.0105
Mojavean Juniper Woodland and Scrub	0.0179	2:1	0.0358
Rabbitbrush Scrub	0.0741	1:1	0.0741
Southern Willow Scrub	0.0293	1:1	0.0293
Sparsely Vegetated Streambed	0.0149	1:1	0.0150
Unvegetated (Existing Access Roads)	0.0171	None	None
Total[1]	0.20	--	0.20

Notes:
[1]May not total due to rounding.

Table 3. Summary of Permanent Impacts to State-Jurisdictional Waters and Proposed Offsite Mitigation

Vegetation Community	Total Impacts (acre)	Mitigation Ratio	Proposed Mitigation (acres)
California Annual Grassland	0.0021	1:1	0.0021
Desert Bunchgrass Grassland	0.0195	1:1	0.0195
Disturbed/Developed	0	None	None
Joshua Tree Woodland	0.0001	2:1	0.0002
Mojave Desert Wash Scrub	0.0356	1:1	0.0356
Mojave Mixed Woody Scrub	0.0036	1:1	0.0036
Mojavean Juniper Woodland and Scrub	0.0166	2:1	0.0332
Rabbitbrush Scrub	0.1047	1:1	0.1047
Southern Willow Scrub	0.0063	1:1	0.0063
Sparsely Vegetated Streambed	0.0029	1:1	0.0029
Unvegetated (Existing Access Roads)	0.0016	None	None
Total[1]	0.19	--	0.21

Notes:
[1]May not total due to rounding.

Attachment G

Mitigation Measures and Applicant Proposed Measures

Excerpt from the ATP Segment 2 and 3 FEIR (December 2006)

Also included in the Waste Discharge Requirement Application Attachment - ATP: Segment 3B, Highwind Substation, and AC Mitigation (April 2012)
(Provided by Southern California Edison)

Table 1. APMs and Mitigation Measures for the Proposed Project

Biological Resources APMs	
APM BIO-1	Pre-construction biological clearance surveys would be performed to minimize impacts on special-status plants or wildlife species.
APM BIO-2	Every effort would be made to minimize vegetation removal and permanent loss at construction sites. If necessary, native vegetation would be flagged for protection. A project revegetation plan would be prepared for areas of native habitat temporarily affected during construction. Joshua trees would be afforded protection under applicable provisions of the California Desert Native Plants Act and the City of Palmdale Code, Chapter 14.04 Joshua Tree and Native Desert Vegetation Preservation.
APM BIO-3	Construction crews would avoid affecting the streambeds and banks of any streams along the route to the extent feasible. If necessary, a Streambed Alteration Agreement (SAA) would be secured from CDFG. Impacts would be mitigated based on the terms of the SAA. No streams with flowing waters and/or those capable of supporting special-status species would be expected to be adversely affected from project implementation.
APM BIO-4	Construction and operations crews would be directed to use BMPs where applicable. These measures would be identified prior to construction and incorporated into the construction and maintenance operations.
APM BIO-5	Biological monitors would be assigned to the project. The monitors would be responsible for ensuring that impacts on special-status species, native vegetation, wildlife habitat, or unique resources would be avoided to the fullest extent possible. Where appropriate, monitors would flag the boundaries of areas where activities need to be restricted to protect native plants and wildlife or special-status species. These restricted areas would be monitored to ensure their protection during construction.
APM BIO-6	A Worker Environmental Awareness Program (WEAP) would be prepared, and all construction crews and contractors would be required to participate in WEAP training prior to starting work on the project. The WEAP training would include a review of the special-status species and other sensitive resources that could exist in the project area, the locations of sensitive biological resources as well as their legal status and protections, and measures to be implemented for avoidance of these sensitive resources. A record of all personnel trained would be maintained.
APM BIO-7	If it was determined that significant and unavoidable impacts occurred to any special-status resources, SCE would purchase lands or otherwise enhance habitat to compensate.
APM BIO-8	SCE would conduct project-wide raptor surveys and remove trees, if necessary, outside of the nesting season (1 February–31 August). If a tree or pole containing a raptor nest must be removed during the nesting season, or if work is scheduled to take place in proximity to an active nest on an existing transmission tower or pole, SCE would coordinate with CDFG and USFWS and obtain written concurrence prior to moving the nest.
APM BIO-9	All transmission and subtransmission towers and poles would be designed to be raptor-safe in accordance with Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 2006 (Avian Power Line Interaction Committee [APLIC] 2006).
Biological Resources Mitigation Measures	
B-3a	Avoid Desert Wash Habitat. The proposed Project shall be designed to avoid permanent impacts to desert wash habitats. If towers are to be located within desert washes then steps will be taken to relocate these facilities beyond the bed, bank and channel of these habitats. Similarly, access roads that need to cross desert washes will utilize half-arch culverts, steel plates, or any other method that leaves the bottom of the washes untouched and allows for continued conveyance of storm flows. Alternatively, access roads through the washes will be removed during the first season of construction to replace the pre-project topography in a manner that will not interrupt ephemeral surface flows. In areas where the desert wash habitat cannot be avoided, Mitigation B-3b shall be implemented.

B-3b	Preserve Off-site Desert Wash Habitat. Following final project design, SCE, in cooperation with CDFG and the CPUC, shall assess the area of impact to desert wash resources within the project site. To mitigate impacts to this area, off-site desert wash habitat shall be preserved in perpetuity at a ratio determined by CDFG in a Streambed Alteration Agreement dependent on the nature of disturbance and the quality of the desert wash habitat to be impacted. For example, high quality desert wash habitat would be mitigated for in perpetuity at a ratio of 2:1 (two acres preserved for each acre impacted). In the event of loss of desert wash habitat, SCE shall work with CDFG and CPUC to identify appropriate mitigation lands and ensure their permanent protection through an appropriate CDFG-approved mechanism, such as a conservation easement or fee title purchase. Mitigation acquisition shall occur at a CDFG-approved location such as the Desert Tortoise Preserve in Kern County and shall be coordinated through a CDFG-approved entity. SCE shall enter into a binding legal agreement regarding the preservation of off-site lands describing the terms of the acquisition, enhancement, and management of those lands. Fee title to acquired habitat lands, or a conservation easement over these lands, shall be transferred to CDFG or to an entity approved by CDFG and CPUC, along with money for enhancement of the land and an endowment for permanent management of the lands.
B-4a	Avoid Joshua Tree and Juniper Woodland Habitat. The proposed Project activities (construction phase, and operations and maintenance phase) shall be designed to avoid Joshua tree woodland habitat and juniper woodland habitat to the maximum extent feasible. All efforts shall be made, in particular, to avoid individual trees of either species. Any trees that must be impacted shall be mitigated at a ratio of 2:1 through preservation of existing habitat so that all impacts to these habitats are mitigated on acreage and tree basis as provided below. SCE shall photo document the number of Joshua and juniper trees removed during project construction and provide a letter report to the CPUC and CDFG at the conclusion of construction.
B-4b	Preserve Off-site Joshua Tree Woodland and Juniper Woodland Habitat. To mitigate impacts to either habitat, existing offsite Joshua tree woodland habitat and juniper woodland habitat shall be preserved in perpetuity at a 2:1 mitigation ratio (two acres preserved for each acre impacted). The minimum standard for preservation of, or mitigation of, Joshua trees is two Joshua trees per acre. The SCE shall coordinate with CDFG and CPUC to identify appropriate mitigation lands and ensure their permanent protection through an appropriate CDFG-approved mechanism, such as a conservation easement or fee title purchase. A conservation easement could be held by CDFG or an approved land management entity and would be recorded within a time frame agreed upon by CDFG. SCE shall provide verification of the purchase of mitigation land to the CPUC within 60 days following the conclusion of construction.
B-6a	Obtain Technical Assistance from the USFWS for Desert Tortoise. The applicants shall request technical assistance from the USFWS and CDFG to review the potential for desert tortoise to occupy suitable habitat within the Project area and obtain concurrence that the applicants proposed measures along with mitigation measures listed below would avoid impacts to this listed species.
B-6b	Conduct Focused Clearance Surveys in Designated Areas. SCE shall contract with a qualified local biologist to conduct focused clearance surveys for desert tortoise prior to construction activities located within areas designated in the WMP as desert tortoise "Survey Areas." Clearance surveys shall follow the USFWS desert tortoise survey protocol, as modified within the WMP. If present SCE shall develop and implement mitigation and monitoring plan that includes the following measures in consultation with the USFWS and CDFG. SCE shall retain a qualified biologist with demonstrated expertise with desert tortoise to monitor all construction activities and assist SCE in the implementation of the monitoring program. This person will be approved by the USFWS prior to the onset of ground-disturbing activities. This biologist will be referred to as the authorized biologist hereafter. The authorized biologist will be present during all activities immediately adjacent to or within habitat that supports desert tortoise. Prior to the onset of construction activities, SCE shall provide all personnel who will be

present on work areas within or adjacent to the Project area the following information:

A detailed description of the desert tortoise including color photographs;

The protection the desert tortoise receives under the Endangered Species Act and possible legal action or that may be incurred for violation of the Act;

The protective measures being implemented to conserve the desert tortoises and other species during construction activities associated with the proposed Project; and

A point of contact if desert tortoises are observed.

All trash that may attract predators of desert tortoises will be removed from work sites or completely secured at the end of each work day.

Prior to the onset of any construction activities, SCE shall meet on-site with staff from the USFWS and the authorized biologist. SCE shall provide information on the general location of construction activities within habitat of the desert tortoises and the actions taken to reduce impacts to this species. Because desert tortoise may occur in various locations during different seasons of the year, SCE, USFWS, and authorized biologists will, at this preliminary meeting, determine the seasons when specific construction activities would have the least adverse effect on desert tortoise. For example construction during the time of year when desert tortoise are dormant would reduce impacts to this species. The goal of this effort is to reduce the level of mortality of desert tortoise during construction.

Where construction can occur in habitat where desert tortoise are widely distributed, work areas will be fenced in a manner that prevents equipment and vehicles from straying from the designated work area into adjacent habitat. The authorized biologist will assist in determining the boundaries of the area to be fenced in consultation with the USFWS/CDFG/CPUC. All workers will be advised that equipment and vehicles must remain within the fenced work areas. Installation of the fencing and any necessary surveys will be directed and/or conducted by the authorized biologist in concurrence with the USFWS/CDFG/CPUC.

If desert tortoises are found within an area that has been fenced to exclude the species, activities will cease until the authorized biologist moves the desert tortoises.

If desert tortoises are found in a construction area where fencing was deemed unnecessary, work will cease until the authorized biologist moves the individual(s). The authorized biologist in consultation with USFWS/CDFG/CPUC will then determine whether additional surveys or fencing are needed. Work may resume while this determination is being made, if deemed appropriate by the authorized biologist.

Any desert tortoises found during clearance surveys or otherwise removed from work areas will be placed in nearby suitable, undisturbed habitat. The authorized biologist will determine the best location for their release, based on the condition of the vegetation, soil, and other habitat features and the proximity to human activities. Clearance surveys shall occur on a daily basis in the work area.

The authorized biologist will have the authority to stop all activities until appropriate corrective measures have been completed.

Staging areas [Material and Contractor yards] for all construction activities will be located on previously disturbed upland areas designated for this purpose. All staging areas will be fenced.

SCE shall restrict work to daylight hours, except during an emergency, in order to avoid nighttime activities when desert tortoise may be present on the access road. Traffic speed should be maintained at 20 mph or less in the work area.

B-7a	Conduct Pre-construction Surveys for Swainson's Hawks. To assure that nesting Swainson's Hawks are not disturbed by construction activities, a qualified ornithologist shall conduct preconstruction surveys within one mile of the Project area in regions with suitable nesting habitat for Swainson's Hawks. Survey Period I occurs from January 1 to March 20, Period II from March 20 to April 5, Period III from April 5 to April 20, Period IV from April 21 to June 10 (surveys not recommend during this period because identification is difficult as the adults tend to remain within the nest for longer periods of time), and Period V from June 10 to July 30. No fewer than three surveys shall be completed, in at least each of the two survey periods immediately prior to project initiation. If a nest site is found, consultation with CDFG shall be required to ensure project initiation will not result in nest disturbance (see Mitigation B-7b). CDFG recommends that no new disturbances or other project-related activities which may cause nest abandonment or forced fledging be initiated within ¼ mile (.40 km) of an active nest between March 1 and September 15 or until August 15 of a Management Authorization of Biological Opinion is obtained for the project (CDFG, 1994b). CDFG recommends that the buffer zone be increased to ½ mile (.80 km) in nesting areas away from urban development (CDFG, 1994b). These buffer zones may be adjusted as appropriate in consultation with a qualified ornithologist and CDFG.
B-7b	Remove Nest Trees. Nest trees within the Project area(s) shall not be removed unless avoidance measures are determined to be infeasible. If a nest tree must be removed, a Management Authorization (including conditions to off-set the loss of the nest tree) must be obtained from CDFG. The Management Authorization will specify the tree removal period, generally between October 1and February 1. If construction or other project related activities which may cause nest abandonment or forced fledging are necessary within the buffer zone, monitoring of the nest site (funded by the applicant) by a qualified biologist shall be required to determine if the nest is abandoned. If the nest is abandoned, and if the nestlings are still alive, the applicant shall fund the recovery and hacking (controlled release of captive reared young) of nestling(s).
B-9a	Avoid Construction During the Breeding Season. In order to avoid disturbance to nesting Yellow-billed Cuckoo, Southwestern Willow Flycatcher, Vermilion Flycatcher, and Least Bell's Vireo construction activities at Amargosa Creek and Oak Creek shall be avoided during the breeding season (April 15 to August 31).
B-9b	Conduct Pre-construction Surveys at Amargosa Creek Crossing and Oak Creek. If construction activities must occur during breeding season at the Amargosa Creek crossing and at Oak Creek, in order to assure that nesting special-status bird species will not be disturbed by construction activities, a qualified ornithologist shall conduct protocol-level surveys of the project site and adjacent areas within 500 ft of the Project area for Yellow-billed Cuckoo, Southwestern Willow Flycatcher, and Least Bell's Vireo. These surveys shall be conducted during the breeding season (April 15 to August 15). If nests are found during the survey, a disturbance-free buffer shall be established in coordination with CDFG. The Vermilion Flycatcher is a "species of concern". A standardized survey protocol for this species has not been developed. Surveys adequate to detect Vermilion Flycatchers could be conducted in conjunction with the protocol-level surveys for Southwestern Willow Flycatcher and Least Bell's Vireo.
B-10a	Conduct Focused Surveys for Mohave Ground Squirrels. Surveys for Mohave ground squirrels shall be performed in the portion of the Project area containing potential Mohave ground squirrel habitat. These surveys shall be performed by a qualified biologist according to CDFG's *Mohave Ground Squirrel Survey Guidelines* (January 2003). Surveys for Mohave ground squirrel are performed between March 15 and July 15 using standard live trapping techniques. Three weeks of trapping are required during this time, although trapping will cease once a Mohave ground squirrel is captured or observed. The trapping girds each contain 100 traps arranged in 4 rows of 25 and spaced 35 meters apart, for a total grid length of one-half mile. The length of the Project area is sufficiently long to require approval of a site-specific survey layout by CDFG. The layout proscribed by CDFG shall determine the total number of grids required. If these surveys obtain positive results for Mohave ground squirrel, or if Mohave ground squirrel presence is assumed within potential habitat, SCE shall obtain incidental take authorization from CDFG. This authorization will likely include mitigation measures B-10b and B-10c below.

B-10b	Implement Construction Monitoring and Worker Environmental Awareness Program. To reduce the potential of take of Mohave ground squirrels, and prior to ground disturbing activity, a qualified biologist will deliver a Worker Environmental Awareness Program (WEAP) on the ecology of the Mohave ground squirrel to the construction employees. A qualified biological monitor shall be on site during initial ground disturbing activities. The name and phone number of the biological monitor shall be provided to a CDFG regional representative at least fourteen (14) days before ground disturbing activities. If the biological monitor observes a living Mohave ground squirrel on the construction site and/or determines that a Mohave ground squirrel was killed by project related activities during construction or otherwise found dead, a written report will be sent to CDFG within five (5) calendar days. The report will include the date, time of the finding or incident (if known), location of the carcass and the circumstances (if known). Mohave ground squirrel remains shall be collected and frozen as soon as possible. CDFG shall be contacted as to the ultimate disposition of the remains.
B-10c	Preserve Off-site Habitat for Mohave Ground Squirrel. To mitigate potential impacts from project construction, the SCE will acquire habitat occupied by Mohave ground squirrels based on the following ratios previously approved by the CDFG for projects in the region: Five acres of off-site habitat supporting Mohave ground squirrels will be preserved for each acre of native creosote bush scrub habitat and Joshua tree woodland habitat within the Kern County Study Area of the Habitat Conservation Area (HCA) delineated in the WMP (Rosamond Boulevard to Oak Creek Road – see habitat description in species account). Three acres of off-site habitat supporting Mohave ground squirrels will be preserved for each acre of native creosote bush scrub habitat and Joshua tree woodland habitat outside of the HCA delineated in the WMP (Rosamond Boulevard to Oak Creek Road– see habitat description in species account). One acre of off-site habitat supporting Mohave ground squirrels will be preserved for each acre of saltbrush scrub habitat (including inclusions of desert wash) impacted by the project outside of the HCA delineated in the WMP (Rosamond Boulevard to Oak Creek Road– see habitat description in species account). One-half acre of off-site habitat supporting Mohave ground squirrels will be preserved for each acre of desert scrub habitat impacted by the project outside of the HCA delineated in the WMP (Rosamond Boulevard to Oak Creek Road– see habitat description in species account). No mitigation will occur for agricultural, non-native annual grassland, developed, or compacted barren ground within the Project area. Mitigation acquisition shall occur at a CDFG-approved location such as the Desert Tortoise Preserve in Kern County and shall be coordinated through a CDFG-approved entity. SCE shall enter into a binding legal agreement regarding the preservation of off-site lands describing the terms of the acquisition, enhancement, and management of those lands. Fee title to acquired habitat lands, or a conservation easement over these lands, shall be transferred to CDFG or to an entity approved by CDFG and CPUC, along with money for enhancement of the land and an endowment for permanent management of the lands. If it is determined that Joshua tree woodland and/or Juniper woodland preserved through implementation of mitigation measure B-4b detailed above also supports Mojave ground squirrel populations, these off-site lands can be used to satisfy the requirements of this mitigation measure.
B-12a	Conduct Focused Surveys for Short-joint Beavertail. Floristic surveys shall be conducted for short-joint beavertail. It is a perennial cactus and as such, is easily detected once tower and road positions are staked. These surveys will be limited to suitable habitat within proposed T/L access roads and towers and in any temporary, associated staging areas. The surveys shall be initiated prior to any ground disturbance.

B-12b	Avoid Impacts to Short-joint Beavertail. The proposed roadways, towers, and temporary construction staging areas shall be situated to avoid impacts to short-joint beavertail individuals, to the extent practicable. In some cases, individual plants could be transplanted to adjacent habitat, provided that SCE adheres to the monitoring plan listed in mitigation measure B-11c. Short-joint beavertail occurrences located within temporary construction areas shall be fenced or flagged for avoidance prior to construction, and a biological monitor shall be present to ensure compliance with off-limits areas.
B-12c	Remove and Reintroduce Short-joint Beavertail. Prior to grading, a qualified biologist shall develop a short-joint beavertail removal and reintroduction plan for any impacted plants. This plan shall include a map of impacted plants, a suitable method of removal of the species, detailed planting instructions for optimal survival of the transplanted individual, and a map of the transplant location within 200 feet of the impact area and within the same habitat type in which the plant was originally growing. This plan shall be approved by CDFG and CPUC prior to the issuance of grading permits.
B-13c	Minimize impacts to Montane Scrub and Juniper Woodland Habitats. The proposed roadways, towers, and temporary construction staging areas shall be situated to minimize ground disturbance activities within the montane scrub, juniper woodland, and chaparral habitats.
B-13d	Preserve Off-site Montane Scrub and Juniper Woodland Habitats. To mitigate impacts to these habitats, existing offsite montane scrub (including chaparral) and juniper woodland habitats shall be preserved in perpetuity at a 1:1 mitigation ratio (one acre preserved for each acre impacted). SCE shall work with CDFG to identify appropriate mitigation lands and ensure their permanent protection through an appropriate CDFG-approved mechanism, such as a conservation easement or fee title purchase. A conservation easement could be held by CDFG or an approved land management entity and shall be recorded within a time frame agreed upon by CDFG.
B-17	Conduct Pre-construction Surveys and Monitoring for Breeding Birds. SCE shall conduct preconstruction surveys for nesting birds if construction and removal activities are scheduled to occur during the breeding season for raptors and other migratory birds. Surveys shall be conducted in areas within 500 feet of tower sites, laydown/staging areas, substation sites, and access road/spur road locations. SCE shall be responsible for designating a qualified biologist who can conduct preconstruction surveys and monitoring for breeding birds. If nests are found during the survey, a disturbance-free buffer shall be established in coordination with CDFG. The biological monitor shall conduct regular monitoring of the nest to determine success/failure and to ensure that project activities are not conducted within the buffer until the nesting cycle is complete or the nest fails.
B-19a	Implement CDFG protocol for burrowing owls. In conformance with federal and state regulations regarding the protection of raptors, a habitat assessment in accordance with CDFG protocol for Burrowing Owls shall be completed prior to the start of construction. Burrowing Owl habitat within the Project area and within a 500-foot (150 m) buffer zone shall be assessed ("Assessment Area"). If the habitat assessment concludes that the Assessment Area lacks suitable Burrowing Owl habitat, no additional action would be warranted. However, if suitable habitat is located on the Assessment Area, all ground squirrel colonies, rabbit and badger dens, or other man-mad[e] or natural cavities shall be mapped at an appropriate scale, and the following mitigation measures shall be implemented: In conformance with federal and state regulations regarding the protection of raptors, a preconstruction survey for Burrowing Owls, in conformance with CDFG protocol, shall be completed no more than 30 days prior to the start of construction within suitable habitat at the project site(s) and buffer zone(s). Three additional protocol-level surveys shall also be completed per CDFG protocol prior to construction. Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by CDFG verifies through non-invasive methods that either: 1) the birds have not begun egg –laying and incubation; or 2) that

	juveniles from the occupied burrows are foraging independently and are capable of independent survival. Eviction outside the nesting season may be permitted pending evaluation of eviction plans and receipt of formal written approval from the CDFG authorizing the eviction. A 250-foot (76 m) buffer, within which no activity will be permissible, will be maintained between project activities and nesting Burrowing Owls during the nesting season. This protected area will remain in effect until August 31, or at the CDFG's discretion and based upon monitoring evidence, until the young owls are foraging independently. If accidental take (disturbance, injury, or death of owls) occurs, the CDFG/CPUC lead monitor will be notified immediately.
B-19b	Compensate for Loss of Burrowing Owl Habitat. If surveys determine that Burrowing Owls occupy the site and avoiding development of occupied areas is not feasible, then habitat compensation on off-site mitigation lands shall be implemented. Habitat Management (HM) lands comprising existing Burrowing Owl foraging and breeding habitat shall be acquired and preserved if required by the CDFG. An area of 6.5 acres (2.6 ha) (the amount of land found to be necessary to sustain a pair or individual owl) shall be secured for each pair of owls, or individual in the case of an odd number of birds. As part of an agreement with the CDFG, the project applicant shall secure the performance of its mitigation duties by providing the CDFG with security in the form of funds that would: Allow for the acquisition and/or preservation of 6.5 acres (2.6 ha) of HM lands; Provide initial protection and enhancement activities on the HM lands, potentially including, but not limited to, such measures as fencing, trash clean-up, artificial burrow creation, grazing or mowing, and any habitat restoration deemed necessary by CDFG; Establish an endowment for the long-term management of the HM lands; and Reimburse the CDFG for reasonable expenses incurred as a result of the approval and implementation of this agreement.
B-20a	Avoid Nesting Season for Raptors. To the extent practicable, construction shall be scheduled to avoid the nesting season for raptor species, which extends from January through August.
B-20b	Conduct Pre-construction Surveys for Nesting Raptors. If it is not possible to schedule construction between August and January, then one of the following options shall be implemented: With the approval of the CDFG, trees containing known or potential raptor nest sites may be removed to discourage future nesting attempts on the condition that no raptor pair is currently utilizing the site; or, Pre-construction surveys for nesting raptors shall be conducted by a qualified ornithologist or wildlife biologist to ensure that no raptor nests will be disturbed during project implementation. A pre-construction survey shall be conducted no more than 14 days prior to the initiation of demolition/construction activities during the early part of the breeding season (January through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August). During this survey, the qualified person shall inspect all trees in and immediately adjacent to the impact areas for raptor nests. If an active raptor nest is found close enough to the construction area to be disturbed by these activities, the ornithologist, in consultation with CDFG, shall determine the extent of a construction-free buffer zone to be established around the nest.
B-26	Passively Relocate American Badgers During the Non-breeding Season. SCE shall survey and identify any badger dens located in the Project area. Occupied dens shall be flagged for avoidance. Un-occupied dens located in the ROW shall be covered to prevent the animal from re-occupying the den prior to construction. Occupied dens in the ROW shall be hand-excavated if avoidance is not possible. Dens shall only be hand–excavated before or after the breeding season (February-May). Any relocation of badgers shall take place after consultation with the CDFG.
B-27a	Avoid Creating Barriers to Movements. To avoid creating barriers to desert tortoise movements, within areas designated in the WMP as desert tortoise "Survey Areas," roadbeds shall not be lowered and berms shall not exceed 12 inches (30 cm) or a slope of 30 degrees.

B-27b	Invasive Weed Prevention. Non-native or Invasive plants (*i.e.*, non-native species) shall not be used during any re-seeding or landscaping activities associated with site restoration within areas designated in the WMP as desert tortoise "Survey Areas."

Hydrology APMs	
APM HYD-1	A Construction SWPPP would be submitted to Los Angeles and Kern counties along with grading permit applications. Implementation of the Plan would help stabilize graded areas and waterways, and reduce erosion and sedimentation. The plan would designate BMPs that would be adhered to during construction activities. Erosion minimizing efforts such as straw wattles, water bars, covers, silt fences, and sensitive area access restrictions (for example, flagging) would be installed before clearing and grading begins. Mulching, seeding, or other suitable stabilization measures would be used to protect exposed areas during construction activities. During construction activities, measures would be in place to ensure that contaminates are not discharged from the construction sites. The SWPPP would define areas where hazardous materials would be stored, where trash would be placed, where rolling equipment would be parked, fueled and serviced, and where construction materials such as reinforcing bars and structural steel members would be stored. Erosion control during grading of the construction sites and during subsequent construction would be in place and monitored as specified by the SWPPP. A silting basin(s) would be established, as necessary, to capture silt and other materials, which might otherwise be carried from the site by rainwater surface runoff.
APM HYD-2	An environmental training program would be established to communicate environmental concerns and appropriate work practices, including spill prevention and response measures, and SWPPP measures, to all field personnel. A monitoring program would be implemented to ensure that the plans are followed throughout the period of construction.
APM HYD-3	The Construction SWPPP identified above would include procedures for quick and safe cleanup of accidental spills. This plan would be submitted with the grading permit application. The Construction SWPPP would prescribe hazardous materials handling procedures for reducing the potential for a spill during construction, and would include an emergency response program to ensure quick and safe cleanup of accidental spills. The plan would identify areas where refueling and vehicle maintenance activities and storage of hazardous materials, if any, would be permitted.
APM HYD-4	Oil-absorbent materials, tarps, and storage drums would be used to contain and control any minor releases of transformer oil. In the event that excess water and liquid concrete escapes from foundations during pouring, it would be directed to bermed areas adjacent to the borings where the water would infiltrate or evaporate and the concrete would remain and begin to set. Once the excess concrete has been allowed to set up (but before it is dry), it would be removed and transported to an approved landfill for disposal.
APM HYD-5	A Phase I ESA would be performed at each new substation location and along newly acquired T/L ROWs. Depending on the results of the Phase I ESA, soil sampling would be conducted and remedial activities would be implemented, if applicable. If hazardous materials were encountered during any construction activities, work would be stopped until the material was properly characterized and appropriate measures were taken to protect human health and the environment. If excavation of hazardous materials is required, they would be handled, transported, and disposed of in accordance with federal, state, and local regulations.
APM HYD-6	If groundwater were encountered while excavating or constructing the T/L or substations, dewatering operations would be performed. These operations would include, as applicable, the use of sediment traps and sediment basins in accordance with BMP NS-2 (Dewatering Operations) from the California Stormwater Quality Association's (CASQA) California Stormwater BMP Handbook – Construction (CASQA, 2003).

Hydrology Mitigation Measures	
H-1a	Implementation of Best Management Practices for Erosion and Sediment Control. The following Best Management Practices (BMPs) shall be implemented to minimize potential hydrologic impacts of erosion and sedimentation created through project construction: Mechanical and vegetative measures shall be implemented to provide surface soil stability in areas where Project construction requires the exposure of cut slopes, fill slopes, or spoil disposal. The level of stabilization effort depends upon site-specific factors such as slope angle, soil type, climate, and proximity to waterways. Mechanical measures may include but are not limited to: wattles, erosion nets, terraces, side drains, blankets, mats, riprapping, much, tackifiers, pavement, soil seals, and windrowing construction slash at the toe of fill slopes. Vegetative measures shall be used to supplement mechanical measures, as appropriate. The appropriate stabilization effort using mechanical and vegetative measures shall be determined by the supervising project or crew leader prior to the onset of construction, based on site-specific conditions. Road slope stabilization practices shall be implemented prior to the first winter rains. These practices shall include: verification of the correct cut and fill slope steepness as dependent upon the dominant soil type/s present, implementation of methods to handle surface and subsurface runoff, and finalization of road surface compaction or application of appropriate surfacing material. Any temporary roadways which are built or used for the purpose of transporting construction equipment and materials to construction sites shall be situated to prevent undercutting of the designated final cut slope, avoid deposition of materials outside the designated roadway limits, and accommodate drainage with temporary culverts. Road siting is dependent upon site-specific conditions and shall be determined by the supervising project or crew leader prior to the onset of construction activities. Embankment methods shall be implemented to ensure adequate strength of the roadway and shoulder and to minimize potential failure of road embankments and fill areas. Acceptable stabilization methods include: sidecasting and end dumping, layer placement (roller compaction), controlled compaction, minimization of fill volumes, or strengthening of fills using retaining walls, confinement systems, plantings, or a combination of techniques. The appropriate stabilization effort shall be determined by the supervising project or crew leader prior to the onset of construction, based on site-specific conditions. Strictly control vehicular traffic to only that which is minimally necessary to transport materials, equipment, and construction personnel to the Project site. Roads that must be used during wet periods shall have a stable surface and sufficient drainage, as determined by the supervising project or crew leader, to prevent rutting and churning of the road surfaces. Re-vegetate all areas disturbed by grading or clearing following construction, unless operation and maintenance of the Project would require the area to remain clear (such as with an access road). Establish the use of concrete washout stations to capture and contain concrete washout material and wastewater to avoid direct release of washout to surface water.
H-1d	Timing of Construction Activities. Construction activities, particularly regarding roadway installations and improvements, must not occur when precipitation events are expected.
H-7	Protect Aboveground Structures Against Flood and Erosion Damage. Aboveground project features such as T/L towers and substation facilities shall be designed and engineered to withstand any mechanical stresses that may result from location, such as potential flooding or erosion of the surrounding area. Site-specific measures may include tower anchoring, installation of slope protection, or raising foundation levels. All Project-related facilities shall be placed outside the current and reasonably expected future flow path of watercourses. No Project-related facilities shall be positioned within a known watercourse.

Geology and Soils APMs	
APM GEO-2	Prior to final design of substation foundations and T/L structure foundations, a geotechnical study would be performed to identify site-specific geologic conditions in enough detail to support final engineering.
APM GEO-3	T/L and substation construction activities would be performed in accordance with the soil erosion/water quality protection measures specified in the Construction SWPPP.
Geology and Soils Mitigation Measures	
G-1	Protect Against Slope Instability. Design-level geotechnical investigations performed by the Applicant shall be performed by a licensed geologist or engineer and shall include evaluation of slope stability issues in areas of planned grading and excavation, and provide recommendations for development of grading and excavation plans. Based on the results of the geotechnical investigations, appropriate support and protection measures shall be designed and implemented to maintain the stability of slopes adjacent to newly graded or re-graded access roads and work areas during and after construction. These measures shall include, but are not limited to, retaining walls, visqueen, removal of unstable materials, and avoidance of highly unstable areas. SCE shall document compliance with this measure prior to the start of construction by submitting a report to the CPUC for review and approval. The report shall document the investigations and detail the specific support and protection measures that will be implemented.
G-2	Minimize Soil Erosion. The Construction SWPPP for the Project shall include Best Management Practices (BMPs) designed to minimize soil erosion along access roads and at work areas. Appropriate BMPs may include construction of water bars, grading road surfaces to direct flow away from natural slopes, use of soil stabilizers, and consistent maintenance of roads and culverts to maintain appropriate flow paths. Silt fences and straw bales installed during construction shall be removed to restore natural drainage during the cleanup and restoration phase of the project. Where access roads cross streams or drainages, they shall be built at or close to right angles to the streambeds and washes and culverts or rock crossings shall be used to cross streambeds and washes. Design of appropriate BMPs should be conducted by or under the direction of a qualified geologist or engineer.
Hazardous Materials APMs	
APM HAZ-1	A Phase I ESA would be performed at each new substation location and along newly acquired T/L ROWs. Depending on the results of the Phase I ESA, soil sampling would be conducted and remedial activities would be implemented, if applicable. If hazardous materials were encountered during any construction activities, work would be stopped until the material was properly characterized and appropriate measures were taken to protect human health and the environment. If excavation of hazardous materials is required, they would be handled, transported, and disposed of in accordance with federal, state, and local regulations.
Hazardous Materials Mitigation Measures	
HAZ-1a	Implement an Environmental Training and Monitoring Program. An environmental training program shall be established to communicate environmental concerns and appropriate work practices, including spill prevention, emergency response measures, and proper Best Management Practice (BMP) implementation, to all construction and maintenance personnel. The training program shall emphasize site-specific physical conditions to improve hazard prevention (e.g., identification of potentially hazardous substances) and include a review of all site-specific plans, including but not limited to, the Project's SWPPP, Erosion Control and Sediment Transport Plan, Health and Safety Plan, Waste Characterization and Management Plan, and Hazardous Substances Control and Emergency Response Plan. Properly trained construction and maintenance staff would hopefully not cause hazardous materials spills, and in the event of a spill would be able to quickly ascertain the best way to stop and clean up the spill, thus limiting potential soil contamination.

	A monitoring program shall also be implemented to ensure that the plans are followed throughout the period of construction. BMPs, as identified in the Project SWPPP and Erosion Control and Sediment Transport Plan, shall also be implemented during the construction of the Project to minimize the risk of an accidental release and provide the necessary information for emergency response.
HAZ-1b	Implement a Hazardous Substance Control and Emergency Response Plan. SCE shall prepare a Hazardous Substance Control and Emergency Response Plan, which shall include preparations for quick and safe cleanup of accidental spills. This plan shall be submitted with the grading permit applications to the appropriate oversight agency, based on grading location. It shall prescribe hazardous-materials handling procedures for reducing the potential for a spill during construction, and include an emergency response program to ensure quick and safe cleanup of accidental spills. The plan shall identify areas where refueling and vehicle maintenance activities and storage of hazardous materials, if any, will be permitted. These directions and requirements will also be reiterated in the Project SWPPP. SCE shall document compliance with this measure prior to the start of construction by submitting the plan to the CPUC for review.
HAZ-1d	Emergency Spill Supplies and Equipment for Construction Activities. Hazardous material spill kits shall be maintained on-site for small spills. These kits shall include oil-absorbent material, tarps, and storage drums to be used to contain and control any minor releases. Emergency spill supplies and equipment shall be kept adjacent to all areas of work and in staging areas and shall be clearly marked. Detailed information for responding to accidental spills and for handling any resulting hazardous materials shall be provided in the Project's Hazardous Substances Control and Emergency Response Plan
HAZ-2a	Implement Spill Prevention, Countermeasure, and Control Plans. SCE shall document compliance with updating and preparing SPCCs for each substation facility by (a) submitting to the CPUC for review and approval an outline of the proposed Environmental Training and Monitoring Program, (b) providing a list of names of all operations personnel who have completed the training program, and (c) providing a copy of the SPCC plans to the CPUC for review and approval at least 60 days before the start of operation.
HAZ-2b	Emergency Spill Supplies and Equipment for Operation and Maintenance Activities. Hazardous material spill kits shall be available in all maintenance vehicles for small spills. These kits shall include oil-absorbent material and tarps to contain and control any minor releases. During significant maintenance operations, emergency spill supplies and equipment shall be kept adjacent to all areas of work and in staging areas, and shall be clearly marked. Detailed information for responding to accidental spills and for handling any resulting hazardous materials shall be provided in the Project's Hazardous Substances Control and Emergency Response Plan.