WATER BODY IMPACT

Information regarding impacts to waters of the State from Segment 11C is provided in Attachment E, Table 1, on permanent and temporary impacts by Feature ID for TRTP Segment 11C. The table provides the map page (in Appendix A-1 of the Jurisdictional Delineation Report for the Tehachapi Renewable Transmission Project: Segments 6 and 11, September 2010); a description of the Project and construction activities affecting the feature; biological and/or other species restrictions; the vegetation community affected; the area (acres, square feet), linear feet, and cubic yards of fill for impacted jurisdiction; whether the impact occurs on federal (Angeles National Forest) or Non-federal lands; stream type (ephemeral or intermittent); and the watershed in which the activity occurs.

All drainages are waters of the U.S. and waters of the state. In total, the TRTP Segment 11C project will include 0.14 acre and 3,611 linear feet of permanent impacts and 1.18 acre and 12,511 linear feet of temporary impacts to waters of the U.S. Project activities have the potential to increase erosion, affect channel hydrology, and expose waters to pollutant sources common to construction activities. The majority of impacts are temporary; however, permanent impacts will occur as a result of installation of new hardscape, culverts, and other fill material within jurisdictional features. SCE will install BMPs to reduce erosion, avoid sedimentation, and reduce other sources that contribute to the degradation of water quality. SCE is designing road crossings that will reduce impacts to waters by stabilizing roadways through the installation of hard crossings, debris fences, and gabion walls at select locations.

Other Action/Best Management Practices

SCE conducted a rigorous project review during the project design to avoid and minimize impacts on jurisdictional resources. Following the delineation fieldwork, all jurisdictional features were overlain with the preliminary project plans to review which features might be impacted. Meetings were held with SCE engineers (access road, tower, and construction engineers) and regulatory/delineation team members to conduct a desktop review of the extent of potential impacts and determine which facilities could be moved or modified to minimize impacts. Features that were determined to require on-site construction review were then reviewed during several field visits (December 2009 to July 2010) with appropriate engineering and environmental staff to determine additional avoidance measures and/or the extent of impacts requiring permits. Avoidance modifications included adjusting the tower construction pad location, size, or shape to avoid features or minimize impacts; installing exclusion/silt fencing and other temporary construction best management practices (BMPs) to prevent damage to adjacent or downstream water bodies; and relocating structures, access roads, or planned...
construction areas. Multiple features that were originally identified as potentially impacted were subsequently avoided through redesign.

The Segment 11C project alignment will temporarily and permanently impact waters of the U.S. In addition to the above avoidance and minimization review process, mitigation measures and Applicant Proposed Measures (APMs) have been incorporated into the project to minimize impacts. APMs represent a commitment by SCE that was included in the original application to the CPUC and considered part of the proposed project. Additional mitigation measures were adopted for the project if it was determined during preparation of the Final Environmental Impact Report (FEIR) (December 2009)/Final Environmental Impact Statement (FEIS) (September 2010) for the SCE TRTP Segments 4-11 (State Clearinghouse Number 2007081156) (FEIR/FEIS) that the APMs did not fully mitigate the impacts for which they were presented. Potential risks to water quality from erosion, sedimentation, landslides, and toxins increased significantly following the Station Fire; the increased risks are addressed in the final Supplemental EIS (SEIS) released in September 2010. The APMs and mitigation measures outlined in the FEIR/FEIS were determined in the SEIS to be sufficient to reduce impacts on water quality following the Station Fire. Please see the APMs and mitigation measures listed in Attachment F, which will be implemented to minimize impacts on biological resources and hydrology/water quality.

DESCRIPTION OF PROJECT ACTIVITIES

The Project involves the removal and installation of transmission towers, related structures, and transmission lines. The information in this attachment was provided by SCE in their application materials.

Permitted Activities

Activities associated with this project that will result in fill of waters of the U.S. and waters of the state include culvert installation, replacement, and removal; concrete wet crossings; road widening (which may include gabion wall and mattress installation; retaining/hilfiker and crib walls; debris wall installation), McCarthy drain installation and replacement; temporary wire setup sites, structure work areas; helicopter assembly yards and helicopter support yards; vegetation removal; guard poles; temporary water diversions; and the placement of temporary plates on existing access road crossings. Descriptions of these Project activities are provided below.

Culvert Removal, Replacement, and Installation

Culverts will be installed/replaced using corrugated metal pipe (CMP) with a diameter of adequate size to accommodate the anticipated flows through the drainage. If an old culvert is going to be replaced, it will be dug out by using either a backhoe or excavator, depending on the amount of silt and debris that has washed in. Once the old culvert is exposed, it will be lifted out,
loaded, and transported to a designated demolition site for disposal. For replacement and installation, grading/trenching and/or backfill will ensure that the culvert is level. Any backfilled material will consist of native soil without rock. Riprap may be installed as needed to prevent erosion and downstream sedimentation. Surface soil will be compacted in layers to a minimum height of 6 inches above the pipe. Permanent material placed in the drainage features will include a CMP, native fill material, and riprap. Equipment and material staging will occur nearby in wide spots or turnouts in the road. Culvert removal, replacement, and installation will follow the engineering plans (SCE Engineering Plans Version C issued on February 13, 2013, plus additional proposed project work areas as of March 11, 2013).

If water is present during construction, a temporary water diversion will be used to direct flows around the active construction area (refer to the Temporary Water Diversion description).

**Concrete Wet Crossing**

Concrete wet crossings would be installed in areas where redirecting the flow to a culvert is not recommended. The concrete wet crossing will be constructed per the engineering drawings (SCE Engineering Plans, 2013). Generally speaking, within the access road, a concrete apron surface would be constructed measuring approximately 10 feet wider than the existing flow path but a minimum of 14 feet wide, 6 inches thick, with #4 rebar 12 inches on center in each direction. The upstream side of the crossing would be sloped downward into the channel to facilitate the movement of water across the access road without undercutting the roadway. The soil below the apron would be compacted, and the edges of the crossing (upstream and downstream) would be smoothed. The center of the road at the crossing would also be slightly depressed to direct flows to the center of the apron. Gabion walls (described below) would be installed on the downstream edge of the road, with a gabion mattress at the base of the flow spillway to prevent erosion.

In some cases, a 99 percent compacted soil roadbed would be used and supported by gabion walls, baskets, and mattresses in lieu of concrete crossings.

If water is present during construction, a temporary water diversion will be used to direct flows around the active construction area (refer to the Temporary Water Diversion description below).

**Road Widening**

Existing access roads will be widened where necessary to facilitate construction vehicle access at turn angles measuring less than 50 degrees. Widening of the existing access road will generally occur on the upstream side of the road to provide up to a 30-foot drivable surface. Methods and equipment used to widen access roads are similar to those described for maintenance grading (see below) and will follow the engineering drawings (SCE Engineering Plans, 2013). Access road widening may include the installation of gabion walls, gabion mattresses, crib walls, and/or Hilfiker walls, discussed below.
If water is present during construction, a temporary water diversion will be used to direct flows around the active construction area (refer to the Temporary Water Diversion description).

**Gabion Wall/Mattress Installation**

Gabion walls are constructed by first excavating to level/stable ground below the “toe” of the existing access road. A wall made up of wire mesh and a Class 2 aggregate base configured into squares measuring roughly 4 feet by 3 feet by 3 feet is then stacked to create a “batter,” or slope, inward and up to the edge of the road. All slopes behind the proposed wall will require benching to create “steps” into the earth of the existing slope upon which the gabion cages will be placed. The benching technique will continue up in a stair-step pattern until the fill side meets the cut. All slopes behind the proposed wall will require benching prior to placing backfill material. The joints between gabion cages are securely laced with tie wire.

Gabion mattresses are constructed similarly to gabion walls, with interconnected cages and sized appropriately to prevent erosion. The cages will be a minimum of 6 inches high, with a standard height of 1 foot.

The equipment will be common earthmoving equipment, such as dozers, excavators, backhoes, and road graders, as well as water trucks. Other compaction equipment, such as rollers, will be used as necessary.

If water is present during construction, a temporary water diversion will be used to direct flows around the active construction area (refer to the Temporary Water Diversion description below).

**Retaining/Hilfiker and Crib Walls**

Slide, washout, and other slope failure areas; road berm and surface stabilization areas; as well as areas requiring energy dissipation (such as below a concrete water crossing) will be repaired and stabilized by installing retaining walls or using other methods to prevent future failures. Typically, Hilfiker wall systems are used for road and berm stabilizations. Other retaining structures may be used where terrain or site parameters (such as excessive height, length, or soil conditions) preclude the use of these types of retaining walls. Generally, the disturbance areas will be approximately 30 feet wide (or less) by the length of wall (plus 25 feet on either end of wall). Staging will occur nearby in wide spots or turnouts in the road. Materials will consist of wire mesh and rock.

Construction of a Hilfiker wall system generally includes excavation (lowering) of the existing road/material to the level needed to establish the overall width of the final road surface. Once competent material has been established, the road is recompacted in alternating lifts of compacted fill, soil reinforcement mats, and filter fabric. Also, a backing mat is placed against the inside face cut. Material is then compacted until the final roadway elevation and width is achieved. Heavy steel mesh will be placed on the outer edges of the wall for drainage, as
required. A Hilfiker wall unit is typically 25 feet long, but the replacement wall could be either longer or shorter, depending on the location. Hilfiker walls will be constructed per the engineering drawings (SCE Engineering Plans, 2013).

Crib walls are generally constructed by removing excess debris and excavating the slope along the disturbed area below the toe of the existing road or slope. After the area is excavated to competent material, a filter fabric is placed along the entire length of the back cut. A wall is built that consists of concrete members, which are stacked to create a slope inward and up to the edge of the road or slope. All slopes behind the proposed wall will require benching prior to placing backfill material. Crib walls will be constructed per the engineering drawings (SCE Engineering Plans, 2013).

**Debris Wall Installation**

Debris fences would be necessary to prevent rocks and soil from sliding onto roadways where they cross jurisdictional features. Eight-inch-diameter metal fence posts, a minimum of 6 feet tall, will be imbedded in concrete footings (2 feet in diameter by 2 feet deep) and spaced at a maximum distance of 10 feet. Where posthole digging is not feasible, a 2- by 2-foot trench may be used to set the posts. The posts are connected with a wire mesh, with a grid spacing of 6 inches by 6 inches. The fences are typically placed a minimum of 10 feet upstream of the road edge to provide maximum debris capture but still maintain a passable roadway surface. The captured debris will need to be removed on a regular basis as part of typical operations and maintenance (O&M) activities. Installation of debris walls will require common earthmoving equipment, such as dozers, excavators, backhoes, and road graders, as well as water trucks. Other compaction equipment, such as rollers, will be used as necessary, and a digging unit will be required to create postholes. Installation of the debris walls will follow the engineering plans (SCE Engineering Plans, 2013).

If water is present during construction, a temporary water diversion will be used to direct flows around the active construction area (refer to the Temporary Water Diversion description below).

**McCarthy Drain Installation/Replacement**

McCarthy drains (MCDs) are stormwater diversion devices made out of corrugated metal. MCDs are placed at the edge of access roads to direct runoff down a single path to an established channel and reduce multiple-path erosion. The drains are rectangular, with the bottom (24 inches wide) and sides constructed of sheets of corrugated metal. At the end of the flume of new or replaced MCDs, a 6- by 6-foot gabion mattress will be installed to prevent erosion at the spillway. The cage will be a minimum of 6 inches high, with a standard height of 1 foot. The gabion mattress will overlap the end of the flume by 2 feet. Damaged MCDs will be lifted out by an excavator or backhoe and then loaded for transport to a scrap material area (such as a demolition tower) for disposal. The types of equipment used in the removal/installation process will include boom trucks, 1-ton support vehicles with welder and
torch, excavators, backhoes, hand compactors, and water trucks. Staging will take place at
nearby turnouts or existing widened areas on the roads. The work area is generally defined by
the road surface and two 10-foot chutes placed end to end within the existing flow line. The
MCDs will be installed per the engineering drawings (SCE Engineering Plans, 2013).

If water is present during construction, a temporary water diversion will be used to direct flows
around the active construction area (refer to the Temporary Water Diversion description below).

**Temporary Wire Setup (Pulling) Site**

Wire setup sites are temporary construction areas for prepping wires before they are mounted
to constructed towers. A puller vehicle will be used to ensure the proper angle for the final
alignment; this vehicle will be stationed within the boundaries of the pull site. In addition, wire
and other supplies for tower and line construction may be stored within these limits. Pull sites
may be grubbed and graded as needed for vehicle and equipment access. The temporary wire
setup sites will vary to accommodate the terrain. They range from 0.7 acre to 4.20 acres in size.
The typical dimensions for the pull sites are, on average, 300 feet by the width of the right of
way (approximately 150 feet on average) and parallel to the alignment. These sites may also be
adjusted in shape or size, depending on the location and angle of the transmission lines at a
particular site. Following construction, the sites will be restored or “put back to bed” by using
evaculators, water trucks, dozers, and other compaction equipment. The contour will be brought
back to original and compacted in lifts, with use of water for compaction. Compaction tests will
be performed on-site.

If water is present during construction, a temporary water diversion will be used to direct flows
around the active construction area (refer to the Temporary Water Diversion description below).

**Structure Work Areas**

Construction of new tower structures will require preparation of a new permanent tower pad and
a temporary structure work area to support construction activities. In general, where topography
and resources allow, the entire tower pad will be grubbed and graded to create clear access
and a level foundation for construction. Structure work areas will be grubbed and graded as
needed for vehicle and equipment access but will be restored to pre-project conditions after
construction is complete. The sites will be restored or “put back to bed” by using excavators,
water trucks, dozers, and other compaction equipment. The contour will be brought back to
original and compacted in lifts, with use of water for compaction. Compaction tests will be
performed on site. The new structures typically require a permanent 82- by 82-foot square with
rounded corners surrounded by a 200- by 200-foot temporary structure work area. However, the
size and shape of the work area can be modified in certain cases to fit within the limits of
sensitive resources, rocks, or other barriers. In addition, a tower can be built on a slope or
incline with relatively minor site preparation, if required. Such structures will be constructed by
helicopter and require relatively small ground disturbance, except within the supporting helicopter assembly yards (described below).

If water is present during construction, a temporary water diversion will be used to direct flows around the active construction area (refer to the Temporary Water Diversion description below).

**Helicopter Assembly Yards and Helicopter Support Yards**

Helicopter assembly yards (HAYs) are needed to support construction of structures by helicopter, especially throughout the steep terrain of the ANF. HAYs will require similar site preparation activities as wire setup sites and structure work areas, including clearing and grubbing as needed for vehicle, equipment, and helicopter access. HAYs range in size from 0.15 acre to 8.48 acres in size and will be temporary in nature. The yards were selected according to their topography (as level as possible) and location (ideally, an uninhabited area that is free of trees and high-voltage power lines). Preparation of the yards typically includes minor grading and vegetation removal, application of the road base, installation of perimeter fencing, and implementation of Stormwater Pollution Prevention Plan (SWPPP) best management practices.

Helicopter support yards are necessary because of the fueling constraints of helicopters. A small area (ranging from 0.15 acre to 8.48 acres) will be used for landing and fueling/servicing the helicopters as needed during construction activities. The support yards are usually located immediately adjacent to paved roads, in relatively flat areas, and located strategically throughout the area of helicopter-supported construction activity. For some yards, because of the presence of vegetation and/or an uneven surface, the area required for a specific yard may need to be grubbed and/or graded.

After construction, all temporary helicopter areas will be revegetated and restored to pre-project conditions.

**Vegetation Removal**

Vegetation will be cleared, or grubbed, using a combination of heavy equipment and small hand tools, such as a chainsaw, “weed eater”-type device, or non-mechanical tools, such as a hand pruner or machete. To minimize disturbance, vegetation removal will be conducted using equipment designed for trimming or cutting vegetation. Tree removal in the ANF will be conducted in a manner consistent with Mitigation Measure B-1c (treat cut tree stumps with Sporax). All stumps of trees (conifers and hardwoods) 3 inches in diameter at breast height (dbh), or greater, resulting from activities associated with construction of the proposed project alignment shall be treated with Sporax according to product directions to prevent the spread of annosus root disease. Sporax shall be applied only by a licensed applicator, and Sporax shall not be used during rain events unless otherwise approved by USFS.
Cleared vegetation will be chipped where feasible and either spread on-site or distributed in USFS pre-approved locations on ANF lands. As appropriate, vegetation may also be saved in whole form to use as vertical mulch or slash for restoration efforts.

In sites that are determined by USFS to contain high-priority invasive plant populations, all invasive plant material, including any existing seeds, will be effectively contained prior to removal from the site to prevent the dispersal of invasive plant material and weed seed during transport. This may include bagging or other effective methods of containing weed species prior to clearance to prevent the mixing of weed seed with cut vegetation or containment of all cut vegetation before/during removal; chemically treated weeds must also be contained prior to transport. Weed treatment, removal, and mitigation will proceed in accordance with the proposed project alignment’s Weed Control Plan.

**Guard Poles**

Temporary guard poles or guard structures may be installed at transportation, flood control, and utility crossings, and at other locations such as parks or near residences to stop the travel of a conductor should it momentarily drop below a conventional stringing height. Typical guard structures are standard wood poles, 60 to 80 feet tall, installed within a 200-ft by 50-ft work area. Hole diggers, bucket trucks, and boom trucks are utilized to excavate the holes, erect the wood poles, and support the guard structures. Occasionally it is necessary to conduct vegetation removal and grade the guard pole work areas with backhoes or bulldozers. Following construction, the sites will be restored or “put back to bed” by using excavators, water trucks, dozers, and other compaction equipment. The contour will be brought back to original and compacted in lifts, with use of water for compaction. Compaction tests will be performed on site.

If water is present during construction, a temporary water diversion will be used to direct flows around the active construction area (refer to the Temporary Water Diversion description below).

**Temporary Water Diversion**

If water is present during any of the activities described above, a temporary water diversion will be used to direct flows around the active construction area. Sand bags will be placed on the uphill stream side of the work area to direct water into 2- or 4-inch poly pipe. The size of the pipe will be determined according to the amount of flow present and/or expected during construction. Water will be diverted to a location downstream of the construction area and onto level ground and/or energy dissipation devices to prevent turbidity and erosion. If necessary, perforated pipe will be utilized to prevent erosion at the outfall of the diversion.

**Temporary Steel Plates/Wood Mats/Swamp Mats**

Steel plates typically consist of two flat steel plates with steel railroad-type rails bolted to the edges. Rails would be wide enough to support the wheels of large machinery. These plates are placed over some features temporarily to minimize impacts from construction vehicle traffic. If
needed, wood mats or swamps mats will be used in lieu of steel plates because of the location and/or field conditions (i.e., wet, slippery rocks). Wood mats are typically made from logs or sawn hardwood and consist of 10- by 10- by 20-foot timbers that are bolted together to attain the desired width. The mats are used as temporary single-layer crossings in areas where construction equipment needs to travel across protected waters, streams, or wetlands. The construction and placement of wood mats will vary according to field conditions. Wood mats typically require little maintenance. Any broken/damaged crossings will be replaced if necessary, and mats will be removed once construction in the area is complete.

Swamp mats, also known as composite mats, consist of interlocking mats that can be used in soft soils and wet or otherwise environmentally sensitive areas. The mats protect areas from erosion, reduce the amount of dust and displaced sediment, and provide a stable surface with good traction for equipment, even in wet conditions. The mats are 4.25 inches thick and durable enough to withstand the pressure of heavy construction equipment. Swamp mats disperse the weight load over a large surface area and have demonstrated their usefulness in protecting wetlands and other sites during large construction operations.

The equipment used during the installation and removal of steel plates, wood, or swamp mats will be common earthmoving equipment, such as dozers, excavators, backhoes, and road graders, as well as water trucks. A boom truck will be required to lift and place the mats into the desired location.

If water is present during construction, a temporary water diversion will be used to direct flows around the active construction area (refer to the Temporary Water Diversion description).

Project Activities with No Adverse Impacts to Waters of the U.S.

Water Board staff have determined will not have adverse impacts to waters of the U.S. are (1) maintenance grading on existing access roads, (2) temporary foot trails, and (3) dead/burned tree removal. For more information on these activities, please see the detailed activity descriptions below.

Maintenance Grading

Existing access roads occur throughout the proposed project alignment. These roads are predominantly in a functional state that will allow vehicles to pass. Maintenance grading on existing Forest Service roads is conducted in accordance with U.S. Forest Service plans and has been performed ever since the roads were established. The typical standard width of the project alignment’s access roads is 14 feet for the roadway, with a 2-foot berm or swale on either side of the roadway (a total of 18 feet wide). Maintenance grading will not exceed the existing disturbed areas, which include roadbeds, swales, and the outside edges of the berms. Maintenance grading will not result in widening the road or “pushing” the berm beyond the
existing width of the existing disturbed area (roadbed, swale, or outside edge of berm). Maintenance grading applies only to existing access roads with a passable width.

Road widening activities that adversely affect jurisdictional waters are classified separately (see description under Road Widening listed above).

Equipment used for maintenance grading will be composed of backhoes (used to shift slopes, swales, berms, etc.), road graders, and water trucks. Other compaction equipment, such as rollers, will be used as necessary. Typical construction consists of a road grader operator lowering the mow board on the road surface, gathering material from side to side, and then drifting it across the road surface to fill any voids or remove big rocks. The estimated depth of soil disturbance is typically 2 to 3 inches. The equipment will make several passes to complete the section of road. A water truck will spray the area prior to grading and as needed to keep the material damp and in place.

When water is present, graders will lift the blades to avoid sedimentation into the active channel. No material will be pushed into the active channel that will cause siltation or turbidity. The installation, monitoring, and maintenance of straw wattles will be employed as necessary.

In some areas, vegetation that may encroach into the passable roadway will be trimmed or removed to allow vehicle clearance. The maximum horizontal vehicle clearance needed is the width of the roadway (defined as the existing road and the outer edge of berm); the vertical clearance is 20 feet.

Pull-out Areas

Pull-out areas are characterized as currently disturbed areas adjacent to existing access roads that will be utilized as areas for vehicles to pull out onto while working on the proposed Project alignment. These areas may be subject to maintenance grading as described above.

Foot Trails

Certain areas within the ANF cannot be accessed using established access roads because of topography, the presence of existing transmission towers and wire, or USFS restrictions. For these areas, foot trails will be the only means of overland travel used to access tower locations. Foot trails typically are designated from a helicopter landing zone or existing road leading to a tower location. Helicopters or vehicles will drop off and pick up crewman and equipment from these designated helicopter landing zones or existing roads. To the extent feasible, foot trails will be located on existing fire breaks or dirt trails. New temporary foot trails established for construction access may intersect jurisdictional waters; therefore, a minimal impact on vegetation associated with the jurisdictional feature will result in minor vegetation trimming or crushing (no more than 5 linear feet) to access a site.
**Removal of Burned Trees**

As a result of the Station Fire, portions of the ANF, especially severe burn areas, contain dead and fallen trees that pose a risk to safe ingress/egress along existing access roads. There are several areas along TRTP Segment 11C in which SCE anticipates the need to remove dead trees to reduce/eliminate this safety risk during construction. The removal of dead and burned trees will be conducted in a manner that avoids impacts to waters of the U.S. In an effort to minimize impacts on drainage features, the dead trees will be accessed on foot, felled toward the road and away from native habitat, and not removed beyond the stump. All other biological resources will be avoided to the fullest extent feasible.

**Previously Permitted Features**

Water feature 11-2-S-33 is covered under the TRTP Segment 6 Certification (File Number SB110031N). This water feature was impacted during construction of TRTP Segment 6 by a temporary wire setup site located on disturbed/developed land for which no compensatory mitigation was required. The same area of feature 11-2-S-33 will be re-impacted under Segment 11c. This feature is not listed in the impacts for Segment 11c because it was already quantified as an impact in the TRTP Segment 6 Certification. Therefore, SCE will follow the conditions in the TRTP Segment 6 Certification for impacts to feature 11-2-S-33.

Six water features are covered under the TRTP Segment 6 Certification that will be re-impacted and subject to new/additional impact areas within the feature by Segment 11C. These features include 11-2-S-4, 11-2-S-6, 11-8-S-3, 6-118-S-1, 6-118-S-4, and 6-8-S-2. Segment 11C impacts at these locations partly overlap areas already covered under the TRTP Segment 6 Certification. Five of these impact locations involve additional impacts within these water features that are associated with road widening, guard pole, structure work area, and wire setup sites at existing maintenance grading sites. The sixth area impacted by Segment 11C is a disturbed access route through Kentucky Springs Wash just north of an existing bridge crossing (that will not support heavy equipment). The additional impact area is associated with the construction of a new temporary construction access road (DWP crossing). As a result of these overlapping impacts, the Segment 11C impact tables only include the areas of additional impact associated with these features that are not covered under the TRTP Segment 6 Certification.

Conditions related to impacts may differ for the TRTP Segment 6 project versus the TRTP Segment 11C project. Therefore, applicable certification conditions will be based on the project for which the activity/ies occur. As such, when SCE re-impacts waters of the U.S. within different areas of specific water features on the TRTP Segment 11C project than what were previously authorized as part of the TRTP Segment 6 project, SCE will refer to conditions in this Certification rather than the TRTP Segment 6 Certification because the activity is associated with the TRTP Segment 11C project.
LICENSES/PERMITS/AGREEMENTS/PLANS
Table 1 provides all approvals required for the TRTP, as provided in Table 1-1 of the FEIR/FEIS (pp. 1-14 and 1-15). Approvals that may specifically be required for the proposed project alignment are noted.
Table 1: Other Licenses/Permits/Agreements

<table>
<thead>
<tr>
<th>Agency</th>
<th>Permit/Approval/Consultation</th>
<th>Required for Segment 11C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FEDERAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USDA Forest Service</td>
<td>A 50-year term Special Use authorization for the construction, operation, and maintenance of the proposed 500 kV transmission line and ancillary improvements on NFS lands and amendments to the 2005 Forest Plan to ensure that all actions approved under the Special Use authorization are consistent with management direction.</td>
<td>Yes</td>
</tr>
<tr>
<td>U.S. Army Corps of Engineers</td>
<td>Amendment or replacement of the existing easement across lands owned by USACE and authorization under Section 404 of the CWA.</td>
<td>Yes</td>
</tr>
<tr>
<td>U.S. Fish and Wildlife Service</td>
<td>Endangered Species Act Biological Opinion if project activities would result in adverse effect on a federally threatened, endangered, proposed, petitioned, or candidate species or if project activities would affect occupied designated critical habitat.</td>
<td>Yes</td>
</tr>
<tr>
<td>Federal Communications Commission</td>
<td>Licenses for new microwave paths.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>STATE/REGIONAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>California Public Utilities Commission</td>
<td>Certificate of Public Convenience and Necessity (CPCN).</td>
<td>Yes</td>
</tr>
<tr>
<td>California Department of Parks and Recreation</td>
<td>Permit for construction, operation, and maintenance of Alternative 4 across Chino Hills State Park (CHSP) lands. Permits are issued only for projects that comply with state park general plans; therefore, the Department of Parks and Recreation is responsible for developing any necessary amendment(s) to the CHSP General Plan, as subject to review and approval by the California State Park and Recreation Commission (see below).</td>
<td>No – Segment 11C is not located near CHSP lands</td>
</tr>
<tr>
<td>California Department of Fish and Wildlife (CDFW)</td>
<td>Streambed Alteration Agreement (per Section 1602 of the California Fish and Game Code) for effects on the bed, channel, or bank of rivers, streams, or lakes.</td>
<td>Yes</td>
</tr>
<tr>
<td>California Air Resources Board (CARB)</td>
<td>Portable engine registration for specified non-mobile portable engines.</td>
<td>Yes</td>
</tr>
<tr>
<td>South Coast Air Quality Management District</td>
<td>Air quality permits for portable engines greater than 50 horsepower not registered under CARB’s Portable Engine Registration Program.</td>
<td>Yes</td>
</tr>
<tr>
<td>State Water Resources</td>
<td>National Pollutant Discharge Elimination System</td>
<td>Yes</td>
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</table>
## Attachment C

### TRTP: SEGMENT 11C

#### SUPPLEMENTAL PROJECT INFORMATION SHEET

<table>
<thead>
<tr>
<th>Agency</th>
<th>Permit/Approval/Consultation</th>
<th>Required for Segment 11C</th>
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<tbody>
<tr>
<td>Control Board</td>
<td>(NPDES) General Permit for Stormwater Discharges Associated with Construction Activities.</td>
<td></td>
</tr>
<tr>
<td>California Department of Water Resources</td>
<td>Encroachment Permit required to traverse the California Aqueduct.</td>
<td>No – The Segment 11C project alignment does not encroach on the California Aqueduct.</td>
</tr>
<tr>
<td>California Department of Parks and Recreation,</td>
<td>Consultation and Memorandum of Understanding (MOU) per Section 106 of the National Historic</td>
<td>Yes, a Programmatic Agreement for the management of all cultural resources for the TRTP has been approved.</td>
</tr>
<tr>
<td>State Historic Preservation Officer</td>
<td>Preservation Act.</td>
<td></td>
</tr>
<tr>
<td>California Department of Transportation, State and Local</td>
<td>Approval for private facilities running parallel to and falling in the ROW of conventional</td>
<td>Yes</td>
</tr>
<tr>
<td>Project Development</td>
<td>highways with franchise rights from local agencies. Encroachment permits for any nonstandard use of state highway facilities. Transportation permits for heavy or oversized loads.</td>
<td></td>
</tr>
<tr>
<td>Division of Occupational Safety and Health</td>
<td>Construction permit (for construction of trenches or excavations that are 5 feet or deeper and into which a person is required to descend).</td>
<td>Yes</td>
</tr>
</tbody>
</table>

## PROJECT LOCATION INFORMATION

The Segment 11C Project alignment is approximately 19 miles of the 173-mile TRTP alignment and is primarily located on National Forest Service lands in the Angeles National Forest, within unincorporated areas of Los Angeles County. The northern terminus of the alignment for Segment 11C is located at the Vincent Substation, southwest of the intersection of the Angeles Forest Highway and Soledad Pass Road and south of State Route (SR) 14. The southern terminus of Segment 11C is located at the Gould Substation in La Cañada Flintridge, southeast of Angeles Crest Highway. Refer to Attachment D for a detailed location of waters of the state by feature ID, feature name and connectivity, watershed, assessor’s parcel number, and latitude/longitude coordinates.
HYDROLOGIC INFORMATION

The proposed project alignment is located in the Los Angeles River and Santa Clara River watersheds and the Los Angeles-San Gabriel River and Santa Clara-Calleguas hydrologic units (HUs). Notable water features that cross or are connected to features associated with the proposed project alignment include

- Fall Creek
- Kentucky Springs
- Canyon Creek
- North Mill Creek

Most of the 257 water features that are impacted by the Project are ephemeral and intermittent creeks, which receive their water sources from springs or precipitation in the San Gabriel Mountains.

THREATENED/ENDANGERED SPECIES

Several biological studies have been performed for the Project. The results of these studies are compiled in Chapter 3.4, Biological Resources, of the Final EIR/EIS (Aspen 2009), the Biological Specialist Report (Aspen and H.T. Harvey & Associates 2009), Chapter 4.3, Biological Resources, of the SEIS (Aspen 2010), and focused survey reports for the Project. Special status plant and wildlife species with the potential to occur on the Project area summarized in Tables 2 and 3 below.
### Table 2. Special Status Plant Species Observed in the Project Area

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Species</th>
<th>Location of Observation</th>
<th>Year Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fragrant pitcher sage</td>
<td>Lepechinia fragrans</td>
<td>Angeles National Forest, La Canada-Flintridge, Pasadena; B-Flat.</td>
<td>2010, 2011</td>
</tr>
<tr>
<td>Lemmon’s syntrichopappus</td>
<td>Syntrichopappus lemonii</td>
<td>Unincorporated Los Angeles County - South of Vincent Substation.</td>
<td>2007</td>
</tr>
<tr>
<td>Mt. Gleason Indian paintbrush</td>
<td>Castilleja gleasonii</td>
<td>Angeles National Forest – Mt. Gleason</td>
<td>2011</td>
</tr>
<tr>
<td>Ocellated Humboldt lily</td>
<td>Lilium humboldtii ssp. ocellatum</td>
<td>Pasadena</td>
<td>2010, 2011</td>
</tr>
<tr>
<td>Plummer’s mariposa lily</td>
<td>Calochortus plummerae</td>
<td>Angeles National Forest</td>
<td>2010, 2011</td>
</tr>
<tr>
<td>San Gabriel Mountains sunflower</td>
<td>Hulsea vestita ssp. gabiellensis</td>
<td>Angeles National Forest</td>
<td>2010, 2011</td>
</tr>
<tr>
<td>Short-joint beavertail</td>
<td>Opuntia basilaris var. brachyclada</td>
<td>Angeles National Forest, Unincorporated Los Angeles County – South of Vincent Substation</td>
<td>2007, 2010</td>
</tr>
</tbody>
</table>

### Table 3. Special Status Wildlife Species Observed in the Project Area

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Species</th>
<th>Status*</th>
<th>Location of Observation</th>
<th>Year Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>California red-legged frog</td>
<td>Rana draytonii</td>
<td>FT, CSSC</td>
<td>Segment 11C, Aliso Creek, inside and outside the ANF</td>
<td>2011</td>
</tr>
<tr>
<td>Coast patch-nosed snake</td>
<td>Salvador hexalepis</td>
<td>CSSC</td>
<td>Segment 11C, Aliso HAY</td>
<td>2011</td>
</tr>
<tr>
<td>Common Name</td>
<td>Species</td>
<td>Status*</td>
<td>Location of Observation</td>
<td>Year Observed</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>------------------------</td>
<td>-----------</td>
<td>---------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>virgultea</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooper's hawk</td>
<td>Accipiter cooperii</td>
<td>CDFW WL</td>
<td>Segment 11C, northern region</td>
<td>2012</td>
</tr>
<tr>
<td>San Diego desert woodrat</td>
<td>Neotoma lepida intermedia</td>
<td>CSSC</td>
<td>Middens located throughout Segment 11C</td>
<td>2011, 2012</td>
</tr>
<tr>
<td>San Diego horned lizard</td>
<td>Phrynosoma blainvillii</td>
<td>FSS,CSSC</td>
<td>Present in the central region on Segment 11C</td>
<td>2006, 2009</td>
</tr>
</tbody>
</table>

* FSS = USDA Forest Service Sensitive Species, CSSC = California Species of Special Concern, FE = Federally Endangered, FT = Federally Threatened, FD = Federally Delisted, SCD = State Candidate for Delisting, SE = State Endangered, CDFW FP = State Fully Protected Species, CDFW WL = CDFW Watch List

HAY = Helicopter Assembly Yard