

RECLAMATION

Managing Water in the West

Categorical Exclusion Checklist

Land Use Authorization for the Southern California Edison Santa Barbara County Reliability Project

CEC-16-017

Prepared by:

Kate Connor
Kate Connor
Natural Resources Specialist
South-Central California Area Office

Date: 2/23/2017

Concurred by:

See Attachment A
Joanne Goodsell
Mid-Pacific Regional Office
Regional Archeologist concurred with Item 8. Their determination has been placed within the project file.

Date: See Attachment A

Concurred by:

Lisa Buck
Lisa Buck
Wildlife Biologist
South-Central California Area Office

Date: 02/23/2017

Concurred by:

Rain L. Emerson
Rain L. Emerson
Supervisory Natural Resources Specialist
South-Central California Area Office
ITA Designee concurred with Item 11. Their determination has been placed within the project file.

Date: 03/10/2017

Approved by:

Michael P. Jackson, P.E.
Michael P. Jackson, P.E.
Area Manager
South-Central California Area Office

Date: 3/21/2017



Background

Southern California Edison (Edison) filed an application with the California Public Utilities Commission (Commission) for the Santa Barbara County Reliability Project (Proposed Project). The Proposed Project would rebuild and upgrade a portion of Edison's existing transmission infrastructure located in Santa Barbara and Ventura Counties between the cities of Ventura and Carpinteria (Figure 1). The Proposed Project comprises the following:

- Removal and/or replacement of existing 66-kilovolt (kV) subtransmission structures facilities, primarily within existing utility rights-of-way between the existing Santa Clara Substation in Ventura County and the existing Carpinteria Substation in Santa Barbara County.
- Installation of marker balls on overhead wire where determined necessary.
- Modification of subtransmission and substation equipment within the existing Carpinteria Substation, Casitas Substation, and Santa Clara Substation.
- Replacement of line protection relays within existing substation equipment rooms or cabinets at the Getty Substation, Goleta Substation, Ortega Substation, and Santa Barbara Substation.
- Installation of telecommunications facilities to connect the proposed project to the applicant's existing telecommunications system for the protection, monitoring, and control of subtransmission and substation equipment.
- Installation of new telecommunications facilities along reconstructed subtransmission segments and at the Carpinteria Substation, Casitas Substation, Santa Clara Substation, and Ventura Substation.
- Transfer of distribution lines (and third-party infrastructure as necessary) to new subtransmission structures.
- Removal of subtransmission infrastructure, such as tower foundation footings, decommissioned during previous 66-kV reconstruction activities between 1999 and 2004.

The Commission completed an Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act for the Proposed Project (http://www.cpuc.ca.gov/Environment/info/ene/sbcrp/SBCRP_FEIR.html) and issued a Final Decision on November 5, 2015 granting Edison permission to move forward with their Proposed Project (Decision 15-11-003).

The Proposed Project is subdivided into four geographically defined sections within Santa Barbara and Ventura counties and is expected to take approximately seven years to complete. Segment 2 of the Proposed Project has several existing structures that are located on Bureau of Reclamation (Reclamation) land (Figure 1). Edison has existing easements from Reclamation within this area that allow modifications to the existing transmission lines and supporting infrastructure. However, as some of the actions associated with the Proposed Project fall on Reclamation Right Of Way (ROW) outside of these existing easements, Edison has requested a land use authorization from Reclamation for additional ROW (Figure 1).

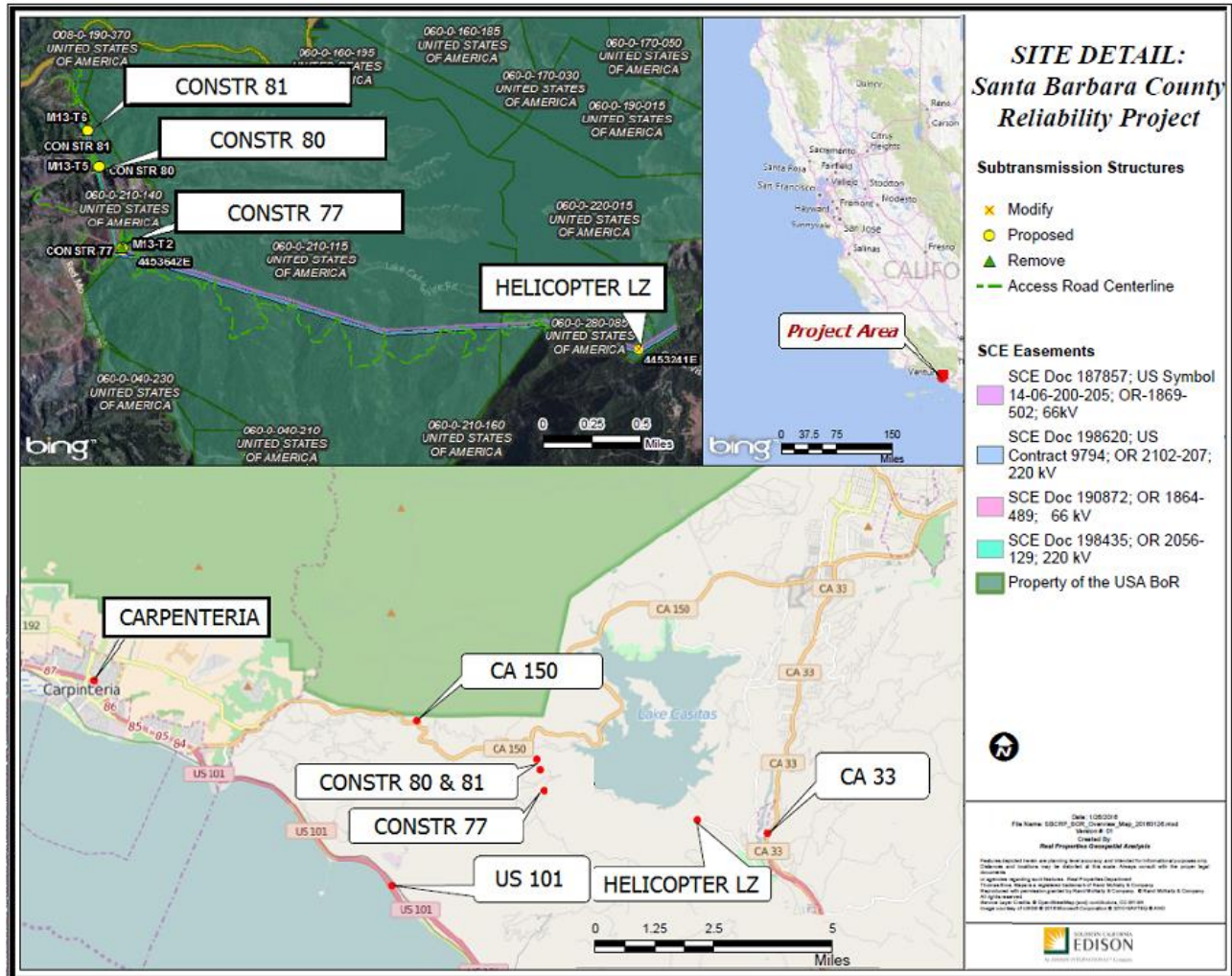


Figure 1 Project locations

Nature of the Action

Reclamation will issue Edison a new 10-year land use authorization to include the additional ROW associated with their Proposed Project that fall outside the existing easement area. The new land use authorization would cover a 10-year time period for the Project. Edison would implement the following actions associated with implementation of their Project at the four sites shown in Figure 1 (Helicopter LZ, Constr 77, 80, and 81) and described below.

Helicopter Landing Zone #7

An existing cleared area would be used as a helicopter-landing zone and telecommunications cable-pulling site for Edison's Proposed Project (Figure 2). The total area needed for the landing zone is approximately 0.11 acres in size. Approximately 0.05 acres of this is located within Edison's existing easement. An additional 0.06 acres of Reclamation ROW would be needed temporarily under the Proposed Action. Actions within this area would include surface grading and vegetation removal to ensure fire protection/fuel reduction and a flat landing surface for safe operation at the helicopter site. Vegetation would be removed down to the surface of the ground

without root removal. Grading would remove wash boarding and fill potholes, but no subsurface grading would be necessary.

Helicopters would be used to support construction activities in Project areas where access is limited (e.g., no suitable access road, limited construction area to facilitate on-site structure assembly, and/or environmental constraints to accessing project areas with standard construction vehicles and equipment) or where system outage constraints would be a factor. Project-related helicopter activities could include transportation of construction workers, delivery of equipment and materials to structure sites, structure placement, and hardware.

Wire Stringing, Pulling, and Splicing

Helicopters would be used for wire stringing activities in this area. These activities include installation of conductor, telecommunications cable, a fault return conductor, insulators, stringing sheaves (rollers or travelers), vibration dampeners, weights, suspension, and dead-end hardware assemblies onto subtransmission line structures. Telecommunications cable would be installed at or near the top of overhead structures. Pulling and splicing locations would be the same as those used for installation of subtransmission conductor. Telecommunication cable splices would be made within metal enclosures that would attach to subtransmission structures. Splice boxes would be installed on subtransmission structures no more than 20,000 feet apart.

Insulators and Conductors

Marker balls (non-electrical pieces of equipment placed on electric utility lines to ensure pilots can see the line) would generally be installed by helicopter because of this method's efficiency, minimal ground disturbance, and ability to operate in rugged terrain.

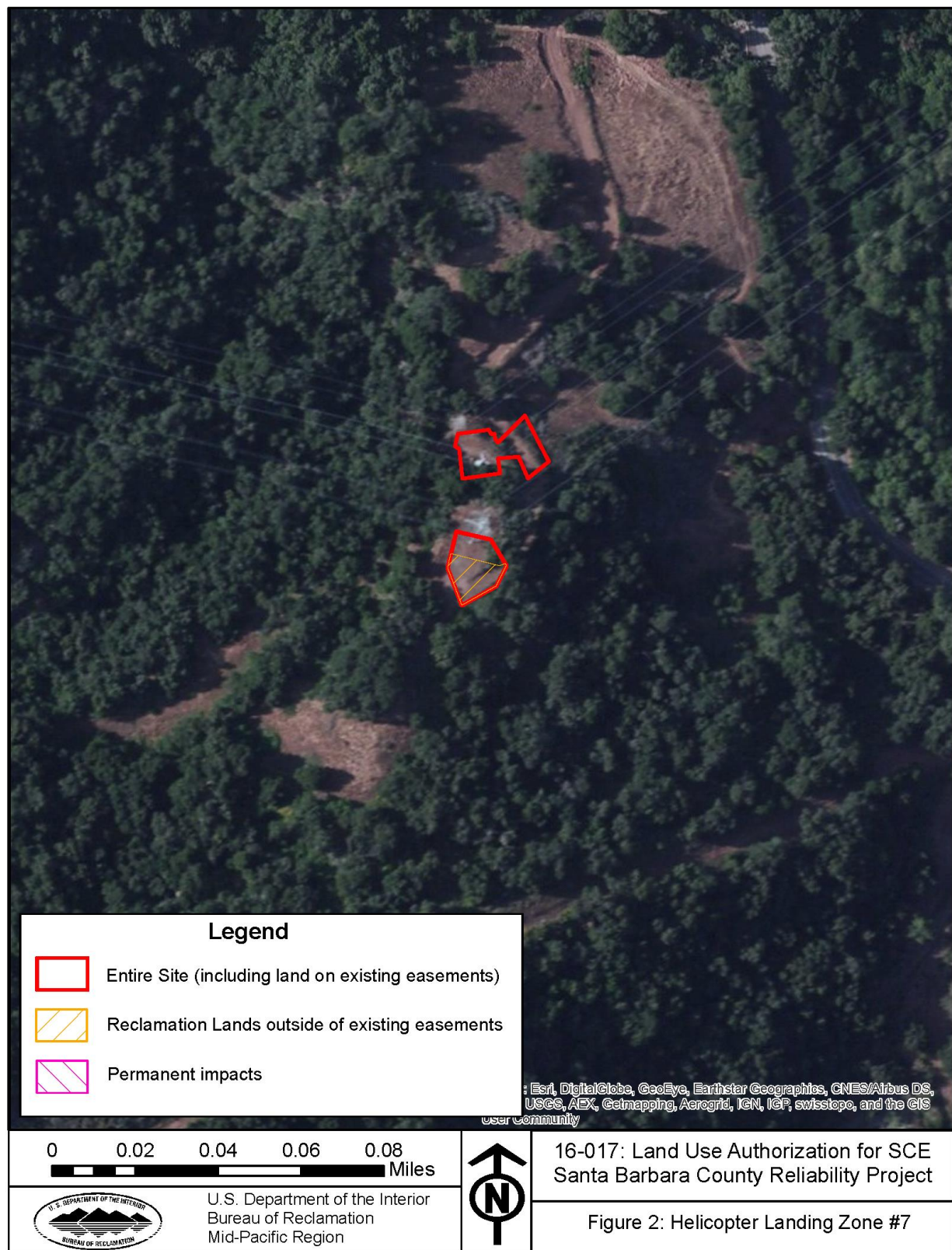


Figure 2 Helicopter landing zone 7

Construction Site 77

A majority of actions at this site would be performed within Edison's existing easements; however, an additional 0.06 acres of Reclamation ROW would be needed under the Proposed Action (Figure 3). The existing infrastructure at this location, including conductor and associated hardware, would be removed either by helicopter or by equipment and vehicles in areas accessible from the ground. Vegetation would be cleared and the surface graded to a maximum depth of 3.5 feet. Approximately 320 cubic yards of cut and 815 cubic yards of fill would be required at this location. Temporary laydown areas and work areas would also require grading or vegetation removal, but would be restored to preconstruction conditions. Permanently graded slopes would be revegetated. The only areas that would be cleared regularly are at the base of the poles to support fire abatement. The following activities would also be conducted at this site:

Pole Installation

The existing pole and foundation would be removed and a new 7-foot diameter pole would be installed to a depth of approximately 32 feet. Sections of the new pole would be placed in a temporary laydown/work area near the installation site. A crane would be used to set the steel pole base section on top of the prepared foundations. A temporary crane pad made of soil would be constructed within the laydown/work area and would be revegetated after the pole installation. The pole sections may also be spot-welded together for additional stability.

Wire Stringing, Pulling, and Splicing

Wire stringing activities would include the installation of conductor, telecommunications cable, FRC, insulators, stringing sheaves (rollers or travelers), vibration dampeners, weights, suspension, and dead-end hardware assemblies onto subtransmission line structures.

Cable Installation

Telecommunications cable would be installed at or near the top of the overhead structure. Pulling and splicing locations would be the same as those used for installation of the subtransmission conductor.

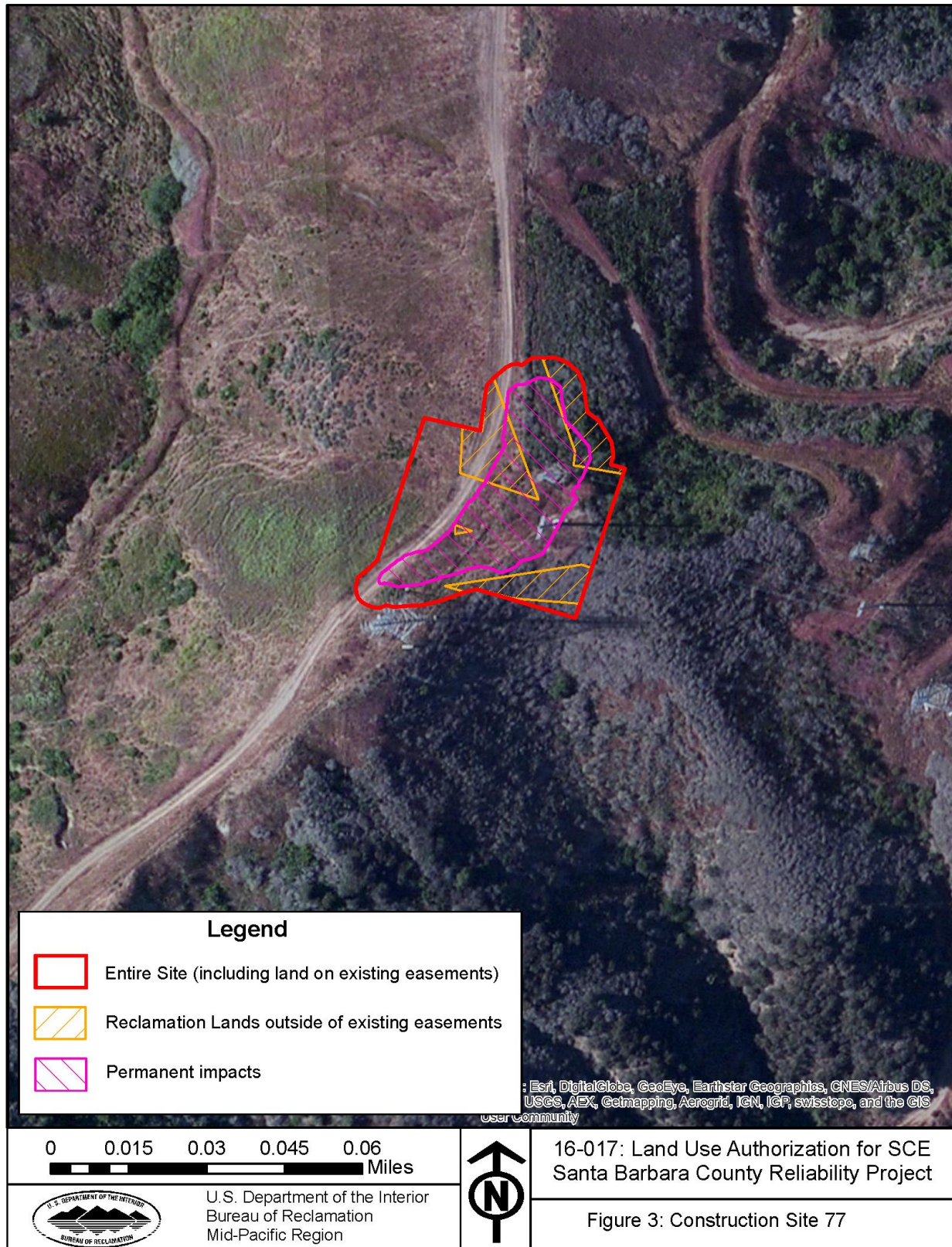


Figure 3 Construction Site 77

Construction Site 80

The majority of activity for this site would occur within Edison's existing easements or on private lands; however, 0.16 acres of temporary disturbance and 0.09 acres of permanent disturbance are located outside of the existing easements (Figure 4). Therefore, an additional 0.09 acres of Reclamation ROW would be needed under the Proposed Action. Of the 0.09 acres of permanent disturbance, 0.05 acres would be within the existing road prism, and would consist of rehabilitating the access road (grading, compacting, filling, ruts, installing berms, etc.).

An existing tower would be removed and a new 6.5-foot diameter pole installed approximately 32 feet; both are located within the existing Edison easement. The components would be removed by using helicopters and by equipment and vehicles in areas accessible by ground. Improvements to Edison's access roads in the immediate vicinity of Construction Site 80 would be done prior to the removal of the tower or installation of the pole.

The remaining permanent impacts would support site preparation, tower installation, and operation. Vegetation clearance and grading up to a maximum depth of 1 foot would be necessary to create a sufficiently level and cleared area for construction work. The vegetation would be restored to previous conditions after construction. Approximately 564 cubic yards of cut and 110 cubic yards of fill would be required at this location.

In the proposed 0.16 acres of temporary disturbance, vegetation removal or grading may occur, but would be restored to pre-Project conditions. The following activities would also be conducted at this site.

Pole Installation

The new pole sections would be placed in a temporary laydown/work area. A crane would be used to set the steel pole base section on top of the previously prepared foundation. A temporary crane pad made of soil would be constructed within the laydown/work area and would be revegetated after the pole installation. The pole sections may also be spot-welded together for additional stability.

Wire Stringing, Pulling, and Splicing

Wire stringing activities would include the installation of conductor, telecommunications cable, fault return conductor, insulators, stringing sheaves (rollers or travelers), vibration dampeners, weights, suspension, and dead-end hardware assemblies onto subtransmission line structures.

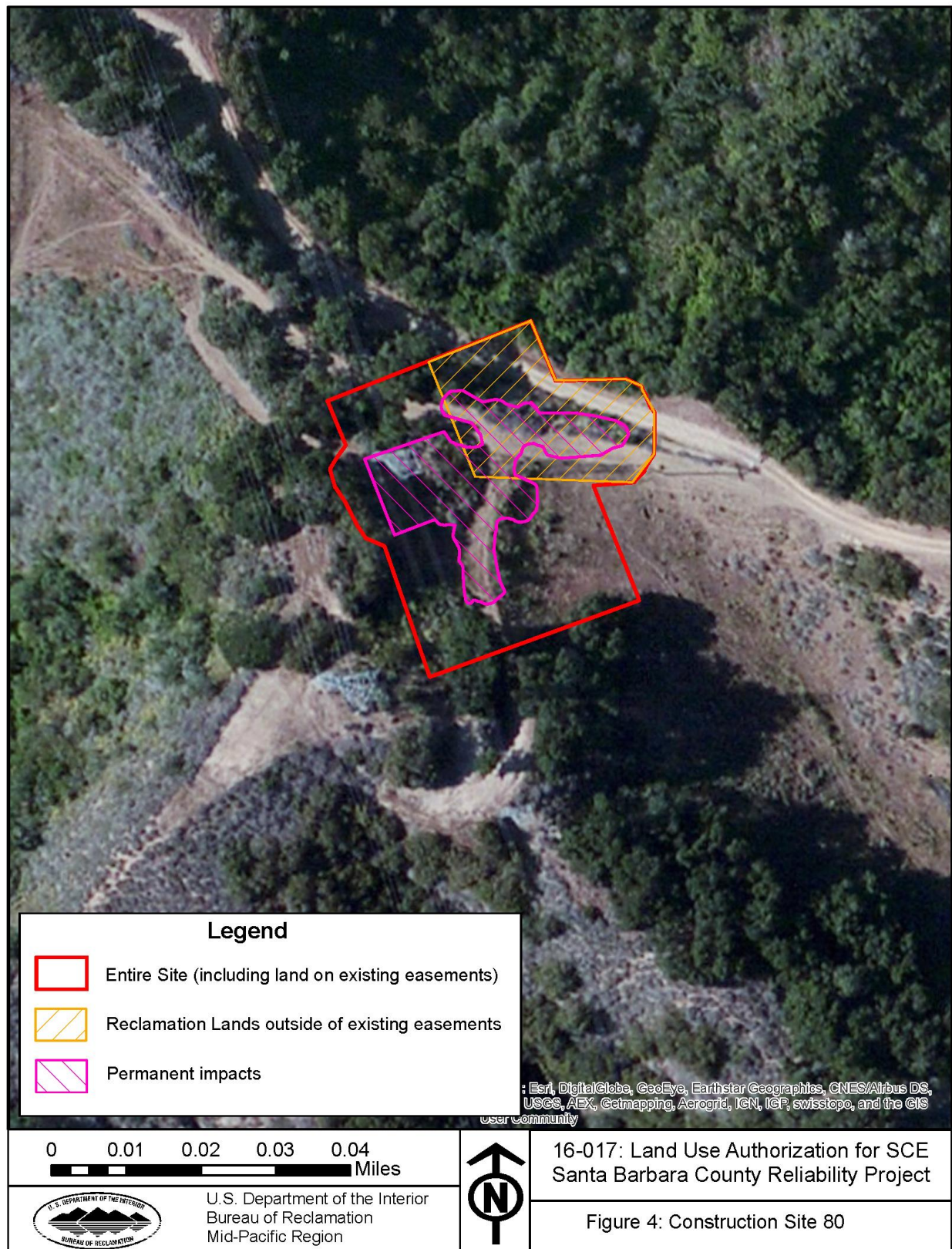


Figure 4 Construction Site 80

Construction Site 81

The majority of activity for this site would occur within Edison's existing easements or on private lands including the placement of a Mac drain for site drainage. No new permanent disturbances are proposed on Reclamation lands outside the existing easements in this area; however, an additional 0.19 acres of Reclamation ROW would be needed temporarily under the Proposed Action (Figure 5).

An existing tower would be removed and a new 7-foot diameter pole would be installed to a depth of approximately 25 feet; both are located within the existing Edison easement. The components would be removed by using helicopters and by equipment and vehicles in areas accessible by ground.

Grading or vegetation removal at this site would be conducted to create a sufficiently flat surface for construction safety and would not exceed 1 foot in depth. Grading and vegetation removal would only occur during construction and would be restored to previous conditions after construction.

Three oak trees (*Quercus agrifolia*), located outside of Edison's existing easement, would require canopy pruning as part of the Project (Figure 5). Two of the oak trees would require 5 percent of their canopies pruned and one of the oak trees would have 10 percent of its canopy pruned and up to 25 percent root compaction. Edison would consult with a qualified arborist for the trimming and removal of all native vegetation. The following activities would also be conducted at this site.

Pole Installation

The new pole sections would be placed in a temporary laydown/work area. A crane would be used to set the steel pole base section on top of the previously prepared foundation. A temporary crane pad made of soil would be constructed within the laydown/work area and would be revegetated after the pole installation. The pole sections may also be spot-welded together for additional stability.

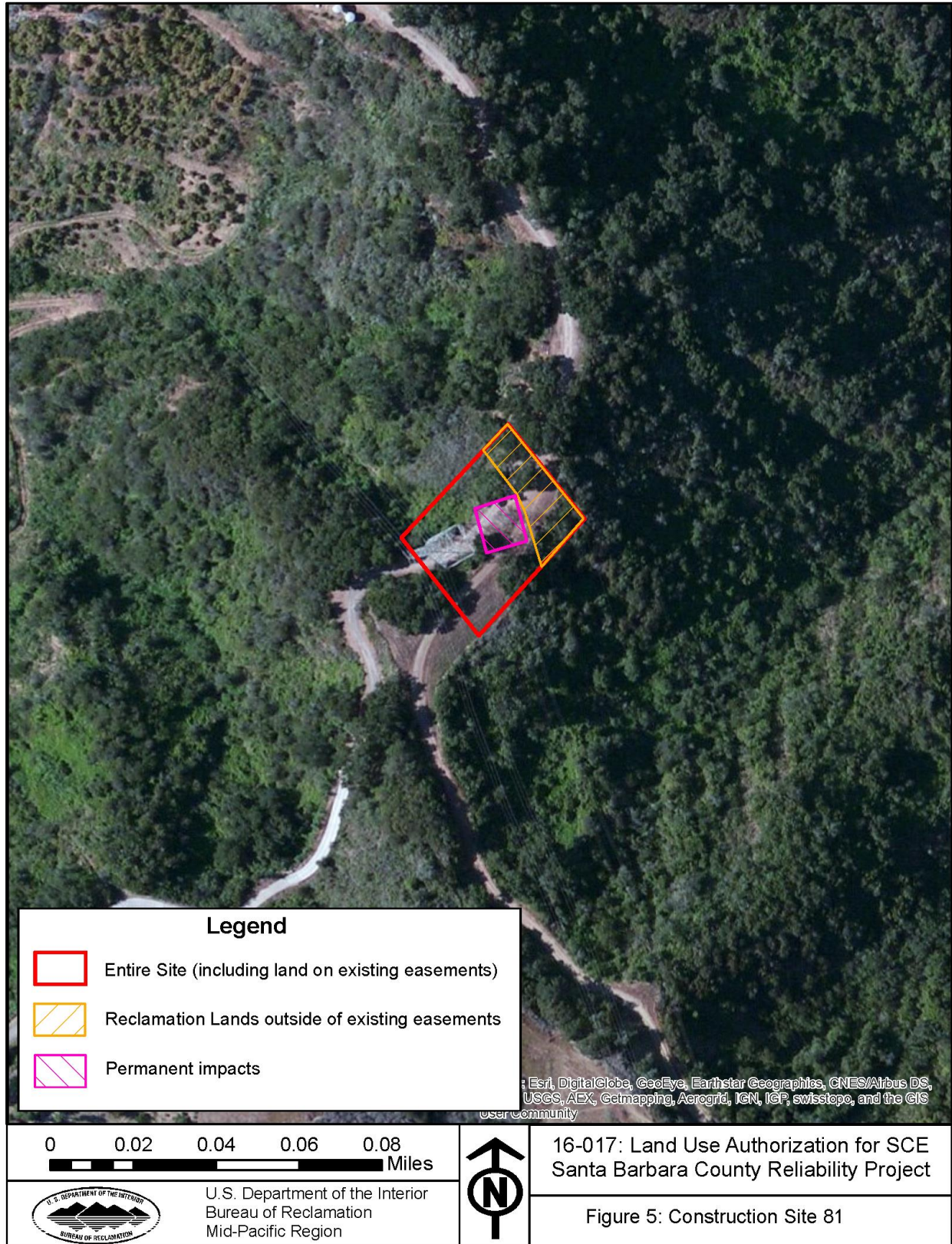


Figure 5 Construction site 81

Environmental Commitments

The United States Fish and Wildlife Service (Service) issued a biological opinion for the entirety of the Santa Barbara County Reliability Project on September 8, 2016, including the portions of the Proposed Project analyzed in this document (Attachment B). Edison shall implement all of the requirements (conservation measures, reasonable and prudent measures, and terms and conditions) in the biological opinion and letter of concurrence issued by the Service as well as the following environmental commitment to avoid take of migratory birds:

In order to avoid take of migratory birds, work on the Proposed Project shall occur outside of the migratory bird nesting season (February 1- August 31) to the maximum extent feasible. If work on the Proposed Project must occur during the nesting season, prior to the start of work a qualified biologist shall conduct surveys for nesting birds in areas of suitable habitat within the Project Area and adjacent areas according the requirements of the Nesting Bird Management Plan outlined on page 4.4-46 of the Santa Barbara County Reliability Project Final EIR. If an active nest is found during the survey, a qualified biologist shall establish an appropriate non-disturbance buffer according to the requirements of the Nesting Bird Management Plan in the Final EIR.

Environmental consequences for resource areas assume the measures specified would be fully implemented.

Exclusion Category

516 DM 14.5 D (10). *Issuance of permits, licenses, easements, and crossing agreements which provide right-of-way over Bureau lands where action does not allow for or lead to a major public or private action.*

Evaluation of Criteria for Categorical Exclusion

- | | | | |
|--|---|---------------------------------------|---------------------------------|
| 1. This action would have a significant effect on the quality of the human environment (40 CFR 1502.3). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| 2. This action would have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources (NEPA Section 102(2)(E) and 43 CFR 46.215(c)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| 3. This action would have significant impacts on public health or safety (43 CFR 46.215(a)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |

- | | No | Uncertain | Yes |
|--|---|---------------------------------------|---------------------------------|
| 4. This action would have significant impacts on such natural resources and unique geographical characteristics as historic or cultural resources; parks, recreation, and refuge lands; wilderness areas; wild or Edissonic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (EO 11990); flood plains (EO 11988); national monuments; migratory birds; and other ecologically significant or critical areas (43 CFR 46.215 (b)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| 5. This action would have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks (43 CFR 46.215(d)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| 6. This action would establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects (43 CFR 46.215 (e)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| 7. This action would have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects (43 CFR 46.215 (f)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| 8. This action would have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by Reclamation (LND 02-01) (43 CFR 46.215 (g)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| 9. This action would have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated critical habitat for these species (43 CFR 46.215 (h)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| 10. This action would violate a Federal, tribal, State, or local law or requirement imposed for protection of the environment (43 CFR 46.215 (i)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| 11. This action would affect ITAs (512 DM 2, Policy Memorandum dated December 15, 1993). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| 12. This action would have a disproportionately high and adverse effect on low income or minority populations (EO 12898) (43 CFR 46.215 (j)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |

- | | No | Uncertain | Yes |
|--|-------------------------------------|--------------------------|--------------------------|
| 13. This action would limit access to, and ceremonial use of, Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (EO 13007, 43 CFR 46.215 (k), and 512 DM 3)). | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. This action would contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act, EO 13112, and 43 CFR 46.215 (l)). | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

NEPA Action: Categorical Exclusion

The Proposed Action is covered by the exclusion category and no extraordinary circumstances exist. The Action is excluded from further documentation in an EA or EIS.

Attachment A: Cultural Resources Determination

**CULTURAL RESOURCE COMPLIANCE
Mid-Pacific Region
Division of Environmental Affairs
Cultural Resources Branch**

MP-153 Tracking Number: 14-SCAO-289

Project Name: Land Use Authorization for the Southern California Edison (SCE) Santa Barbara County Reliability Project (SBCRP)

NEPA Document: CEC-16-017

MP 153 Cultural Resources Reviewer: Joanne Goodsell, Archaeologist

Date: February 6, 2017

JOANNE GOODSSELL

Digitally signed by JOANNE

GOODSELL

Date: 2017.02.06 10:08:29 -08'00'

Reclamation proposes to amend an existing contract with SCE for temporary and long term land use rights-of-way related to the operation and maintenance of an existing 66-kilovolt (kV) subtransmission line and upgrades to the line associated with SBCRP. Reclamation's approval of this land use authorization constitutes an undertaking, as defined in 36 CFR § 800.16(y), with the potential to cause effects on historic properties, pursuant to 36 CFR § 800.3(a), requiring compliance with Title 54 USC § 306108, commonly known as Section 106 of the National Historic Preservation Act (NHPA).

Efforts to identify historic properties in the area of potential effects (APE) for the SBCRP, as a whole, were conducted by various cultural resources consultants on behalf of SCE. Using documentation prepared by SCE's consultants, pursuant to 36 CFR § 800.4(d)(1), Reclamation initiated consultation with the California State Historic Preservation Officer (SHPO) on a finding of no historic properties affected for Reclamation's undertaking through correspondence dated January 10, 2017. The SHPO responded indicating no objection to Reclamation's finding through correspondence dated February 3, 2017. With receipt of the SHPO's response, Reclamation concluded the NHPA Section 106 process for the current undertaking. Item 8 on the Evaluation of Criteria for Categorical Exclusion checklist in CEC-16-017 is supported by Reclamation's finding.

Please retain a copy of this document, which conveys the completion of the NHPA Section 106 process and cultural resources review, in the administrative record for the proposed action. Note that should the proposed action change, additional Section 106 review may be required. Thank you for the opportunity to review the proposed action.

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

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SACRAMENTO, CA 95816-7100
(916) 445-7000 Fax: (916) 445-7053
calshpo@parks.ca.gov
www.ohp.parks.ca.gov



February 3, 2017

In reply refer to: BUR_2017_0110_001

Anastasia T. Leigh
Regional Environmental Officer
U.S. Department of the Interior
Bureau of Reclamation
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, CA 95825-1898

RE: Section 106 Consultation for Land Use Authorization Related to Southern California Edison's (SCE) Santa Barbara County Reliability Project, Santa Barbara and Ventura Counties, California (Project #14-SCAO-289)

Dear Ms. Leigh:

The California Office of Historic Preservation (OHP) is in receipt of your January 10, 2017 letter initiating consultation with me for the above referenced project in order to comply with Section 106 of the National Historic Preservation Act of 1966 and its implementing regulations at 36 CFR Part 800. The Bureau of Reclamation (BUR) is requesting my comments on their proposal to amend the existing contract with Southern California Edison (SCE) for temporary and long term land use right-of-ways to permit the operation and maintenance of transmission and telecommunication facilities associated with the Santa Barbara County Reliability Project (SBCRP). The SBCRP involves rebuilding and upgrading portions of SCE's infrastructure, portions of which traverse lands owned and administered by BUR. Therefore, the BUR has determined that SCE's proposed removal and replacement of various 66-kV sub-transmission structures and facilities in four discrete areas of BUR lands constitute and undertaking pursuant to 36 CFR 800.3(a). Along with their letter, the BUR provided the following documents:

- *Supplemental Cultural Resources Technical Report for 17.4 Acres of the Santa Barbara County Reliability Project, Santa Barbara and Ventura Counties, California* (GANDA 2016)
- *Cultural Resources Technical Report for the Santa Barbara County Reliability Project, Santa Barbara and Ventura Counties, California* (GANDA 2014)
- *Historical Resource Analysis Report/Historic Property Survey Report Southern California Edison Company Santa Barbara County Reliability Project* (Urbana Preservation & Planning, LLC 2012)

The BUR has determined the Area of Potential Effect (APE) as the four discontinuous locations on BUR land where SCE has or will acquire rights-of-way related to the SBCRP construction and maintenance. This consists of 0.11 acres at Helicopter Landing Zone 7 where helicopter landing and staging will occur, and construction sites 77, 80, and 81 where three existing Lattice Steel Towers will be removed and replaced. The horizontal APE is approximately 0.79 acres in total, and the maximum depth of ground disturbance is 32 feet for the installation of new poles.

The BUR's letter detailed the efforts that were completed by SCE to identify potential historic properties within the project area and within the BUR's APE for this undertaking. These efforts included records searches and pedestrian surveys performed between 2012 and 2016 that covered the entire project area and APE. The records search identified 93 previously recorded

cultural resources within a one-mile radius of the SBCRP study area, and one previously recorded resource within the BUR's APE, the SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line (P-56-153060). This transmission line is roughly 34 miles long and a 23-mile portion of it was constructed in 1932. However, this line has undergone significant realignments and reconfigurations over time and was evaluated in 2012 by Urbana Preservation & Planning as not eligible for listing on the National Register of Historic Places (NRHP) under any criteria. The BUR has agreed with this determination.

The BUR requested a list of contacts from the Native American Heritage Commission (NAHC) for the project location in December, 2016. Letters were sent to the contacts provided on December 12, 2016 and one response was received from Mr. Freddy Romero of the Santa Ynez Band of Chumash Mission Indians indicating that his tribe had no specific concerns about the proposed undertaking on BUR lands.

The BUR is seeking my comments and concurrence on their determination that P-56-153060 is not eligible for listing on the NRHP and with their finding of *no historic properties affected* for this undertaking. After reviewing the submitted materials, I have the following comments:

- I concur that the Santa Clara-Ojai-Santa Barbara 66kV Transmission Line is not eligible for listing on the NRHP under any criteria.
- Pursuant to 36 CFR 800.4(d)(1), I do not object to the BUR's finding of *no historic properties affected* for this undertaking.

Please direct any questions or concerns that you may have to Jessica Tudor, Archaeologist, at (916) 445-7016 or at jessica.tudor@parks.ca.gov or Kathleen Forrest, Historian, at (916) 445-7022 or at kathleen.forrest@parks.ca.gov.

Sincerely,



Julianne Polanco
State Historic Preservation Officer



United States Department of the Interior

BUREAU OF RECLAMATION
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, CA 95825-1898

IN REPLY REFER TO:

JAN 10 2017

MP-153
ENV-3.00

HAND DELIVERED

Ms. Julianne Polanco
State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816

Subject: National Historic Preservation Act (NHPA) Section 106 Consultation for Land Use Authorization Related to the Southern California Edison (SCE) Santa Barbara County Reliability Project (SBCRP), Santa Barbara and Ventura Counties, California (Project #14-SCAO-289)

Dear Ms. Polanco:

The Bureau of Reclamation is initiating consultation under Title 54 USC § 306108, commonly known as Section 106 of the NHPA, and its implementing regulations found at 36 CFR Part 800, for issuing a land use authorization related to SCE's proposed SBCRP, located in Santa Barbara and Ventura Counties, California (Enclosure 1: Figure 1). More specifically, Reclamation is proposing to amend an existing contract with SCE for temporary and long term land use rights-of-way to permit the operation and maintenance of transmission and telecommunications facilities associated with the SBCRP. Reclamation's approval of these land use rights-of-way constitutes an undertaking as defined in 36 CFR § 800.16(y) and is a type of activity that has the potential to cause effects on historic properties under 36 CFR § 800.3(a). We are entering into consultation with you on this undertaking, and notifying you of our finding of no historic properties affected pursuant to 36 CFR § 800.4(d)(1).

The SBCRP, which was approved by the California Public Utilities Commission in 2015, involves rebuilding and upgrading a portion of SCE's infrastructure in southeastern Santa Barbara County and northwestern Ventura County. The majority of the project is located on private lands; however, portions of one 66-kilovolt (kV) sub-transmission corridor are located on lands owned and administered by Reclamation. A full description of the SBCRP is available in a Final Environmental Impact Report (FEIR) prepared in compliance with the California Environmental Quality Act. The FEIR is available on the California Public Utilities Commission website (http://www.cpuc.ca.gov/Environment/info/ene/sbcpr/SBCRP_FEIR.html).

Briefly, the SBCRP involves the removal and/or replacement of various 66-kV sub-transmission structures and facilities, including work on overhead wires and distribution lines, existing substations, and telecommunications facilities. Four discrete work areas are proposed on Reclamation lands and are the subject of this consultation. These areas are identified as Helicopter Landing Zone (LZ) 7, Construction Site 77, Construction Site 80, and Construction Site 81 (Enclosure 1: Figures 1, 1a, 1b, 2a and 2b). The legal descriptions for these four work areas are listed in the table below:

Work Area	USGS 7.5' Quad	Township, Range, Section (San Bernadino Meridian)
Helicopter LZ 7	Ventura, CA	T. 3 N., R. 23 W., Section 6
Construction Site 77	Pitas Point, CA	T. 3 N., R. 24 W., Section 3
Construction Site 80	White Ledge Peak, CA	T. 4 N., R. 24 W., Section 34
Construction Site 81	White Ledge Peak, CA	T. 4 N., R. 24 W., Section 34

Reclamation determined the area of potential effects (APE) for our current undertaking is limited to the four dis-contiguous locations on Reclamation land where SCE has or will acquire rights-of-way related to SBCRP construction and maintenance (Enclosure 1: Figures 2a and 2b). The APE consists of 0.11 acres at Helicopter LZ 7, 0.24 acres at Construction Site 77, 0.25 acres at Construction Site 80, and 0.19 acres at Construction Site 81. The horizontal APE amounts to approximately 0.79 acres in total. The activities that will occur within each of these four work areas, and the maximum depth of ground disturbance associated with these activities, are summarized in the table below:

Work Area	Activity	Ground Disturbance (with Maximum Depth)
Helicopter LZ 7	Site preparation	Minimal – vegetation removed to ground level with root system left intact
Helicopter LZ 7	Access road rehabilitation	Minimal – grading of existing roads to remove washboarding and fill potholes
Construction Site 77	Pole removal and replacement	A new 7-foot diameter pole would be installed to a depth of 32 feet
Construction Site 77	Site preparation	Grading to a depth of 3.5 feet to create level work area
Construction Site 80	Pole removal and replacement	A new 6.5-foot diameter would be installed to a depth of 31.5 feet
Construction Site 80	Access road rehabilitation	Minimal – grading and compacting of existing roads; new berm installation
Construction Site 80	Site preparation	Grading to a depth of 11 feet to create level work area
Construction Site 81	Pole removal and replacement	A new 6.5-foot diameter would be installed to a depth of 25 feet
Construction Site 81	Site preparation	Grading not to exceed 1 foot in depth

In an effort to identify historic properties in the APE, Reclamation reviewed two cultural resources technical reports prepared by Garcia and Associates (GANDA) on behalf of SCE. These reports (Enclosures 2 and 3) document the results of records searches conducted through the Central Coast Information Center and South Central Coast Information Center, Native American consultation, and pedestrian surveys associated with the SBCRP in its entirety, inclusive of the APE on Reclamation-owned lands. The record searches identified 93 previously recorded cultural resources within a one-mile radius of the larger SBCRP study area. GANDA's pedestrian surveys resulted in the updating of three previously recorded resources (CA-SBA-3587, CA-VEN-22, and CA-VEN-23) and the documentation of two new resources (GANDA-1 and ISO-GANDA-1).

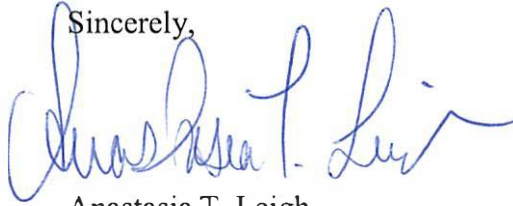
CA-SBA-3587, CA-VEN-22, and CA-VEN-23 are located on private property. GANDA-1, which consists of a prehistoric temporary use/campsite, and ISO-GANDA-1, comprising a single 12 ounce soft top beverage can, branded as Coors beer, are both located on lands under Reclamation's jurisdiction. GANDA-1 has not been formally evaluated for National Register of Historic Places (National Register) eligibility; however, this cultural resource is located outside the current APE and will not be impacted by SBCRP activities (see Enclosure 1: Figure 3). It is unclear from GANDA's Location Map for ISO-GANDA-1 if the isolated beer can is within or outside of the APE for the current undertaking (see Enclosure 2: Appendix A); however, by itself this object does not demonstrate any qualities of significance needed for National Register eligibility and requires no further consideration. No historic properties were identified within Reclamation's APE for the current undertaking.

Reclamation requested a Native American Contacts List from the California Native American Heritage Commission (NAHC) and, on December 12, 2016, sent letters requesting assistance in the identification of historic properties to the following Indian tribes and individuals identified by the NAHC as having an interest in the project area: Santa Ynez Band of Chumash Mission Indians, Barbareno/Ventureno Band of Mission Indians, Coastal Band of Chumash Nation, Northern Chumash Tribal Council, and Yak Tityu Tityu – Northern Chumash Tribe. Mr. Freddy Romero, Cultural Resources Coordinator with the Santa Ynez Band of Chumash Mission Indians, contacted Reclamation by phone and indicated his tribe had no specific concerns regarding the proposed activities on Reclamation land. No other responses have been received. Should any concerns be raised, Reclamation will work to address them and notify your office as appropriate.

No historic properties are present in the APE. Based on the above information and enclosed documentation, Reclamation has reached a finding of no historic properties affected for our current undertaking. We invite your comments on the delineation of the APE and historic properties identification efforts. We are also notifying you of our finding of no historic properties affected for this undertaking, pursuant to 36 CFR § 800.4(d)(1). In the event of any post-review discovery during construction on Reclamation land, we will follow the procedures outlined at 36 CFR § 800.13 and notify your office as required.

If you have any questions or comments concerning this submission, please contact Ms. Joanne Goodsell, Archaeologist, at 916-978-4694 or jgoodsell@usbr.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Anastasia T. Leigh". The signature is fluid and cursive, with the first name being the most prominent.

Anastasia T. Leigh
Regional Environmental Officer

Enclosures – 3

Attachment B: Fish and Wildlife Service Biological Opinion



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003



IN REPLY REFER TO:
08EVEN00-2015-F-0430

September 8, 2016

Antal Szijj, Senior Project Manager
Regulatory Division
U.S. Army Corps of Engineers
2151 Alessandro Drive, Suite 110
Ventura, California 93001

Subject: Formal and Informal Consultation for Southern California Edison's Santa Barbara County Reliability Project, Santa Barbara and Ventura Counties, California (File Number 2015-00309-AJS) (2015-F-0430)

Dear Mr. Szijj:

This document transmits the U.S. Fish and Wildlife Service's (Service) biological opinion based on our review of the U.S. Army Corps of Engineers' (Corps) proposed issuance of a permit, pursuant to section 404 of the Clean Water Act, for Southern California Edison's (Edison) Santa Barbara County Reliability Project (project) and its effects on the federally threatened California red-legged frog, in accordance with section 7 of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). We received your September 11, 2015, request for formal and informal consultation on September 14, 2015.

You made the determination that project activities may affect, but are not likely to adversely affect, the federally endangered least Bell's vireo (*Vireo pusillus belli*), southwestern willow flycatcher (*Empidonax traillii extimus*), and threatened western yellow-billed cuckoo (*Coccyzus americanus*). We concur with your determination based on the following:

1. No work would occur within or directly adjacent to the Ventura River;
2. Pre-construction survey(s) and monitoring would occur prior to and during construction activities within habitat suitable for least Bell's vireo, southwestern willow flycatcher and yellow-billed cuckoo;
3. If least Bell's vireo, southwestern willow flycatcher or yellow-billed cuckoo are detected, work would be deferred until outside of the breeding season for the least Bell's vireo, southwestern willow flycatcher and yellow-billed cuckoo, or immediately stopped, and avoidance buffers would be established; and
4. Conservation measures developed as a part of the project description and adopted by the California Public Utility Commission as part of the Final Environmental Impact Report

would be implemented to further avoid and minimize potential effects to least Bell's vireo, southwestern willow flycatcher and yellow-billed cuckoo.

Furthermore, we understand that you have determined that the project activities will not affect the federally endangered California condor (*Gymnogyps californianus*), and designated critical habitat for the southwestern willow flycatcher. Consequently, the California condor, and critical habitat for the southwestern willow flycatcher, will not be discussed further in this document.

Lastly, we understand you have initiated formal consultation with the National Marine Fisheries Service for the effects of the project on the federally endangered steelhead trout (*Onchorynchus mykiss*), which occurs in the Ventura River and Carpinteria Creek. Because the steelhead is not within the Service's jurisdiction, it will not be mentioned further in this document.

We have based this biological opinion on information that accompanied your September 11, 2015, request for consultation, including the biological assessment (Edison 2015) as well as information included in a series of subsequent electronic mail correspondences. We can make available a record of this consultation at the Ventura Fish and Wildlife Office.

Analysis of Effects and Incidental Take Exemption

When we analyze the Effects of the Action under the Act, we look at all of the direct and indirect effects the project would have on the listed species the biological opinion covers and how these effects would or would not result in jeopardy of the species. The proposed Santa Barbara County Reliability Project includes operations and maintenance of the power lines and associated facilities until such a time reconstruction or decommissioning is necessary. Therefore, the jeopardy analysis in this biological opinion includes effects of operation, maintenance, and construction impacts of the project.

Federal action agencies have a continuing duty to regulate the activity covered by an Incidental Take Statement. In addition, the section 7 regulations contemplate the ability to reinstate consultation if any of several criteria are met; including exceeding the level of take we anticipate would occur. The incidental take exempted for this Federal action under section 7(o)(2) of the Act, as identified in the Incidental Take Statement, is co-extensive with and limited to the scope of the Federal action under review, which is the construction impacts of the project.

Consultation History

On February 12, 2016, Chris Dellith, of my staff, called Jennifer Turner at Rincon Consultants, Inc. (Edison's consultant) for additional information regarding measures to minimize potential effects to least Bell's vireo, southwestern willow flycatcher and yellow-billed cuckoo. Mr. Dellith recommended that Edison provide a letter to supplement the biological assessment (Edison 2015) with additional information clarifying minimization measures. As a result of Mr. Dellith's recommendation, Edison provided you with a letter, with a copy to the Service, dated March 8, 2016, which included information to supplement the biological assessment.

BIOLOGICAL OPINION

DESCRIPTION OF THE PROPOSED ACTION

The proposed project involves reconstruction of an existing 66 kilovolt subtransmission system. The purpose of the project is to ensure the availability of safe and reliable electric service to help meet customer electrical demand in the Santa Barbara County South Coast area during emergency conditions while also enhancing operational flexibility. The proposed action generally includes replacement of lattice steel towers with tubular steel poles, replacement of the existing conductor (wire) with double-circuit 954 aluminum conductor steel-reinforced, the installation of new telecommunications cable (which also serves as a ground wire between poles for lightning protection), and road maintenance to facilitate construction activities and ongoing operations and maintenance.

The proposed project consists of the following primary elements:

- Removal and/or replacement of existing 66-kV subtransmission structures facilities, primarily within existing utility Right-Of-Ways (ROW) between the existing Santa Clara Substation in Ventura County and the existing Carpinteria Substation in Santa Barbara County.
- Installation of marker balls on overhead wire where determined necessary.
- Modification of subtransmission and substation equipment within the existing Carpinteria Substation, Casitas Substation, and Santa Clara Substation.
- Replacement of line protection relays within existing substation equipment rooms or cabinets at the Getty, Goleta, Ortega, and Santa Barbara Substations.
- Installation of telecommunications facilities to connect the proposed project to the Edison's existing telecommunications system for the protection, monitoring, and control of subtransmission and substation equipment.
- Installation of new telecommunications facilities along reconstructed subtransmission segments and at the Carpinteria Substation, Casitas Substation, Santa Clara Substation, and Ventura Substation.
- Transfer of distribution lines (and third-party infrastructure as necessary) to new subtransmission structures.
- Removal of subtransmission infrastructure, such as tower foundation footings, decommissioned during previous 66-kV reconstruction activities between 1999 and 2004.

Access Roads. Access to the project's 66-kV subtransmission lines for construction, operation and maintenance activities would be accomplished by using a network of 88 miles of existing dirt access roads. Access roads are roads that traverse between structure sites and serve as the main transportation route along the ROWs. During construction, the Project would utilize public roads and existing access roads to the maximum extent practical. Maintenance activities on existing access roads would include: scraping or blading the surface of the road to remove small ruts and wash-boarding to create a smooth surface, utilizing a root rake or similar device to remove roots remaining in the soil (i.e., grubbing), and clearing vegetation from the land on 2 to 3 feet of either side of the road (roots remain). Roads would be widened, as necessary to provide the required drivable surface width (minimum of 14 feet with a 2-foot shoulder on each side of the road) necessary for construction. Roads may be wider along curved sections depending on field conditions at the time of construction to allow large equipment access. Berms would be installed along roadway edges to provide stability and protect adjacent resources.

Rehabilitation and/or upgrades to existing access roads and construction of new, short distance roads may be required to facilitate construction access and permanent maintenance access. For less than 3 of the 88 miles of existing roads, the following rehabilitation activities are proposed:

- Widen the existing roadbed at curves and other locations.
- Install new, or repair existing drainage structures such as water bars, "Mac Drain" drainage devices, and over side drains to allow for construction traffic usage, as well as to prevent road damage.
- Repair washouts, and minimize surface disturbance areas and avoid extensive grading operations by installing 26 mechanical stabilized earth (MSE) retaining wall-type structures. The type of structure used would be based on specific site conditions.

Staging Yards. Eleven construction material yard and staging areas, ranging in size from 0.3 to 4.7 acres, are proposed for use during the construction of the project. This includes three currently existing, in-use yards and eight proposed, temporary new yards. Staging areas would be used as reporting locations for workers, vehicle and equipment parking, and material storage. Materials commonly stored at the staging yards would include, but not be limited to, construction trailers, construction equipment, portable sanitation facilities, steel bundles, steel/wood poles, conductor reels, telecommunications cable reels, hardware, insulators, cross arms, signage, consumables (such as fuel and filler compound), waste materials for salvaging, recycling, or disposal, and materials used according to best management practices (BMPs), such as straw wattles, gravel, and silt fences. These areas may also have construction trailers for supervisory and clerical personnel and may be lit for staging and security purposes. In addition, normal maintenance and refueling of construction equipment would also be conducted at staging areas. All refueling and storage of fuels would be performed in accordance with the Storm Water Pollution Prevention Plan (SWPPP).

Preparation of the new temporary yard areas would include installation of temporary perimeter fencing, as necessary, and, depending on existing ground conditions at the site, minor grading, blading, brushing and/or compaction of soil, and the application of gravel or crushed rock. Following the completion of construction for the project, disturbed lands at the staging yards would be restored as close to preconstruction conditions as possible or to the conditions agreed upon between the landowner and Edison.

A majority of materials associated with the construction efforts would be delivered by truck to designated staging yards and then transported by truck or helicopter from a staging yard to the construction or work areas; some materials may be delivered directly to the temporary subtransmission construction areas. The Edison Ventura Service Center would serve as the primary helicopter staging yard for the project. If necessary, additional helicopter staging yards of approximately 0.5 acre in size would be sited at locations along the project alignment that optimize flight time to structure locations. These additional helicopter staging yards would be used for material storage and tower assembly activities where towers would need to be installed with a helicopter. Additionally, operation crews, as well as fueling and maintenance trucks, would also be based in the helicopter staging yards, as necessary.

Schedule. Construction would take approximately 24 months, and the proposed project is anticipated to be operational in 2017. The schedule for specific work, and the final operational date, could vary depending on delays encountered, potential contract management issues and close out requirements.

Operations and Maintenance. Once the Project is constructed, Edison would operate and maintain the Project in accordance with existing Edison procedures and terms and conditions of authorizations. As discussed below, maintenance would occur as needed and could include activities such as repairing or restringing conductors, access road maintenance, washing or replacing insulators, wood pole testing, repairing or replacing other hardware components, replacing poles and towers, tree trimming, brush and weed control, and telecommunication facility maintenance.

Most regular operations and maintenance (O&M) activities are performed from existing and previously disturbed areas surrounding or adjacent to a specific structure, with no surface disturbance, such as access roads, structure locations, stringing sites, crane pads, and laydown areas. Work done to existing facilities, such as repairing or replacing existing poles and towers, could occur in undisturbed areas. Existing conductors could require re-stringing to repair damaged equipment. Some pulling sites could be located in previously undisturbed areas and at times, conductors could be passed through existing vegetation on route to their destination. Routine access road maintenance would be conducted on an annual or on as needed basis. Access road maintenance includes maintaining a vegetation-free corridor (to facilitate access and for fire prevention) and blading to smooth over washouts, eroded areas, and washboard surfaces as needed. Access road maintenance could include brushing (i.e., trimming or removal of shrubs) approximately 2 to 5 feet beyond the edge of the road or roadside berm when necessary to keep vegetation from intruding into the roadway. Access road maintenance would also

include cleaning ditches, moving and establishing berms, clearing and making functional drain inlets to culverts, culvert repair, clearing and establishing water bars, and cleaning and repairing over-side drains. Access road maintenance includes the repair, replacement and installation of storm water diversion devices on an as-needed basis. Insulators could require periodic washing with water to prevent the buildup of contaminants (e.g., dust, salts, droppings, smog, and condensation) and reduce the possibility of electrical arcing which can result in circuit outages and potential fire. Frequency of insulator washing is region specific and based on local conditions and build-up of contaminants. Insulators, hardware, and other components are replaced as needed to maintain circuit reliability.

Wood pole testing and treating would be necessary to evaluate the condition of wood structures both above and below ground level. Intrusive inspections require the temporary removal of soil around the base of the pole, usually to a depth of approximately 12 to 18 inches, to check for signs of deterioration. Public roads and existing access roads would be employed to access poles. All soil removed during intrusive inspections would be replaced and compacted at the completion of the testing.

Regular tree pruning would be performed in compliance with existing state and federal laws, rules, and regulations and is crucial for maintaining reliable service, especially during severe weather or disasters. Edison's standard approach to tree pruning is to remove at least the minimum required by law plus 1-year's growth (species dependent). In addition to maintaining vegetation-free access roads and clearances around electrical lines, clearance of brush and weeds around poles, and as required by local jurisdictions on fee-owned ROWs, would be necessary for fire protection.

The O&M-related helicopter activities could include transportation of workers, delivery of equipment and materials to structure sites, structure placement, hardware installation, and conductor or telecommunications cable stringing operations. Helicopter landing areas could be located where access by road is infeasible. In addition, helicopters must be able to land within Edison ROWs, which could include landing on access roads.

Telecommunication equipment would also be subject to routine inspection and preventative maintenance such as filter change-outs or software and hardware upgrades. Most regular O&M activities of telecommunication equipment would be performed within the existing substations facility or boundary. Telecommunication cable maintenance activities would include patrolling, testing, repairing and replacing damaged cable and hardware. Most regular maintenance activities of overhead facilities would be performed from existing access roads with no surface disturbance, although some activities could occur in undisturbed areas. Repairs done to existing facilities, such as repairing or replacing existing cables and restringing cables, could occur in undisturbed areas.

Emergency repairs, in addition to regular O&M activities, could be conducted in response to emergency situations (e.g., damage resulting from high winds, storms, fires, other natural

disasters, and accidents). Such repairs could include replacement of downed poles or lines or restringing conductors. Emergency repairs could be needed at any time.

Conservation Measures: Edison will implement the following conservation measures to avoid or minimize potential impacts on the California red-legged frog:

- Edison will conduct pre-construction biological surveys for special-status plants and wildlife would be conducted 0 to 30 days before the start of construction by a qualified biologist in all laydown/work areas. If a special-status species is encountered, biologists would record the location, take a photograph, and delineate a buffer area, as appropriate, where activities should be restricted for the protection of the resource. If impacts to the special status plant(s) or wildlife cannot be avoided, Edison would consult with the appropriate resource agency or agencies.
- To the extent feasible, Edison will minimize impacts and permanent loss to native vegetation types, vegetation that may support special-status species, and known populations of special-status plants at construction sites by avoiding construction activities in areas flagged to be avoided. If unable to avoid impacts to native vegetation, a project revegetation plan may be prepared in consultation with the appropriate agencies for areas of native habitat temporarily impacted during construction.
- Biological monitors will monitor construction activities in wildlife habitat areas that may contain special-status species, critical habitat for those species, or unique resources to ensure such species, habitat, or resources are avoided.
- Edison will conduct project-wide nesting bird surveys. Edison will, if feasible, remove trees, vegetation, subtransmission structures, and poles outside of the nesting season. If a tree, subtransmission structure, or pole containing a raptor nest must be removed during nesting season, Edison biologists would consult with the appropriate resource agencies. If work is scheduled to take place in close proximity to an active nest, appropriate nesting buffers or other measures would be established based on consultation with the appropriate resource agencies or an adaptive management plan to address nesting birds which would be subject to the approval of the California Department of Fish and Wildlife (CDFW). This project-specific nesting bird management plan would allow for implementation of species-specific buffer modification guidelines provided by a qualified utility avian biologist; nest buffers would be determined by species sensitivity to disturbance, the nature of the construction activity, and the environmental conditions surrounding the nest.
- The National Pollutant Discharge Elimination System Construction General Permit would require Edison to develop and implement a SWPPP, which specifies best management plans to avoid or minimize impacts to water quality and riparian habitat during construction.

- Edison will develop a worker environmental awareness plan. Edison will also prepare a presentation used to train all site personnel prior to the commencement of work. A record of all trained personnel would be kept. The environmental plan and presentation will include:
 - A list of phone numbers for Edison's environmental specialist personnel associated with the proposed project (archaeologist, biologist, environmental compliance coordinator, and regional spill response coordinator).
 - Instruction on biological resources (including special-status species and other sensitive habitats and resources that could occur in the vicinity of the proposed project); the locations of sensitive resources; the legal status and protection afforded these species; and the measures to be implemented for avoidance and minimization of impacts to the resources. Penalties for violations of environmental laws will also be incorporated into the training.
 - Instruction regarding the importance of maintaining a clean construction site, including ensuring that all food scraps, wrappers, food containers, cans, bottles, and other trash from the proposed project are deposited in closed trash containers. Trash containers would be removed from the project area as required and would not be permitted to overfill.
 - Instructions regarding the individual responsibilities under the Clean Water Act, the project SWPPP, site specific BMPs, and the location of Material Safety Data Sheets for the proposed project.
 - Instructions to notify the foreman and regional spill response coordinator in case of a hazardous materials spill or leak from equipment, or upon the discovery of soil or groundwater contamination.
 - Instruction that noncompliance with any laws, rules, regulations, or mitigation measures could result in a worker(s) being barred from participating in any remaining construction activities associated with the proposed project.
 - Temporary soil stabilization through techniques including timing of construction activities, preservation of existing vegetation, soil binders, mulch, and streambank stabilization.
- Edison will provide temporary sediment control through techniques including silt fence, fiber rolls, gravel bag berm, and sandbag or straw bale barriers.
- Edison will provide tracking control through techniques including stabilized construction roadways and exit/entrance areas and entrance/outlet tire wash.

- Edison will provide non-stormwater management including temporary stream crossings; vehicle and equipment cleaning, fueling, and maintenance practices; concrete curing and finishing practices; waste management and materials pollution control including stockpile management; spill prevention and control; management of solid, hazardous, liquid, contaminated soil, concrete, and septic waste.
- Crews will cover all holes and trenches at the end of every day. In the morning, crews will look in holes that have been covered to make sure nothing has become trapped overnight.
- All trash will be contained and removed from the job site daily. Special attention should be given to leaving no micro-trash (screws, nuts, bolts, pop-tops, washers, etc.) at the job site.
- Crews will enter and exit the project site via the same trail/footpath.
- Vehicles will observe speed limits of no more than 15 miles per hour when traveling on access roads.
- No substances that could be hazardous to aquatic or other life will be allowed to contaminate the soils and/or enter into or be placed where it may be washed off-site or into sensitive resource areas.
- Vehicles and equipment will be checked and maintained (off site) to prevent leaks of materials that could be deleterious to aquatic and other life. Stationary equipment will be inspected and maintained, and will be positioned over drip pans or other containment suitable to handle a spill/leak. Spill cleanup equipment will be on-site prior to the initiation of pre-construction activities.

ANALYTICAL FRAMEWORK FOR THE JEOPARDY DETERMINATION

Section 7(a)(2) of the Endangered Species Act requires that Federal agencies ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of listed species. “Jeopardize the continued existence of” means “to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species” (50 CFR 402.02).

The jeopardy analysis in this biological opinion relies on four components: (1) the Status of the Species, which describes the range-wide condition of the California red-legged frog, the factors responsible for that condition, and its survival and recovery needs; (2) the Environmental Baseline, which analyzes the condition of the California red-legged frog in the action area, the factors responsible for that condition, and the relationship of the action area to the survival and recovery of the California red-legged frog; (3) the Effects of the Action, which determines the direct and indirect impacts of the proposed Federal action and the effects of any interrelated or

interdependent activities on the California red-legged frog; and (4) the Cumulative Effects, which evaluates the effects of future, non-Federal activities, that are reasonably certain to occur in the action area, on the California red-legged frog.

In accordance with policy and regulation, the jeopardy determination is made by evaluating the effects of the proposed Federal action in the context of the current status of the California red-legged frog, taking into account any cumulative effects, to determine if implementation of the proposed action is likely to reduce appreciably the likelihood of both the survival and recovery of the California red-legged frog in the wild by reducing the reproduction, numbers, and distribution of that species.

STATUS OF THE SPECIES

The California red-legged frog was federally listed as threatened on May 23, 1996 (61 FR 25813). Critical habitat for the California red-legged frog was first designated on March 13, 2001 (66 FR 14625). On March 17, 2010, the Service published a revised critical habitat designation for California red-legged frog (75 FR 12816). The final rule for designation of critical habitat describes 48 separate units, encompassing approximately 1,636,609 acres, in 27 counties in California. Critical habitat is designated in Ventura and Santa Barbara Counties; however, critical habitat is not designated in the action area and it will not be discussed further in this biological opinion. The Service also finalized a special rule pursuant to section 4(d) of the Act, associated with final listing of the California red-legged frog as threatened, for existing routine ranching activities (71 FR 19244). A recovery plan for the species has been published (Service 2002).

Detailed information on the biology of California red-legged frogs can be found in Storer (1925), Stebbins (2003), and Jennings et al. (1992). This species is the largest native frog in the western United States, ranging from 1.5 to 5.1 inches in length. The abdomen and hind legs of adults are largely red; the back is characterized by small black flecks and larger irregular dark blotches with indistinct outlines on a brown, gray, olive, or reddish background color. Dorsal spots usually have light centers, and dorsolateral folds are prominent on the back. Tadpoles range from 0.6 to 3.1 inches in length and are dark brown and yellow with dark spots.

California red-legged frogs spend most of their lives in and near sheltered backwaters of ponds, marshes, springs, streams, and reservoirs. Deep pools with dense stands of overhanging willows and an intermixed fringe of cattails (*Typha latifolia*) are considered optimal habitat. Eggs, larvae, transformed juveniles, and adults also have been found in ephemeral creeks and drainages and in ponds that do not have riparian vegetation. Accessibility to sheltering habitat is essential for the survival of California red-legged frogs within a watershed, and can be a factor limiting population numbers and distribution. Some California red-legged frogs have moved long distances over land between water sources during winter rains. Adult California red-legged frogs have been documented to move more than 2 miles in northern Santa Cruz County “without apparent regard to topography, vegetation type, or riparian corridors” (Bulger et al., 2003). Most of these overland movements occur at night.

California red-legged frogs breed from November through April with earlier breeding records occurring in southern localities. California red-legged frogs are often prolific breeders, typically laying their eggs during or shortly after large rainfall events in late winter and early spring. Female California red-legged frogs deposit egg masses on emergent vegetation so that the masses float on the surface of the water. Egg masses contain about 2,000 to 5,000 moderate-sized (0.08 to 0.11 inch) in diameter, dark reddish brown eggs. Embryos hatch 6 to 14 days after fertilization and larvae require 3.5 to 7 months to attain metamorphosis. Tadpoles probably experience the highest mortality rates of all life stages, with less than 1 percent of eggs laid reaching metamorphosis. Sexual maturity normally is reached at 3 to 4 years of age; California red-legged frogs may live 8 to 10 years. Juveniles have been observed to be active diurnally and nocturnally, whereas adults are mainly nocturnal.

The diet of California red-legged frogs is highly variable. Invertebrates are the most common food items for adults, although vertebrates such as Pacific treefrogs (*Pseudacris regilla*) and California mice (*Peromyscus californicus*) can constitute over half of the prey mass eaten by larger frogs (Hayes and Tennant 1985).

The California red-legged frog has been extirpated or nearly extirpated from 70 percent of its former range. Historically, this species was found throughout the Central Valley and Sierra Nevada foothills. At present, California red-legged frogs are known to occur in 243 streams or drainages in 22 counties, primarily in central coastal California. The most secure aggregations of California red-legged frogs are found in aquatic sites that support substantial riparian and aquatic vegetation and lack non-native predators. Over-harvesting, habitat loss, non-native species introduction, and urban encroachment are the primary factors that have negatively affected the California red-legged frog throughout its range (Jennings and Hayes 1985, Hayes and Jennings 1988). Habitat loss and degradation, combined with over-exploitation and introduction of exotic predators, were important factors in the decline of the California red-legged frog in the early- to mid-1900s. Continuing threats to the California red-legged frog include direct habitat loss due to stream alteration and loss of aquatic habitat; indirect effects of expanding urbanization as well as competition or predation from non-native species including the bullfrog (*Lithobates catesbeiana*), catfish (*Ictalurus* spp.), bass (*Micropterus* spp.), mosquitofish (*Gambusia affinis*), red swamp crayfish (*Procambarus clarkii*), and signal crayfish (*Pacifastacus leniusculus*); and disease. Chytrid fungus (*Batrachochytrium dendrobatidis*) is a waterborne fungus that can decimate amphibian populations, and is considered a threat to California red-legged frog populations.

Although the presence of California red-legged frogs is correlated with still water deeper than approximately 1.6 feet, riparian shrubbery, and emergent vegetation (Jennings and Hayes 1985), numerous locations in the species' historical range exist where these elements are well represented yet California red-legged frogs appear to be absent. The cause of local extirpations does not appear to be restricted solely to loss of aquatic habitat. The most likely causes of local extirpation are thought to be changes in faunal composition of aquatic ecosystems (i.e., the introduction of non-native predators and competitors) and landscape-scale disturbances that

disrupt California red-legged frog population processes, such as dispersal and colonization. The introduction of contaminants or changes in water temperature may also play a role in local extirpations. These changes may also promote the spread of predators, competitors, parasites, and diseases.

Recovery Plan for the California Red-legged Frog

The 2002 final recovery plan for the California red-legged frog states that the goal of recovery efforts is to reduce threats and improve the population status of the California red-legged frog sufficiently to warrant delisting. This species will be considered for delisting when:

1. Suitable habitats within all core areas are protected and/or managed for California red-legged frogs in perpetuity, and the ecological integrity of these areas is not threatened by adverse anthropogenic habitat modification (including indirect effects of upstream/downstream land uses);
2. Existing populations, throughout the range, are stable (i.e., reproductive rates allow for long term viability without human intervention). Population status will be documented through establishment and implementation of a scientifically acceptable population monitoring program for at least a 15-year period, which is approximately 4 to 5 generations of the California red-legged frog. This 15-year period will preferably include an average precipitation cycle. An average precipitation cycle is a period when annual rainfall includes average to 35 percent above-average through greater than 35 percent below-average and back to average or greater. The direction of change is unimportant in this criterion;
3. Populations are geographically distributed in a manner that allows for the continued existence of viable metapopulations despite fluctuations in the status of individual populations (i.e. when populations are stable or increasing at each core area);
4. The species is successfully reestablished in portions of its historical range such that at least one reestablished population is stable/increasing at each core area where California red-legged frog are currently absent; and
5. The amount of additional habitat needed for population connectivity, recolonization, and dispersal has been determined, protected, and managed for California red-legged frogs.

The recovery plan describes a strategy for delisting, which includes the following actions: (1) Protect known populations and reestablish populations; (2) Protect suitable habitat, corridors, and core areas; (3) Develop and implement management plans for preserved habitat, occupied watersheds, and core areas; (4) Develop land use guidelines; (5) Gather biological and ecological data necessary for conservation of the species; (6) Monitor existing populations and conduct surveys for new populations; and (7) Establish an outreach program.

ENVIRONMENTAL BASELINE

Action Area

The implementing regulations for section 7(a)(2) of the Act define the “action area” as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 Code of Federal Regulations 402.02). The action area for this biological opinion include 12 different locations which are under the Corps’ jurisdiction and are identified as: Site 1 – Franklin Creek, Site 2 – Franklin Creek, Site 4 – Franklin Creek, Site 8 – unnamed tributary to Carpinteria Creek, Site 9 – unnamed tributary to Sutton Canyon Creek, Site 10 – Sutton Canyon Creek, Site 12 – unnamed tributary to Carpinteria Creek, Site 14 – unnamed tributary to Gobernador Creek, Site 20 – Las Sauces Creek, Site 21 – unnamed tributary to Las Sauces Creek, Site 22 – unnamed tributary to Las Sauces Creek, and Site 33 – Las Sauces Creek. In addition to the 12 aforementioned sites, the action area also includes the Ventura River in the vicinity of Foster Park, right-of-way corridors, access roads, and staging yards, plus a 500-foot buffer around these areas.

Habitat Characteristics and Existing Conditions of the Action Area

The action area is located within the foothills of the Santa Ynez Mountains, a subrange of the Transverse Ranges in northwest Ventura County and southeast Santa Barbara County, California between the City of San Buenaventura (Ventura) and the City of Carpinteria, ranging from 1 to 6 miles inland of the coastline. The Transverse Ranges are characterized by west-east trending mountain ranges and ridges (i.e., Santa Ynez Mountains, Laguna Ridge, Sulphur Mountain) separated by intervening valleys. Numerous smaller, steep-sided canyons are aligned perpendicular to the major ridges and would be crossed by the Project. Landslides are prone to occur in areas of steep, unstable terrain, and the area has a history of large and sometimes devastating wildland fire events, with “Sundowner” and “Santa Ana” winds contributing to fast-moving and destructive fires.

Elevations vary through the action area from 30 feet above mean sea level in Carpinteria, which lies in the coastal plain, to 1,500 feet above mean sea level along the foothills of the western Transverse Ranges, to more than 1,800 feet above mean sea level near Rincon Peak. Temperatures in the action area average 50 to 71 degrees Fahrenheit, with an average annual temperature of 60 degrees Fahrenheit. Average rainfall ranges from 15.4 to 17.7 inches. The majority of the action area is located on private lands.

The action area crosses the headwaters of multiple small streams and creeks, as well as the Ventura River, which flow through agricultural and urban areas before reaching the ocean. Surface waters in the vicinity of the action area include coastal streams, the Ventura River and its tributaries, Carpinteria Creek, and Lake Casitas. Groundwater resources include the Carpinteria groundwater basin at the southern border of the Central Coast Basin, and the Lower Ventura River Sub-basin and portions of coastal watersheds in the Los Angeles Basin. While groundwater and surface water sources have been extensively developed for domestic and

agricultural uses throughout the area, native riparian corridors are present and contrast with an otherwise dry landscape. Existing conditions at the riparian locations vary greatly, ranging from intact undisturbed aquatic and native vegetation to highly disturbed aquatic and non-native vegetation.

The east-west orientation of the mountains, combined with the distinct Mediterranean/marine climate, results in a mix of plant and wildlife species. Predominantly north- or south-facing slopes are dominated by alternating bands of grasslands and chaparral that follow bands of sedimentary rock formations, with oak woodlands and coastal sage scrub at lower elevations. Conifers exist in small patches along ridgetops and on north-facing slopes. Native oaks are scattered in pockets throughout. Six major vegetation types occur within the Project area: chaparral, grassland, coastal sage scrub, woodland, riparian, and non-native vegetation types. Native riparian vegetation occurs in corridors in association with drainages, creeks and streams. Non-native assemblages that occur throughout the action area include those that have been planted with orchards or crops, are extensively grazed by cattle, dominated by non-native or ruderal species, and developed with ornamental and landscaped vegetation. Noxious weed infestations, including black mustard (*Brassica nigra*), tocalote (*Centaurea melitensis*), cape ivy (*Delairea odorata*), fennel (*Foeniculum vulgare*), and ruderal species and escaped cultivars occur through the extent of the action area, especially along road and trail corridors.

Previous Consultations in the Action Area

We consulted with the U.S. Army Corps of Engineers on the effects of Matilija Dam Ecosystem Restoration Project in 2005 (1-8-04-F-38). The biological opinion written for the Matilija Dam Ecosystem Restoration Project concluded that the proposed action, which encompasses the Ventura River portion of the action area for this consultation, would not jeopardize the continued existence of the California red-legged frog. We anticipated that individuals of all California red-legged frog life stages will be taken within the Matilija Dam vicinity and upstream channel area as a result of the proposed dam removal and habitat restoration. Individuals that are killed, injured, or harassed, particularly during dam demolition, slurry operations, grading, vegetation removal, revetment installation, sediment deposition and stabilization, would be difficult to detect because the heavy machinery used in these operations is very large and large volumes of material are moved; these factors make detection of carcasses difficult. However, we determined that if more than ten (10) adult individuals are found dead or injured, or if any tadpoles or egg masses are present during the 36-month period estimated to demolish the Matilija Dam, slurry and stabilize sediments, the Corps must contact our office immediately so we can review the project activities to determine if additional protective measures are needed. Project activities may continue during this review period, provided that all protective measures proposed by Corps and the terms and conditions of this biological opinion have been and continue to be implemented. We also declared that California red-legged frogs may be taken only within the Matilija Reservoir, delta area, and the upstream channel area, which extends for 2.5 miles upstream from the delta area of the reservoir in Matilija Creek.

Condition (Status) of the Species in the Action Area

California red-legged frogs are known to occur in the Ventura River portion of the action area. On January 27, 2011, Mike Gibson of the Casitas Water District, found a dead California red-legged frog in a tail-out pool while doing southern steelhead surveys (Mike Gibson, pers. comm. 2011). The location of the tail-out pool is within the Ventura River portion of the action area.

On February 18, 2010, Matt Ingamells, Padre Associates, observed a pair California red-legged frogs in amplexus in the Ventura River portion of the action area. Furthermore, Ken Gilliland, Padre Associates, observed on March 16, 2010, and April 3, 2012, California red-legged frogs egg masses (Matt Ingamells pers. comm., 2016, Ken Gilliland pers. comm., 2016).

Lacking specific survey data, we have no information on the numbers of California red-legged frogs that could be present in the action area. We anticipate that the numbers will be relatively low compared to other sites in the California red-legged frog's range due to the intermittent nature of the Ventura River and the scarcity of permanent or semi-permanent water features.

With the exception of the Ventura River, no California red-legged frogs have been reported within the action area. No suitable habitat for breeding California red-legged frog occurs within proposed ground disturbance areas, including Sutton Canyon Creek and at all areas where access road maintenance activities would occur at a drainage crossing; however, under the right environmental conditions (i.e., sustained precipitation for the creation and retention of pools during the winter months), breeding individuals may have the potential to occur within other areas of drainages located within the action area, and therefore, could potentially occur in upland areas during and immediately after precipitation events.

Recovery

The Ventura River is included in Ventura River-Santa Clara River Core Area (Core Area 26) of the Northern Transverse Ranges and Tehachapi Mountains Recovery Unit in the recovery plan for the California red-legged frog (Service 2002). Core areas are locations targeted for development and implementation of management and protection plans for the California red-legged frog. Conservation needs identified for the Ventura River-Santa Clara River Core Area include: habitat restoration, control of non-native predators and non-native plants, and removal of Matilija Dam.

EFFECTS OF THE ACTION

The proposed O&M activities would be conducted essentially in perpetuity after the initial construction activities have been completed. Although the Corps' discretionary authority over the activities will end once initial project activities are completed, we are considering the long-term maintenance and use of the road crossings as interrelated and interdependent activities to the Corps' proposed authorization of the construction activities. This means we will evaluate the effects of long-term use (i.e., operation and maintenance) of the crossing in making our jeopardy

and adverse modification determinations.

The maintenance and long-term use of the crossings and upland dirt roads could adversely affect California red-legged frogs. California red-legged frogs primarily use upland habitat to disperse to other wet features in the landscape or to nearby breeding pools. Dispersing or foraging California red-legged frogs at the crossings or on the upland dirt roads could be killed or injured by long-term maintenance activities or vehicle traffic. Because the Corps' discretionary authority will have ended once the crossing has been established, Edison has committed to avoiding effects to California red-legged frogs by working with us to impose a suite of avoidance measures described above.

Direct impacts to California red-legged frogs in the action area during construction of the modification of existing crossings could include injury or mortality from being crushed by mechanical equipment (used outside of the creek channel), and worker foot traffic. Noise and vibration generated while scraping roads and construction worker foot traffic may cause California red-legged frogs to temporarily abandon habitat adjacent to work areas. Such disturbance may increase the potential for predation and desiccation when California red-legged frogs leave shelter sites. Furthermore, the potential exists for uninformed workers to injure or kill California red-legged frogs by stepping on them or crushing them with tools or equipment.

Trash left during or after project activities could attract predators to work sites, which could, in turn, prey on the listed species. For example, raccoons (*Procyon lotor*) and opossums (*Didelphis virginiana*) are attracted to trash and also prey opportunistically on California red-legged frogs. Accidental spills of hazardous materials or careless fueling or oiling of vehicles or equipment could degrade water quality or upland habitat to the degree California red-legged frogs are adversely affected or killed. Edison has proposed to implement measures that would minimize these effects by conducting worker awareness program and securing all trash. Edison has also proposed to implement measures that would restrict where and when vehicle maintenance and refueling would occur.

California red-legged frogs are known to be more surface active (e.g., foraging, dispersing) at night. If any excavation (e.g., trench, hole) to construct the concrete retaining wall is left open overnight, California red-legged frogs may fall into the excavation and become trapped. Trapped individuals may be more vulnerable to predators (e.g., raccoons) or they may exhaust themselves trying to get out. If they remain in the excavation until daylight, they may desiccate in the sun, be exposed to daytime predators (e.g. great blue herons (*Ardea herodias*)), or be in harm's way when excavation activities resume.

Hydrological alteration in the action area would occur as a result of the creating berms, and road widening at road crossings. These activities could result in changes to stream morphology and flow characteristics, potentially resulting in increased water velocities that could flush California red-legged frogs downstream.

Chytrid fungus is a water-borne fungus that can be spread through direct contact between aquatic animals and by a spore that can move short distances through the water. The fungus only attacks the parts of an animal's skin that have keratin (thickened skin), such as the mouthparts of tadpoles and the tougher parts of adults' skin, such as the toes. It can decimate amphibian populations, causing fungal dermatitis which usually results in death in 1 to 2 weeks. Infected animals may spread the fungal spores to other ponds and streams before they die. Once a pond has become infected with chytrid fungus, the fungus stays in the water for an undetermined amount of time. During the relocation of California red-legged frogs as part of the project, infected individuals or equipment could introduce chytrid fungus into areas where it did not previously occur. If this occurs in the action area, many California red-legged frogs could be affected. We expect aquatic habitats within close proximity to have similar exposure to the pathogen because amphibians can move easily between these areas. Chytrid fungus could be spread if infected California red-legged frogs are relocated to a healthy population of California red-legged frogs.

Effects on Recovery

The proposed project would result in adverse effects to California red-legged frogs within the action area; however, few, if any, California red-legged frogs are likely to be injured or killed because the Corps and Edison will implement a suite of conservation measures to minimize effects to the California red-legged frog. Any overall reduction in numbers of California red-legged frogs due to those injured or killed by project activities would be temporary because we expect individuals would be replaced during the next breeding cycle. Only the Ventura River portion of the action area is within a recovery unit, the population of California red-legged frogs and its habitat at this location remain important to the recovery the species as the habitat in this location will intact and undisturbed from project activities. Although, the remainder of the action area is not within a recovery unit, the habitat this area is important and will continue to provide for connectivity between recovery units in the region (i.e., units 24 and 26). The effects of the proposed project activities are not likely to reduce the potential contribution of the action area to the conservation of the California red-legged frog or impede its recovery.

Summary of Effects

The proposed project would result in adverse effects to California red-legged frogs within the action area; however, few, if any, California red-legged frogs are likely to be injured or killed because no California red-legged frogs have been recorded in most of the action area and only a few have been detected within the Ventura River portion of the action area. Because the action area does not appear to currently support a large population of the species, we do not expect the proposed action to impede the recovery of the California red-legged frog. The effects of the project activities will not appreciably reduce the reproduction, numbers, or distribution of the California red-legged frog. Although dispersal habitat for the California red-legged frog that occurs within and around the project area will be periodically disturbed on a sporadic basis, this constitutes a small portion of the available habitat throughout the entire range of the species.

CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, tribal, local or private actions that are reasonably certain to occur in the action area considered in this biological opinion. We do not consider future Federal actions that are unrelated to the proposed action in this section because they require separate consultation pursuant to section 7 of the Act. We are not aware of any non-Federal actions that are reasonably certain to occur in the action area.

CONCLUSION

The regulatory definition of “to jeopardize the continued existence of the species” focuses on assessing the effects of the proposed action on the reproduction, numbers, and distribution, and their effect on the survival and recovery of the species being considered in the biological opinion. For that reason, we have used those aspects of the California red-legged frog’s status as the basis to assess the overall effect of the proposed action on the species.

Reproduction

California red-legged frogs have been observed in the Ventura River portion of the action area and have not been detected elsewhere in the action area. Furthermore, breeding does occur within the Ventura river portion of the action area when water is present; however, no construction activities are proposed to occur on the ground at this location. Therefore, we do not expect reproduction to be affected.

Numbers

In the Effects section of this biological opinion, we state that injury or mortality of California red-legged frogs could occur as a result of the proposed activities. We expect such injury and mortality to be very infrequent primarily due to the few, or lack of, California red-legged frogs found in most of the action area. Also, the California red-legged frog’s reproductive strategy is to produce many more offspring than just replacements for breeding adults. This strategy has evolved to compensate for high juvenile mortality due to predation and changing environmental conditions. For the rangewide status of the species, this means that modest impacts, like those we anticipate for this project, will be masked within the next breeding season. Because we expect that few, if any, California red-legged frogs will be killed or injured during construction activities and future use and maintenance of the access roads, we conclude that the numbers of California red-legged frog rangewide would not be reduced below current levels.

Distribution

To reduce a species’ range, an action would have to eliminate habitat for the species or eliminate individuals from currently occupied habitat, especially at the periphery of the species’ range. Given the small size of the action area and the extent of direct and indirect effects, we conclude

that the proposed actions would not reduce the distribution of the California red-legged frog from its current rangewide condition.

Recovery

As stated earlier, only the Ventura River portion of the action area is within a core recovery area, and the remainder of the action area is not; however, the remainder of the action area is in close proximity to the Santa Maria-Santa Ynez Core Area (Core Area 26) of the Central Coast Recovery Unit in the recovery plan for the California red-legged frog (Service 2002). Core areas are targeted for development and implementation of management and protection plans for the California red-legged frog. Conservation needs identified for the Santa Maria-Santa Ynez and Ventura-Santa Clara River Core Areas include restoring habitat and protecting habitat connectivity. The proposed action would restore some habitat within staging areas that could support California red-legged frogs; therefore, we conclude that the proposed actions would not diminish the recovery of the California red-legged frog.

Summary

After reviewing the current status of California red-legged frog, the environmental baseline for the action area, the effects of the proposed crossing removal and bridge construction and the cumulative effects, it is the Service's biological opinion that the crossing removal and bridge construction, as proposed, is not likely to jeopardize the continued existence of the California red-legged frog.

The proposed action is designed to minimize adverse effects to California red-legged frogs by implementing a suite of minimization measures; however, some effects to California red-legged frogs will occur. Edison proposes to implement a suite of conservation and avoidance measures that should minimize effects to California red-legged frog. We do not expect any permanent loss of breeding or foraging habitat. The overall quality of breeding, foraging, and dispersal habitat for the California red-legged frog would remain intact.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened wildlife species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined by the Service as an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to

and not the purpose of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this incidental take statement.

In June 2015, the Service finalized new regulations implementing the incidental take provisions of section 7(a)(2) of the Act. The new regulations also clarify the standard regarding when the Service formulates an Incidental Take Statement [50 CFR 402.14(g)(7)], from "...if such take may occur" to "...if such take is reasonably certain to occur." This is not a new standard, but merely a clarification and codification of the applicable standard that the Service has been using and is consistent with case law. The standard does not require a guarantee that take will result; only that the Service establishes a rational basis for a finding of take. The Service continues to rely on the best available scientific and commercial data, as well as professional judgment, in reaching these determinations and resolving uncertainties or information gaps.

We cannot quantify the exact number of California red-legged frogs that may be incidentally killed or injured as a result of the action that the Corps proposes to authorize because California red-legged frogs have only been detected in a small portion of the action area, the patchy distribution of the species in the Ventura River, and the nature of the proposed activity. Additionally, finding carcasses and assigning a cause of death are problematic, and the presence of numerous scavengers that are likely to find dead animals soon after they die. The incidental take of California red-legged frogs, metamorphs, juveniles, and tadpoles would also be difficult to detect because of their small body size. Finding a dead or injured specimen is unlikely.

The Service anticipates that a small number of California red-legged frogs may be directly taken by the proposed project due to harm, harassment, injury, or mortality. Furthermore, we anticipate that take of California red-legged frogs will be due to work activities that result in excessive noise, vibration, traffic, vegetation removal, and disturbance of habitat. If early precipitation leads to moist conditions and California red-legged frogs attempt to disperse through the action area during construction, they could be entrapped in trenches or holes, or become exposed to and spread pathogens (e.g., chytrid fungus); others may be killed or injured as a result of accidental spills of hazardous materials, siltation of the creek, hydrological alteration of the creek, or by equipment and worker foot traffic if undetected.

We conclude the detection of the incidental take of individual California red-legged frogs resulting from these activities represents a reasonable indicator for determining when the anticipated level of incidental take described in this incidental take statement has been exceeded. Specifically, because we believe very few California red-legged frogs would occur in the action area during construction, the Corps must re-initiate formal consultation with the Service if two (2) California red-legged frogs (adult, sub-adult, or juvenile) are killed or injured, five (5) tadpoles or metamorphs are killed or injured, or one (1) egg mass is destroyed during project activities.

This biological opinion does not exempt any activity from the prohibitions against take contained in section 9 of the Act that is not incidental to the action as described in this biological opinion.

Take that occurs outside of the action area, or from any activity not described in this biological opinion, is not exempted from the prohibitions against take described in section 9 of the Act.

REASONABLE AND PRUDENT MEASURES

The measures described below are non-discretionary, and must be undertaken by the Corps or made binding conditions of any grant or permit issued to Edison, as appropriate, for the exemption in section 7(o)(2) to apply. The Corps has a continuing duty to regulate the activity covered by this incidental take statement. If the Corps (1) fails to assume and implement the terms and conditions or (2) fails to require Edison to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. To monitor the impact of incidental take, the Corps or Edison must report the progress of the action and its impact on the species to the Service as specified in the incidental take statement [50 CFR 402.14(i)(3)].

The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize the impacts of the incidental take of California red-legged frog:

REASONABLE AND PRUDENT MEASURES

The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize the impacts of the incidental take of California red-legged frog:

1. California red-legged frogs must be captured and relocated by a Service-approved biologist if they are in harm's way during the proposed project; capture and relocation must be accomplished in a manner than minimizes adverse effects on the California red-legged frog.
2. Specific activity restrictions must be implemented to avoid or minimize adverse effects on the California red-legged frog.

TERMS AND CONDITIONS

To be exempt from the prohibitions of section 9 of the Act, the Corps must comply with the following terms and conditions, which implement the reasonable and prudent measures described above and outline reporting and monitoring requirements. These terms and conditions are non-discretionary.

The following terms and conditions implement reasonable and prudent measure 1:

- 1.1 The Corps must request our approval of any biologists they wish to conduct activities pursuant to this biological opinion. Such requests must be in writing, and be received by the Ventura Fish and Wildlife Office at least 15 days prior to any such activities being conducted. Please be advised that possession of a 10(a)(1)(A) permit for the covered species does not substitute for the implementation of this measure. A section 10(a)(1)(A)

recovery permit is limited to any act otherwise prohibited by section 9 of the Act for scientific purposes or to enhance the propagation or survival of the affected species. Authorization of Service-approved biologist(s) is valid for this project only.

- 1.2 To avoid transferring disease or pathogens between aquatic habitats during the course of California red-legged frog surveys, capture, and relocation efforts, the Service-approved biologist(s) must follow the Declining Amphibian Population Task Force's Code of Practice. You may substitute a bleach solution (0.5 to 1.0 cup of bleach to 1.0 gallon of water) for the ethanol solution. Care must be taken so that all traces of the disinfectant are removed before entering the next aquatic habitat. The Code of Practice is enclosed.
- 1.3 When capturing and removing California red-legged frogs from work sites, the Service-approved biologist(s) must minimize the amount of time that animals are held in captivity. During this time, they must be maintained in a manner that does not expose them to temperatures or any other environmental conditions that could cause injury or undue stress. California red-legged frogs must be captured only by hand or dipnet and transported in buckets separate from other species.
- 1.4 A Service-approved biologist will survey the project site no more than 48 hours before the onset of work activities. If any life stage of the California red-legged frog is found and these individuals are likely to be killed or injured by work activities, the Service-approved biologist will be allowed sufficient time to move them from the site before work begins. The Service-approved biologist will relocate the California red-legged frogs the shortest distance possible to a location that contains suitable habitat and that will not be affected by activities associated with the proposed project. The relocation site should be in the same drainage to the extent practicable and free of exotic predators.

The following terms and conditions implement reasonable and prudent measure 2:

- 2.1 Construction activities must be halted during rain events. If precipitation falls at any time during the proposed project, construction must be halted. After a rain event, a Service-approved biologist must conduct a pre-construction survey for California red-legged frogs dispersing through the project site. Construction may resume only after the Service-approved biologist determines that California red-legged frogs are unlikely to be dispersing through the project site.
- 2.2 No pets will be allowed on the construction site.
- 2.3 Unless approved by the Service, water will not be impounded in a manner that may attract California red-legged frogs.

REPORTING REQUIREMENTS

Pursuant to 50 CFR 402.14(i)(3), the Corps must report the progress of the action and its impact on the species to the Service as specified in this incidental take statement. The Corps must ensure that a written final report is provided to the Service's Ventura Fish and Wildlife Office (2493 Portola Road, Suite B; Ventura, California 93003) within 90 days following completion of the proposed project. The report must describe all activities that were conducted under the auspices of this biological opinion, including activities that were described in the proposed action and required under the terms and conditions. It must also contain a discussion of any problems encountered in implementing minimization measures, the results of surveys and monitoring, the number of California red-legged frogs captured and relocated, the number of individuals found dead or injured and description of the cause of injury or mortality, and any other pertinent information. The report must also document the relocation site for California red-legged frogs, if a relocation site was needed during the project, and the total number of California red-legged frogs that were taken during project activities.

DISPOSITION OF DEAD OR INJURED SPECIMENS

As part of this incidental take statement and pursuant to 50 CFR 402.14(i)(1)(v), upon locating a dead or injured California red-legged frog, initial notification within 3 working days of its finding must be made by telephone and in writing to the Ventura Fish and Wildlife Office (805-644-1766). The report must include the date, time, location of the carcass, a photograph, cause of death or injury, if known, and any other pertinent information.

The Corps or Edison must take care in handling injured animals to ensure effective treatment and care, and in handling dead specimens to preserve biological material in the best possible state. The Corps or Edison must transport injured animals to a qualified veterinarian. Should any treated California red-legged frog survive, the Corps or Edison must contact the Service regarding the final disposition of the animal(s). The remains of any California red-legged frogs must be placed with the Santa Barbara Natural History Museum, contact: Paul Collins, Santa Barbara Natural History Museum, Vertebrate Zoology Department, 2559 Puesta Del Sol, Santa Barbara, California 93105; (805) 682-4711, extension 321. The Corps or Edison should make arrangements with the Museum regarding proper disposition of potential museum specimens prior to the commencement of project activities. In the case of take or suspected take of listed species not exempted in this biological opinion, the Ventura Fish and Wildlife Office must be notified within 24 hours.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to use their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement

recovery plans, or to develop information.

1. We recommend that the Corps participate in any regional planning efforts for the California red-legged frog in an attempt to recognize, at an early stage of planning, where conflicts between conservation of the species and future projects may arise.
2. The Corps should work with local agencies and governments towards the implementation of recovery actions identified in the California red-legged frog recovery plan.

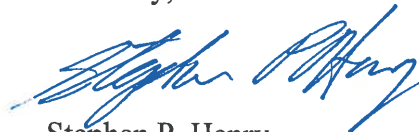
The Service requests notification of the implementation of any conservation recommendations so we may be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats.

REINITIATION NOTICE

This concludes formal consultation on the action(s) outlined in your request. As provided in 50 CFR 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, the exemption issued pursuant to section 7(o)(2) may have lapsed and any further take could be a violation of section 4(d) or 9. Consequently, we recommend that any operations causing such take cease pending reinitiation.

If you have any questions about this biological opinion, please contact Chris Dellith of my staff at (805) 644-1766, extension 227, or by electronic mail at chris_dellith@fws.gov.

Sincerely,



Stephen P. Henry
Field Supervisor

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The Declining Amphibian Populations Task Force Fieldwork Code of Practice

- A. Remove mud, snails, algae, and other debris from nets, traps, boots, vehicle tires, and all other surfaces. Rinse cleaned items with sterilized (e.g., boiled or treated) water before leaving each work site.
- B. Boots, nets, traps, and other types of equipment used in the aquatic environment should then be scrubbed with 70 percent ethanol solution and rinsed clean with sterilized water between study sites. Avoid cleaning equipment in the immediate vicinity of a pond, wetland, or riparian area.
- C. In remote locations, clean all equipment with 70 percent ethanol or a bleach solution, and rinse with sterile water upon return to the lab or "base camp" Elsewhere, when washing-machine facilities are available, remove nets from poles and wash in a protective mesh laundry bag with bleach on the "delicates" cycle.
- D. When working at sites with known or suspected disease problems, or when sampling populations of rare or isolated species, wear disposable gloves¹ and change them between handling each animal. Dedicate sets of nets, boots, traps, and other equipment to each site being visited. Clean them as directed above and store separately at the end of each field day.
- E. When amphibians are collected, ensure that animals from different sites are kept separately and take great care to avoid indirect contact (e.g., via handling, reuse of containers) between them or with other captive animals. Isolation from unsterilized plants or soils which have been taken from other sites is also essential. Always use disinfected and disposable husbandry equipment.
- F. Examine collected amphibians for the presence of diseases and parasites soon after capture. Prior to their release or the release of any progeny, amphibians should be quarantined for a period and thoroughly screened for the presence of any potential disease agents.
- G. Used cleaning materials and fluids should be disposed of safely and, if necessary, taken back to the lab for proper disposal. Used disposable gloves should be retained for safe disposal in sealed bags.

For further information on this Code, or on the Declining Amphibian Populations Task Force, contact John Wilkinson, Biology Department, The Open University, Walton Hall, Milton Keynes, MK7 6AA, UK. E-mail: DAPTF@open.ac.uk Fax: +44 (0) 1908-654167

¹ Latex gloves should not be used. They are toxic to amphibians. Use vinyl or nitrile disposable gloves instead.