13. Summary of Mitigation Measures and Monitoring Requirements

The mitigation measures introduced in Sections 6 through 11 of this Specialist Report for biological resources are presented below in Table 13-1 (Mitigation Monitoring Program – Biological Resources), which provides a summary of how and when the mitigation measures should be implemented and how the success of the mitigation measures can be determined.

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Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
mpact B-1: Construction activities would result in temporary and		es of native vegetation		
B-1a: Provide restoration/compensation for impacts to native vegetation communities. The intent of this mitigation measure is to require SCE to restore disturbed sites to pre-construction conditions or the desired future conditions per the Angeles National Forest (ANF), Land Management Plan (LMP). Prior to construction SCE shall have a qualified biologist, where concurrence on the biologist has been provided by the CPUC and FS, document the community type and acreage of vegetation that would be subject to project disturbance. Impacts to all oaks and native trees (with >3 inch diameter at breast height [DBH]) will be documented by identifying the species, number, location, and DBH. On non-Federal lands all protection and replacement measures shall be consistent with applicable local jurisdiction requirements, such as the Los Angeles County Oak Tree Ordinance. Tree removal shall not be permitted until replacement trees have been planted or transplanting sites are approved. For NFS lands, the FS shall prepare a Habitat Restoration and Revegetation Plan in discussion with SCE for the Project, which shall include plans for restoration, enhancement/re-vegetation and/or mitigation banking. For non-Federal lands SCE shall prepare the Habitat Restoration and Revegetation Plan. Both plans shall include at minimum: (a) the location of the mitigation site (off site mitigation may be required); (b) locations and details for top soil storage (c) the plant species to be used; (d) seed and cutting collecting guidelines; (d) a schematic depicting the mitigation area; (e) time of year that the planting meeding irrigation; (g) measures to control exotic vegetation on site; (h) success criteria; (i) a detailed monitoring program; j) locations and impacts to all oaks and native trees (over 3 inches DBH), k) locations of temporary or permanent gates, barricades, or other means to control unauthorized vehicle access on access and spur roads as deemed necessary by the FS (NFS lands only)-approved locally collected seed mix, locally c	Entire Project.	 Prior to construction, SCE shall submit documentation providing pre-construction conditions and a Habitat Restoration and Revegetation Plan to the CPUC and FS for review and approval. SCE will identify a Habitat Restoration Specialist to determine the most appropriate method of restoration. SCE shall restore native vegetative communities to pre-construction conditions, and the creation or restoration of habitat shall be monitored for 5 years after mitigation. If necessary, remediation activities shall be taken during the 5-year period. SCE's designated biologist shall monitor compliance and provide a copy of the monitoring reports to the CPUC and FS for review on a weekly basis. 	 Successful restoration and revegetation to pre-construction conditions, as verified by the Environmental Monitor (EM). Effectiveness can be determined by monitoring implementation of the control measures. 	Prior to and during construction

T				Timing of
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Action
mix shall consist of native, locally occurring species collected from local seed sources. Cuttings and bare-root stock shall be of local origin. Restoration shall include the revegetation of stripped or exposed work sites and/or areas to be mitigated with vegetation native to the area. No commercially purchased seeds, stock, etc will be accepted without the approval of the FS on NFS lands and must be certified to be free of noxious weeds. Revegetation shall include ground cover, grass, shrub, and tree species in order to match disturbed areas to surrounding conditions and to restore or improve wildlife habitat quality to pre-project or higher levels. The Habitat Restoration and Revegetation Plan shall also include a monitoring element. Post seeding and planting monitoring will be yearly from years one to five and every other year from years six to ten, or until the success criteria are met. SCE shall restore temporarily disturbed areas, including existing tower locations that are to be removed by the Project, to pre-construction conditions or the desired future conditions per the LMP. If the survival and cover requirements have not been met, SCE is responsible for replacement planting to achieve these requirements. Replacement plants shall be monitored with the same survival and growth requirements as previously mentioned.				
The FS will conduct a preconstruction evaluation of the probable impacts to all oaks and native trees in all construction-related disturbance areas. This evaluation shall be incorporated into the Habitat Restoration Plan and shall include the species and number of individuals, their DBH, location and potential impact type. Construction within the driplines of all native trees and oak trees/shrubs, and incidental trimming or damage to trees along the proposed access/spur routes shall not occur until the trees are evaluated by an FS botanist or qualified arborist. This person shall identify appropriate measures to minimize tree loss, such as the placement of fence around the dripline, padding vehicles, minimizing soil removal or addition around driplines, and the placement of matting under the existing dripline during construction activities. On the ANF, if a tree must have any construction-related activities such as equipment or soil staging within the drip zone, root pruning, or excessive branch pruning (greater than 25% in one year), then the tree must be monitored for five years for tree mortality. If any of these identified trees dies during the monitoring period, then the tree must be mitigated at the rate appropriate to the DBH.				

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Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
removed shall be as follows: trees from 3 to 5 inches DBH shall be replaced at 3:1; trees from 5 to 12 inches shall be replaced at 5:1; trees from 12 to 24 inches shall be replaced at 10:1; trees from 24 to 36 inches shall be replaced at 15:1; and all oaks greater than 36 inches shall be replaced at a ratio of 20:1. The replacement ratio for damaged trees shall be 2:1 for trees with DBH less than 12 inches and a 5:1 ratio for trees with DBH greater than 12 inches. The DBHs for scrub oaks will be measured following DFG guidelines. On the ANF any oak or native tree which must be removed or killed as a result of construction or other Project-related activities shall be replaced in kind or mitigated at a comparable value. Compliance shall be evaluated annually for years one to five and bi-annually for years six to ten (years after tree planting). Trees shall be planted at locations acceptable to the landowner or managing agency. All planting locations, procedures, and results shall be evaluated by a qualified arborist and FS botanist. On non-Federal lands all protection and replacement measures shall be consistent with applicable local jurisdiction requirements, such as the Los Angeles County Oak Tree Ordinance.				
Permanent impacts on federal lands shall be determined by the appropriate federal manager (FS and USACE) and on non-federal lands shall be determined by the CPUC at the ratios stated below or at a comparable value. On NFS lands impacts will be considered permanent if they are not likely to recover after ten years post-disturbance. Where onsite restoration is planned for mitigation of temporary impacts to vegetation communities, SCE shall identify a Habitat Restoration Specialist, where concurrence has been provided by the CPUC/FS, to implement the method of restoration outlined by the FS in the Habitat Restoration Plan.				
The creation or restoration of habitat shall be monitored annually for years one to five on both FS lands and private/State/USACE lands and bi-annually for years six to ten on FS lands, or until the success criteria are met, after mitigation site construction to assess progress and identify potential problems with the restoration site. Remediation activities (e.g. additional planting, removal of non-native invasive species, or erosion control) shall be taken during the ten-year period if necessary to ensure the success of the restoration effort. If the mitigation fails to meet the established performance criteria after the ten-year maintenance and monitoring period, monitoring and remedial activities shall extend beyond the ten-year period until the criteria are met or unless otherwise specified by the CPUC/FS/USACE/State				

Table 13-1. Mit	igation Mo	onitoring P	rogram –	Biological R	lesources			
Mitigation Measur	e				Location	Monitoring Requirement	Determination of Effectiveness	Timing o Action
Parks (as appropriathe ten year monito time replacement. I unless the fire is ca and non-NFS lands can be achieved or land purchase for ir mitigation banking, restoration efforts.	ring period, S f a second fir lused by SCE may be requ n NFS land. nclusion into	SCE shall be e occurs, no E activity. Off uired if mitiga This may be ithe Angeles I	responsible replanting is site mitigatition rates ex in the form on National Fore	for a one- required, on for NFS ceed what f funding for est,				7.000
During and after co roads on NFS lands maintained to preve general public. Sigr roads shall be post Mitigation Rat Communities	s shall be gat ent the unaut ns prohibiting ed on these o	ed or blocka horized use o unauthorize gates.	ded in some of these road d use of the	manner and s by the				
Communicies		n Ratios –	Mitigation					
Vegetation		S Lands		eral Lands				
Community	Impacts	Permanent Impacts	Impacts	Permanent Impacts				
Woodland Vegeta		•	,					
Bigcone Douglas Fir-Canyon Oak Forest	1:1	2:1	2:1	5:1				
Canyon Oak Forest	-	-	1:1	5:1				
California Bay Forest	1:1	2:1	1:1	5:1				
California Walnut Woodland	1:1	1.5:1	-	-				
Coast Live Oak Woodland	1:1	1.5:1	1:1	5:1				
Coulter Pine Forest	-	-	1:1	3:1				
Joshua Tree Woodland	1:1	2:1	-	-				
Mojavean Pinyon Woodland	1:1	2:1	2:1	5:1				

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Table 13-1. Miti	gation Mo	onitoring F	rogram –	Biological	Resources			
Mitigation Measure)				Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
Non-native Woodland	1:1*	1:1*	1:1*	1:1*				
Yellow Pine Forest (Plantation)	-	-	1:1	3:1				
Shrub-dominated	Vegetation							
Big Sagebrush Scrub	1:1	1:1	1:1	3:1				
Coastal Sage Scrub	1:1	1.5:1	2:1	5:1				
Desert Saltbush Scrub	1:1	1:1	-	-				
Chamise Chaparral	-	-	1:1	3:1				
Mixed Chaparral	1:1	1:1	1:1	3:1				
Scrub Oak Chaparral	-	-	1:1	5:1				
Interior Live Oak Scrub	-	-	1:1	5:1				
Mojave Creosote Bush Scrub	1:1	1:1	-	-				
Mojave Mixed Woody Scrub	1:1	1:1	-	-				
Mojavean Juniper Woodland and Scrub	1:1	1.5:1	2:1	5:1				
Mojavean Pinyon and Juniper Woodland, Recently Burned	-	-	2:1	5:1				
Mulefat Scrub	1:1	3:1	2:1	5:1				
Rabbitbrush Scrub	1:1	1:1	-	-				
Restoration – California Buckwheat Scrub	-	-	1:1	1:1				
Riversidean Alluvial Fan Sage Scrub	1:1	3:1	2:1	5:1				

Table 13-1. Miti	gation Mo	onitoring F	rogram –	Biological	Resources			
Mitigation Measure	Mitigation Measure				Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
Riparian Vegetation	on							
Desert Wash	1:1	3:1	2:1	5:1				
Ruderal Wetland	1:1*	1:1*	-	-				
Exotic-Giant Reed	1:1*	1:1*	1:1*	1:1*				
Southern Arroyo Willow Riparian Forest	1:1	3:1	2:1	5:1				
Southern Coast Live Oak Riparian Forest	1:1	3:1	2:1	5:1				
Southern Cottonwood Willow Riparian Forest	1:1	3:1	2:1	5:1				
Southern Sycamore-Alder Riparian Forest	1:1	3:1	2:1	5:1				
Southern Willow Scrub	1:1	3:1	2:1	5:1				
Sparsely Vegetated Streambed	1:1	3:1	2:1	5:1				
Herbaceous Veget	tation							
Bunchgrass Grassland	1:1	1.5:1	-	-				
California Annual Grassland	1:1	1:1	1:1	3:1				
Deerweed and Chia Herbaceous Field, Recently Burned	1:1	1:1	2:1	3:1				
Desert Bunchgrass Grassland	1:1	1.5:1	-	-				
Wildflower Field	1:1	1:1	2:1	3:1				
Anthropogenic Ve		1 -	1					
Agriculture	0:1	0:1	-	-				
Barren/developed	1:1*	1:1*	1:1*	1:1*				

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Table 13-1. Mit	igation Ma	nitoring D	rogram –	Riological I	Resources			
Mitigation Measure			TOGIAIII —	Diological	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
Ruderal Grassland Ratios on Non NFS conditions and dist could range from C evaluation. *Non-native habita areas will be mitiga support sensitive v B-1b: Implement a Worker Environment for construction crew concurrence has bee commencement of c shall include but not b Endangered Species Migratory Bird Treaty acts; identification an natural plant commun working on NFS land substance spill preve the event of the disco requirements. The W when road kill is enco minimize potential for species such as the C reported to the FS or lands, road kill shall b agency within 24 hou provided to the CPUC to the start of constru wildlife, fish, or popula construction limitatior environmental monite SCE shall provide to have completed train be updated by SCE a construction worker r participating in the W	1:1* S Lands may turbance level 0.5 to maximuts will be resulted at a 1:1 wildlife (i.e. but worker Environments of the construction ac period level of the construction and construction. Maps sleations of rare pass (i.e., limited for and FS for rection. Maps sleations of rare pass (i.e., limited for and construction and constr	els with approum noted in T eeded with a ratio if they a urrowing owls ronmental Aw Program (WE d biologist(s) p the CPUC/FS tivities. Trainin discussion of the d Golden Eag equences of n ant and wildlife ire protection n cation of FS sectainment meas or injured wildlife o include the p e work area or ortality of scave dor. On NFS la ble agency with the appropriate naterials and a review and app howing the locuplants, exclusion operating peri uction crews p d FS a list of co e start of constinen new perso	native seed re determine s, etc.) vareness Pro AP) shall be invovided by So prior to the g materials and Federal and ple Protection con-compliance species and neasures; sernsitive species sures; a containing access engers, including access enger	PUC. Ratios don site I mix. Barren ed to Dogram. A implemented CE, where Individual site of the ce with these significant instituties of the certain sitiuties of the ce	Entire Project.	 Thirty (30) days prior to construction, training materials and a course outline shall be provided to the CPUC and FS for review and approval. SCE shall submit documentation of training with a list of construction personnel who completed the training to the CPUC and FS. SCE's designated biologist shall monitor and ensure compliance for the duration of construction. 	Minimize unnecessary disruptions to sensitive species, as verified by the EM.	Prior to and during construction.

Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
B-1c: Treat cut tree stumps with Sporax. All stumps of trees (conifers and hardwoods) 3 inches DBH or greater resulting from activities associated with construction of the Project shall be treated with Sporax according to product directions to prevent the spread of annosus root disease. Only licensed applicators shall apply Sporax. Sporax shall not be used during rain events unless otherwise approved by the CPUC/FS/USACE.	Entire Project.	 SCE shall submit documentation of tree-cutting activities and the use of Sporax to the CPUC and FS. SCE's designated biologist shall monitor and ensure compliance for the duration of construction. 	Minimize unnecessary disruptions to sensitive species, as verified by the EM.	Prior to and during construction.
H-1a: Implement an Erosion Control Plan and demonstrate compliance with water quality permits. SCE shall develop and submit to the CPUC and FS for approval 30 days prior to construction an Erosion Control Plan, and implement Best Management Practices (BMPs), as described below. (Note: The Erosion Control Plan may be part of the same document as the Stormwater Pollution Prevention Plan.) Within the Erosion Control Plan, the applicant shall identify the location of all soil-disturbing activities, including but not limited to new and/or improved access and spur roads, the location of all streams and drainage structures that would be directly affected by soil-disturbing activities (such as stream crossings by access roads), and the location and type of all BMPs that would be installed to protect aquatic resources. The Erosion Control Plan shall include a proposed schedule for the implementation and maintenance of erosion control measures and a description of the erosion control practices, including appropriate design details. As part of the Erosion Control Plan, SCE shall maintain a logbook of all precipitation events within the Project area that produce more than one inch of precipitation within a 24-hour period. The logbook shall contain the date of the precipitation event, the approximate duration of the event, and the amount of precipitation (measured as the largest amount recorded by a rain gage or weather station within one mile of the Project). Additionally, the logbook shall include a narrative evaluation (and/or a numerical evaluation, if required by the FS or other jurisdictional agency) of the erosion-prevention effectiveness of the existing BMPs, as well as a description of any post-storm modifications to those BMPs. The logbook shall be submitted to the CPUC and FS for review within 30 days following the first storm event (after construction has begun) that produces greater than one inch of precipitation within a 24-hour period. The logbook shall be retired 5 years after completion of construction. In	Entire Project.	SCE shall submit an Erosion Control Plan and Sediment Transport Plan, including the BMPs contained in this mitigation measure, to the CPUC and FS for review and approval. This erosion control plan will be included in the Project SWPPP. The applicant shall submit to the CPUC and FS evidence of all required permits. CPUC and/or FS will monitor compliance during construction.	BMPs included in the SWPPP are applied, as verified by the EM. Avoid degradation of surface water quality.	Thirty (30) days prior to and during construction.

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Table 13-1. Mitigation Monitoring Program – Biological F	Resources			1
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
construction/demolition activities, before entering flowing or ponded water, or before constructing a crossing at flowing or ponded water. Such permits may include, but are not limited to, a Streambed Alteration Agreement from the California Department of Fish and Game, a Clean Water Act (CWA) Section 404 permit from the USACE, a CWA Section 402 NPDES General Permit for Storm Water Discharges Associated with Construction Activities (General Permit) from the applicable Regional Water Quality Control Board(s) (RWQCBs), and/or a CWA Section 401 certification from the applicable RWQCBs. In addition, if construction-related excavation activities on National Forest System (NFS) lands encounter perched groundwater, triggering the need for dewatering activities to occur in compliance with Applicant-Proposed Measure HYD-6 (Drilling and Construction Site Dewatering Management), SCE shall notify the Forest Service at the onset of dewatering and, upon the completion of dewatering activities at the affected site(s), SCE shall submit to the Forest Service written description of all executed dewatering activities, including steps taken to return encountered groundwater to the subsurface.				
 AQ-1a: Implement Construction Fugitive Dust Control Plan. SCE shall develop a Fugitive Dust Emission Control Plan (FDECP) for construction work. The Plan shall be completed prior to construction and approved by the CPUC and FS. This Plan is in addition to any fugitive dust control plan required by the South Coast Air Quality Management District (SCAQMD). Measures to be incorporated into the plan shall include, but are not limited to the following: Non-toxic soil binders, equivalent or better in efficiencies than the CARB approved soil binders, shall be applied per manufacturer recommendations to active unpaved roadways, unpaved staging areas, and unpaved parking area(s) throughout construction to reduce fugitive dust emissions. On NFS lands, SCE shall obtain FS approval of any soil binders to be used. Unpaved road travel will be limited to the extent possible, by limiting the travel of heavy equipment in and out of the unpaved areas (move from construction site to construction site rather than back to marshalling or staging areas daily); through carpooling/busing construction workers to the maximum feasible extent, and by developing travel routes to each construction site that minimize unpaved road travel to the extent possible, according to FS or other regulatory 	Entire Project.	 Prior to construction, SCE shall submit a construction FDECP to the CPUC and FS for review and approval. SCE shall incorporate the requirements of the FDECP into the plans and specifications, and require compliance by the construction contractor. CPUC and/or FS will monitor compliance at construction areas. 	 PM10 and PM2.5 emissions are reduced. Effectiveness can be determined by monitoring implementation of the control measures detailed in the FDECP. 	Prior to and during construction.

Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
agency road use restriction. The FDECP will include a road travel plan applicable for construction sites with unpaved access greater than one mile.				
Water the disturbed areas of the active construction sites at least three times per day and more often if uncontrolled fugitive dust is noted.				
 Enclose, cover, water twice daily, and/or apply non-toxic soil binders according to manufacturer's specifications to exposed piles with a five percent or greater silt content. 				
 Maintain unpaved road vehicle travel to the lowest practical speeds, and no greater than 15 miles per hour (mph), to reduce fugitive dust emissions. 				
All vehicle tires shall be inspected, are to be free of dirt, and washed as necessary prior to entering paved roadways.				
 Install wheel washers or wash the wheels of trucks and other heavy equipment where vehicles exit unpaved access to the construction sites. 				
 Cover all trucks hauling soil and other loose material, or require at least two feet of freeboard. 				
 Establish a vegetative ground cover (in compliance with biological resources impact mitigation measures) or otherwise create stabilized surfaces on all unpaved areas at each of the construction sites within 21 days after active construction operations have ceased. 				
 Increase the frequency of watering, if water is used as a soil binder for disturbed surfaces, or implement other additional fugitive dust mitigation measures, to all active disturbed fugitive dust emission sources when wind speeds (as instantaneous wind gusts) exceed 25 mph. 				
CAQMD Rule 403 Best Available Control Measures (BACM) are quired to be proposed in the FDECP and implemented when and if e BACM are as strict or stricter than the control measures listed bove. Additionally, mitigation measures provided on the SCAQMD EQA website Tables XI-A through XI-E ttp://www.aqmd.gov/ceqa/handbook/mitigation/fugitive/				
M_fugitive.html or as updated by SCAQMD) must be implemented the FDECP were applicable. This mitigation measure covers onstruction work performed within all three local air quality risdictions.				

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Table 13-1. Mitigation Monitoring Program – Biological	Resources			
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
Impact B-2: The Project would result in the loss of desert wash or	riparian habitat.			
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1)	-	-	-	-
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1)	-	-	-	-
B-2: Implement RCA Treatment Plan. SCE shall not construct or modify any structure, culvert, or bridge or modify any habitat without the appropriate permits from regulatory agencies. SCE shall not construct or modify any structure, culvert, or bridge or modify any habitat on NFS lands in Riparian Conservation Areas (RCAs) without the authorization of the FS. Vegetation removal or road construction shall not occur in RCAs during the breeding season for nesting birds (February 1-August 15) unless otherwise approved by the FS. SCE shall prepare and implement a FS RCA Treatment Plan for the Project. This Plan shall include the specific activities that will occur at each of the RCA points crossed by the Project including the amount and type of vegetation to be cleared, the type of road crossing or improvement allowed for wet and dry crossings, and the methods that would be employed to reduce the effects of the Project on water quality. The Plan shall include timing restrictions for vehicle or equipment passage, restrictions on what activities may occur such as grading, vegetation removal or tree trimming, monitoring requirements, seasonal restrictions, and restoration requirements. This Plan shall be submitted to the FS for approval prior to construction or the grading of any access road. The Plan shall also be submitted to the CPUC for review.	NFS lands.	 Prior to construction, SCE shall submit an FS RCA Treatment Plan to the CPUC and FS for review and approval. Removal or road construction shall not occur in RCAs during breeding season for nesting birds (February 1 – August 15). SCE's designated biologist shall monitor and provide a copy of the monitoring reports to the CPUC and FS for review on a weekly basis. 	Minimize disturbance at RCA crossings, as verified by the EM.	Prior to and during construction.
H-1a: Implement an Erosion Control Plan and demonstrate compliance with water quality permits. (See full description under Hydrology, Section 3.8)	-	-	-	-
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-
Impact B-3: The Project would result in the establishment and spr	ead of noxious v	veeds.		
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1)	-	-	-	-
B-2: Implement RCA Treatment Plan. (See Impact B-2)	-	-	-	-
B-3a: Prepare and implement a Weed Control Plan. SCE shall prepare and implement a comprehensive, adaptive Weed Control Plan on NFS lands for pre-construction and construction invasive weed abatement. The long term Weed Control Plan, including monitoring and eradication, will be defined as part of the 50 year Operations and Maintenance Permit. On the ROW easement lands	Entire Project.	 Prior to construction, SCE shall submit the Weed Control Plan to the CPUC and FS for review and approval. SCE's designated biologist shall 	Successful weed control, as verified by the EM.	Prior toand during construction.

Table 13-1. Mitigation Monitoring Program – Biological R	esources			
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
administered by the FS, the Weed Control Plan shall incorporate all appropriate and legal agency-stipulated regulations. The Weed Control Plan shall be submitted to the FS for final authorization of weed control methods, practices, and timing prior to implementation of the Weed Control Plan on public lands. ROW easements located on private lands shall include adaptive provisions such as wheel and equipment washing for the implementation of the Weed Control Plan. The Weed Control Plan shall include the following:		monitor for the duration of construction, and will provide a copy of the monitoring reports to the CPUC and FS for review on a weekly basis.		
 A pre-construction weed inventory shall be conducted by surveying all areas subject to ground-disturbing activity, including, but not limited to, tower pad preparation and construction areas, tower removal sites, pulling and tensioning sites, assembly yards, and areas subject to grading for new or improved access and spur roads. Weed populations that: (1) are rated High or Moderate for negative ecological impact in the California Invasive Plant Inventory Database (Cal-IPC, 2006); and (2) aid and promote the spread of wildfires (such as cheatgrass, Saharan mustard, and medusa head); and (3) are considered by the FS as species of priority (for NFS lands only) shall be mapped and described according to density and area covered. In areas subject to ground disturbance, weed infestations shall be treated prior to construction according to control methods and practices for invasive weed populations designed in consultation with the FS. The Weed Control Plan shall be updated and utilized for eradication and monitoring post construction. 				
• Weed control treatments shall include all legally permitted herbicide, manual, and mechanical methods applied with the authorization of the FS. The application of herbicides shall be in compliance with all state and federal laws and regulations under the prescription of a Pest Control Advisor (PCA), where concurrence has been provided by the CPUC/FS, and implemented by a Licensed Qualified Applicator. Herbicides shall not be applied during or within 72 hours of a scheduled rain event. Herbicides shall not be used within Riparian Conservation Areas (RCAs) on the ANF without approval of the FS. In riparian areas only water-safe herbicides shall be used. Herbicides shall not be applied when wind velocities exceed 6 mph. Where manual and/or mechanical methods are used, disposal of the plant debris will follow the regulations set by the FS. The timing of the weed control				

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Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
treatment shall be determined for each plant species in consultation with the FS (on NFS lands) with the goal of controlling populations before they start producing seeds. For the preconstruction and construction of the Project, measures to control the introduction and spread of noxious weeds in the Project work area shall be taken as follows.				
 On the ANF, from the time construction begins until ten years after construction is complete, surveying for new invasive weed populations and the monitoring of identified and treated populations shall be required at all sites impacted by construction (tower pads, staging areas, landing zones, etc.), including access/spur roads disturbed during the Project. Surveying and monitoring for weed infestations shall occur annually for years one to five and bi-annually for years six to ten. Treatment of all identified weed populations shall occur at a minimum of once annually. When no new seedlings or resprouts are observed at treated sites for three consecutive, normal rainfall years, the weed population can be considered eradicated and weed control efforts may cease for that impact site. 				
 During Project preconstruction and construction, all seeds and straw materials shall be weed-free rice straw, and all gravel and fill material shall be certified weed free by the county Agriculture Commissioners' Offices. Any deviation from this will be approved by a FS botanist. All plant materials used during restoration shall be native, certified weed-free, and approved by the CPUC and FS. 				
During Project preconstruction and construction, vehicles and all equipment shall be washed (including wheels, undercarriages, and bumpers) before and after entering FS identified areas. On non-NFS lands vehicles and equipment shall be washed prior to commencing work in off road areas. Vehicles shall be cleaned at existing construction yards or legally operating car washes. SCE shall document that all vehicles have been washed prior to commencing project work. In addition, tools such as chainsaws, hand clippers, pruners, etc. shall be washed before and after entering all				
Project work areas. All washing shall take place where rinse water is collected and disposed of in either a sanitary sewer or landfill, unless otherwise approved by the FS. A written daily log shall be kept for all vehicle/equipment/tool washing				

Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
that states the date, time, location, type of equipment washed, methods used, and staff present. The log shall include the signature of a responsible staff member. Logs shall be available to the CPUC and FS for inspection at any time and shall be submitted to the CPUC and FS on a monthly basis. • During Project operation and maintenance activities, clear and dispose of weeds in assembly yards, helicopter landing areas, tower pads, spur roads, staging areas, and any other disturbance areas in a FS-approved method. B-3b: Remove weed seed sources from construction access	NFS lands as	Prior to construction, SCE shall	Successful eradication of sources of	Prior to
routes Prior to construction SCE shall initiate invasive species	specified in MM B-3b table.	 Into to construction, Set Stall initiate eradication of the weed populations identified in the measures, and submit documentation of control measures to the CPUC and FS. Eradication measures shall occur every year until 100 percent control of these small, isolated populations is achieved, and SCE shall submit documentation of control measures to the CPUC and FS. Written daily logs shall be kept for vehicle maintenance and shall be available to the CPUC and FS for inspection at any time and shall be submitted to the CPUC and FS on a monthly basis. SCE's designated biologist will monitor and provide a copy of the monitoring reports to the CPUC and FS for review on a weekly 	weed seed along the construction routes.	construction, and will continue until eradication efforts are 100 percent successful.
Weed Populations Along Construction Routes*		basis.		
ANF Road Location Noxious Weeds Identified				
4N41 Isolated patch of Spanish broom 3N20 Isolated patches of Spanish broom, Scotch broom, and rockrose				
3N23 Giant reed population in creek adjacent to road				

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Mitigation Measur	e	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
	range of population sizes and densities. Some of the large populations along these routes observed during project surveys had been recently brushed for weed control by SCE contractors, but these populations should be rechecked and control efforts reapplied as necessary. Also isolated patches of tree tobacco, rockrose, horehound, and tocalote.				
2N24	Scattered, isolated patches of Spanish broom and rockrose				
2N25.2	Scattered, isolated patches of Spanish broom, rosemary, rockrose, and horehound				
2N30.1	One isolated patch of Spanish broom				
<u>2N30.2</u>	Scattered Spanish broom, bull thistle, tree of heaven, black locust, tocalote, rockrose, eupatory, horehound, smilo grass, and tree tobacco infestations of a range of population sizes and densities.				
3N27 north of Big Tujunga Creek to Mt. Gleason Rd	Scattered, isolated patches of Spanish broom				
2N45	Moderate patch of giant reed and tree of heaven				
2N65.1	Moderate infestation of tree spurge				
2N65.2	Moderate infestation of Spanish broom and thoroughwort				
2N66	Moderate patch of Spanish broom and tree of heaven				
2N75	Moderate patch of Spanish broom				
2N79	Isolated patch of Spanish broom				
1N36	Scattered Spanish broom, bull thistle, tree of heaven, black locust, tocalote, rockrose, Canadian thistle, hairy vetch, smilo grass, and tree tobacco infestations of a range of population sizes and densities.				
Road west out of Shortcut Station	Isolated patches of Spanish broom				
*Specific locations A of the Biologica [Aspen, 2008]	are found in Figures A-2 through A-4 of Appendix I Specialist Report, Noxious Weed Assessment.				

Table 13-1. Mitigation Monitoring Program – Biological	Resources			
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
B-3c: Remove weed seed sources from assembly yards, staging areas, tower pads, pull sites, landing zones, and spur roads. Prior to construction and during each year of use for construction at all assembly yards, staging areas, tower pads, pull sites, landing zones, and spur roads within the ANF, weed infested areas should be mowed and/or treated as appropriate for the individual weed species under the guidance of a qualified plant ecologist or restoration ecologist, where concurrence on the ecologist has been provided by the FS. Unless otherwise authorized by the FS, weed control efforts in these areas shall be timed annually to reduce shortpod mustard, tocalote, and other noxious weed seed production, by mowing or weed-whacking infestations when flowering has just started, but before seeds have been produced. All plant debris shall be disposed of at a FS/CPUC-approved location. Weed control efforts shall commence in early spring (February – March), as indicated annually by a qualified plant ecologist or restoration ecologist in coordination with a FS botanist or Forest Weed Specialist.		 Prior to construction, SCE shall commence weed control efforts in early spring, and submit documentation of control measures to the CPUC and FS. All plant debris shall be disposed of at a FS and/or CPUC-approved location. SCE's designated biologist shall monitor and provide a copy of the monitoring reports to the CPUC and FS for review on a weekly basis. 	Successful eradication of sources of weed seed in assembly yards/staging areas.	Prior to construction, and will continue until eradication efforts are 100 percent successful.
Impact B-4: Construction activities, including the use of access ro	ads and helicopt	er construction, would result in distu	rbance to wildlife and may result in w	vildlife mortality.
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-
B-1b : Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-
B-2: Implement RCA Treatment Plan. (See Impact B-2).	-	-	-	-
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3.)	-	-	-	-
H-1a: Implement an Erosion Control Plan and demonstrate compliance with water quality permits. (See Impact B-1).	-	-	-	-
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-
Impact B-5: Construction activities conducted during the breeding	g season could re	esult in the loss of nesting birds or ra	ptors	
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-

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Table 13-1. Mitigation Monitoring Program – Biological	Resources			
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
B-5: Conduct pre-construction surveys and monitoring for breeding birds. SCE shall conduct pre-construction surveys for nesting birds if construction and removal activities are scheduled to occur during the breeding season. Surveys shall be conducted in areas within 500 feet of tower sites, laydown/staging areas, substation sites, and access/spur road locations. Surveys for birds shall be conducted for all areas from February 1 to August 15. The required survey dates may be modified based on local conditions (i.e., high altitude locations) with the approval of the CPUC, California Department of Fish and Game (CDFG), USACE, and/or FS. SCE shall be responsible for designating qualified biologists who can conduct pre-construction surveys and monitoring for breeding birds. The resume of the proposed biologists will be provided to the CPUC, USACE, and FS for concurrence prior to ground disturbance. On NFS lands, the FS shall apply the FS Land Management Plan Standard S18 (Part 3 of the Land Management Plan), which states "Protect known active and inactive raptor nest areas. Extent of protection will be based on proposed management activities, human activities existing at the onset of nesting initiation, species, topography, vegetative cover, and other factors. When appropriate, a nodisturbance buffer around active nest sites will be required from nest-site selection to fledging." On both NFS and non-NFS lands, if breeding birds with active nests are found, a biological monitor shall establish a 300-foot buffer around the nest for ground-based construction activities and a one-mile buffer for helicopter use if helicopters are flying below 300 feet, and no activities will be allowed within the buffer(s) until the young have fledged from the nest or the nest fails. If nesting bald or golden eagles are identified a 660-foot no activity buffer will be implemented. The 300-foot (660-foot eagle and one-mile helicopter) buffer may be adjusted to reflect existing conditions including ambient noise, topography, and disturbanc	access/spur road locations.	 If construction and removal activities are scheduled to occur during the breeding season, prior to construction SCE shall submit documentation providing the results of the pre-construction nesting bird surveys to the CPUC and FS for review and approval. The resume of the proposed biologists shall be provided to the CPUC, USACE, and FS for concurrence. If a bird nest must be removed during the nesting season, SCE shall provide written documentation providing concurrence from the U.S. FWS and CDFG authorizing the nest relocation. On NFS lands, this will include coordination and written approval from the FS. SCE's designated biologist shall monitor and provide a copy of the monitoring reports to the CPUC and FS for review on a weekly basis. 	Successful avoidance of nesting birds, as verified by the EM.	Prior to and during construction.

Table 13-1. Mitigation Monitoring Program – Biological I	Resources			
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
during the nesting season, SCE shall provide written documentation providing concurrence from the FWS and CDFG authorizing the nest relocation. On NFS lands, this will include coordination and written approval from the FS. On USACE lands, this will include coordination and written approval by the USACE. SCE shall provide a written report documenting the relocation efforts. The report shall include what actions were taken to avoid moving the nest, the location of the nest, what species is being relocated, the number and condition of the eggs taken from the nest, the location of where the eggs are incubated, the survival rate, the location of the nests where the chicks are relocated, and whether the birds were accepted by the adopted parent.				
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-
Impact B-6: The Project would cause the loss of foraging habitat f	or wildlife.			
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-
B-2: Implement RCA Treatment Plan. (See Impact B-2).	-	-	-	-
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-
H-1a: Implement an Erosion Control Plan and demonstrate compliance with water quality permits. (See Impact B-1).	-	-	-	-
Impact B-7: The Project could disturb endangered, threatened, or	proposed plant s	species or their habitat.		
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-
B-7: Conduct preconstruction surveys for State and federally Threatened, Endangered, Proposed, Petitioned, and Candidate plants and avoid any located occurrences of listed plants. SCE shall conduct pre-construction surveys for State and federally listed Threatened and Endangered, Proposed, Petitioned, and Candidate plants in all areas subject to ground-disturbing activity, including, but not limited to, tower pad preparation and construction areas, tower	Entire Project.	 Prior to construction, the resume of the proposed biologists shall be provided to the CPUC and FS. Prior to construction, SCE shall submit documentation providing results of the protocol surveys for rare plants to the CPUC and FS for 	 Minimize disturbance to rare plants, as verified by the EM. Effectiveness can be determined by monitoring implementation of the control measures. 	Prior to and during construction.

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Table 13-1. Mitigation Monitoring Program – Biological Resources					
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action	
removal sites, pulling and tensioning sites, assembly yards, and areas subject to grading for new access roads. The surveys shall be conducted during the appropriate blooming period(s) by a qualified plant ecologist/biologist according to protocols established by the FWS, CDFG, FS, and California Native Plant Society (CNPS). The resume of the proposed biologists will be provided to the CPUC and FS for concurrence prior to ground disturbance. All listed plant species found shall be marked and avoided. If a federally listed plant species cannot be avoided on private land, consultation with FWS will occur. Prior to site grading, any populations of listed plant species identified during the surveys shall be protected by a buffer zone. The buffer zone shall be established around these areas and shall be of sufficient size to eliminate potential disturbance to the plants from human activity and any other potential sources of disturbance including human trampling, erosion, and dust. The size of the buffer depends upon the proposed use of the immediately adjacent lands, and includes consideration of the plant's ecological requirements (e.g., sunlight, moisture, shade tolerance, edaphic physical and chemical characteristics) that are identified by a qualified plant ecologist and/or Forest botanist. At minimum, the buffer shrub species shall be equal to twice the drip line (i.e., two times the distance from the trunk to the canopy edge) in order to protect and preserve the root systems of the plant. The buffer for herbaceous species shall be, at minimum, 50 feet from the perimeter of the population or the individual. A smaller buffer may be established, provided there are adequate measures in place to avoid the take of the species, with the approval of the FWS, CDFG, FS, USACE, and CPUC. If impacts to listed plants are determined to be unavoidable, the FWS shall be consulted for authorization, through the context of a Biological Opinion. Additional mitigation measures to protect or restore listed plant species or their		review and approval. All listed plant species shall be marked and avoided. SCE's authorized biologist shall be present during all activities immediately adjacent to or within habitats that support rare plant species. SCE's designated biologist shall monitor compliance with measures identified in the monitoring plan and provide a copy of the monitoring reports to the CPUC and FS for review on a weekly basis.		Action	
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-	
H-1a: Implement an Erosion Control Plan and demonstrate compliance with water quality permits. (See Impact B-1).	-	-	-	-	

Table 13-1. Mitigation Monitoring Program – Biological Resources					
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action	
Impact B-8: The Project could result in the loss of California red-le	egged frogs and	mountain yellow-legged frogs.			
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-	
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-	
B-2: Implement RCA Treatment Plan. (See Impact B-2)	-	-	-	-	
B-3a : Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-	
 B-8a: Conduct protocol surveys for California red-legged frogs and implement avoidance measures. SCE shall conduct Fish and Wildlife Service (FWS)-approved protocol surveys for California red-legged frogs if suitable habitat is present near the proposed construction sites at the Amargosa Creek, Monte Cristo Creek, Alder Creek, Big Tujunga Creek (Segment 6), and West Fork San Gabriel River within the Central Region. If surveys have been conducted to protocol within two years of start of construction and no red-legged frogs were identified, surveys would not need to be repeated prior to start of construction. Surveys will continue at least every two years until construction is complete in the identified potential habitat. The resumes of the proposed biologists will be provided to the CPUC and FS for concurrence prior to conducting the surveys. Prior to the onset of construction activities, SCE shall provide the following information to all personnel who will be present within work areas or adjacent to the project area: A detailed description of the red-legged frog including color photographs; The protection the red-legged frog receives under the Endangered Species Act and possible legal action that may be incurred for violation of the Act; The protective measures being implemented to conserve red-legged frogs and other species during construction activities associated with the Project; and A point of contact if red-legged frogs are observed. All trash that may attract predators of the red-legged frogs will be removed from work sites or completely secured at the end of each work day. If California red-legged frogs are detected in or adjacent to the Project, the following shall apply: Between 1 November and 31 March, no work will be authorized within one mile of occupied habitat and no vehicular crossings at wet fords of those channels will be 	Amargosa Creek, Lynx Gulch, Alder Creek, Big Tujunga Creek (Segment 6), West Fork San Gabriel River, on NFS lands at road crossings in suitable habitat.	 Prior to construction, the resume of the proposed biologists shall be provided to the CPUC and FS. Prior to construction, SCE shall submit documentation providing results of the protocol surveys for the California red-legged frog to the CPUC for review and approval. If the California red-legged frog is detected in or adjacent to the proposed ROW, SCE shall submit a monitoring plan with compliance measures determined in consultation with USFWS, CDFG, FS and CPUC. SCE's authorized biologist shall be present during all activities immediately adjacent to or within habitat that supports populations of the California red-legged frog. SCE's designated biologist will monitor compliance with measures identified in the monitoring plan and provide a copy of the monitoring reports to the CPUC and FS for review on a weekly basis. 	 Minimize disturbance to red-legged frogs, as verified by the EM. Effectiveness can be determined by monitoring implementation of the control measures. 	Prior to and during construction.	

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ation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
authorized. The one-mile buffer distance may be reduced based on the topography of the site with the approval of the FWS, FS, and CPUC.				71011011
Between April 1 to 31 October, no work will be authorized within 500 feet of occupied habitat and no vehicular crossings at wet fords of those channels will be authorized.				
If present, SCE shall monitor all related construction activities and develop and implement a monitoring plan that includes the following measures in consultation with the FWS and FS.				
Prior to the onset of any construction activities, SCE shall meet on-site with the CPUC/FS-approved biologist (authorized biologist). The authorized biologist shall hold a current red-legged frog permit from FWS. SCE shall provide information on the general location of construction activities within habitat of the red-legged frog and the actions taken to reduce impacts to this species. Because red-legged frogs may occur in various locations during different seasons of the year, SCE, FS, and authorized biologists will, at this preliminary meeting, determine the seasons when specific construction activities would have the least adverse effect on red-legged frogs.				
Where construction can occur in habitat where red-legged frogs are widely distributed, work areas will be fenced in a manner that prevents equipment and vehicles from straying from the designated work area into adjacent habitat. The authorized biologist will assist in determining the boundaries of the area to be fenced in consultation with the FWS/CDFG/FS/CPUC. All workers will be advised that equipment and vehicles must remain within the fenced work areas.				
The authorized biologist will direct the installation of the fence and conduct a minimum of three nocturnal surveys to move any red-legged frogs from within the fenced area to suitable habitat outside of the fence. If red-legged frogs are observed on the final survey or during subsequent checks, the authorized biologist will conduct additional nocturnal surveys if he or she determines that they are necessary in concurrence with the FWS/CDFG/FS/CPUC.				

Table 13-1. Mitigation Monitoring Program – Biological Resources				
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
 Construction activities that may occur immediately adjacent to breeding pools or other areas where large numbers of red- legged frogs may congregate will be conducted during times of the year (winter) when individuals have dispersed from these areas or the species is dormant, unless otherwise authorized by CPUC, FS, and FWS. The authorized biologist will assist SCE in scheduling its work activities accordingly. 				
 If red-legged frogs are found within an area that has been fenced to exclude red-legged frogs, activities will cease until the authorized biologist moves the red-legged frogs. 				
 If red-legged frogs are found in a construction area where fencing was deemed unnecessary, work will cease until the authorized biologist moves the red-legged frogs. The authorized biologist in consultation with FWS/CDFG/FS/CPUC will then determine whether additional surveys or fencing are needed. Work may resume while this determination is being made, if deemed appropriate by the authorized biologist. 				
 Any red-legged frogs found during clearance surveys or otherwise removed from work areas will be placed in nearby suitable, undisturbed habitat. The authorized biologist will determine the best location for their release, based on the condition of the vegetation, soil, and other habitat features and the proximity to human activities. Clearance surveys shall occur on a daily basis in the work area. 				
 The authorized biologist will have the authority to stop all activities until appropriate corrective measures have been completed. 				
SCE shall restrict work to daylight hours, except during an emergency, in order to avoid nighttime activities when red-legged frogs may be present on the access road. Traffic speed should be maintained at 15 mph or less in the work area.				
 A qualified biologist must permanently remove, from within the Project area, any individuals of exotic species, such as bullfrogs, crayfish, and centrarchid fishes, to the maximum extent possible and ensure that activities are in compliance with the California Fish and Game Code. 				
 No stockpiles of materials will occur in areas occupied by California red-legged frogs. 				

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Table 13-1. Mitigation Monitoring Program – Biological I	Table 13-1. Mitigation Monitoring Program – Biological Resources					
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action		
 To ensure that diseases are not conveyed between work sites by the authorized biologist or his or her assistants, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force will be followed at all times. 						
 Any spills of any fluids that may be hazardous to aquatic fauna (gasoline, hydraulic fluid, motor oil, etc) in areas that may contain California red-legged or mountain yellow-legged frogs will be reported to the FS, FWS, and CPUC within one hour. 						
B-8b: Conduct biological monitoring. SCE shall provide a qualified biologist with demonstrated expertise with the listed wildlife species likely to occur in the Project area. This person(s) shall monitor all construction activities daily within suitable habitat for listed or sensitive wildlife. The resumes of the proposed biologists will be provided to the CPUC, USACE, and FS for concurrence prior to the onset of ground-disturbing activities.	Entire Project.	 The resume of the proposed biologists shall be provided to the CPUC, USACE, and FS. SCE's designated biologist shall monitor compliance with measures identified in the monitoring plan and provide a copy of the monitoring reports to the CPUC and FS for review on a weekly basis. 	Minimize disturbance to listed wildlife species, as verified by the EM.	Prior to and during construction.		
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-		
H-1a: Implement an Erosion Control Plan and demonstrate compliance with water quality permits. (See Impact B-1).	-	-	-	-		
H-1b: Dry weather construction. Any construction activities within the ANF and/or Chino Hills State Park (CHSP) [CHSP is only included as part of this measure for Alternative 4 (Routes A through D)] shall be scheduled to avoid anticipated precipitation events that are predicted to produce more than one-half inch of precipitation over a 24-hour period, unless expressly authorized by the FS and/or the California Department of Parks and Recreation (State Parks). If an unexpected precipitation event occurs while construction activities are already underway, SCE shall contact the FS and/or State Parks for guidance. The FS and/or State Parks may require cessation of construction activities within their jurisdiction during any precipitation event in order to prevent excessive erosion and to protect aquatic resources. On NFS lands, SCE shall also observe any criteria promulgated by the FS regarding construction during precipitation events. SCE shall provide documentation to the CPUC monitor of all wet-weather coordination with the FS and/or State Parks.	Entire Project.	 SCE shall submit a construction schedule to the CPUC and FS for review and approval. CPUC and/or FS will monitor compliance during construction. 	 Construction activities will occur under dry conditions, as verified by the EM. Avoid degradation of surface water quality. 	Prior to and during construction.		

Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
Impact B-9: The Project would result in the loss of arroyo toads.				
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-
B-2: Implement RCA Treatment Plan. (See Impact B-2)	-	-	-	-
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-
B-8b: Conduct biological monitoring. (See Impact B-8).	-	-	-	-
 B-9: Conduct protocol surveys for arroyo toads and implement avoidance measures in occupied areas. In areas known to support arroyo toads (Lynx Gulch, Monte Cristo Creek, and Alder Creek) the following avoidance measures shall be implemented. SCE shall avoid ground disturbing activities (i.e. grading, stream crossing upgrades, parking) along access roads within the one mile buffer for arroyo toads during the activity period for arroyo toads (March-November). This date and buffer may be modified based on the existing temperature regime and habitat conditions with FS and FWS approval. SCE shall limit use of the access roads in this area within the one-mile arroyo toad buffer area to daylight hours only during the activity period for arroyo toads (generally March-November), unless otherwise approved by the FS (on NFS land), FWS, and/or the CPUC (on private land). Use of these roadways during rain events shall not occur during the activity period for arroyo toads. Vehicle speeds shall be limited to 15 MPH and no parking or loitering shall occur along the access roads. SCE shall retain a qualified biologist with demonstrated expertise with arroyo toads to monitor all construction activities in occupied arroyo toad habitat. The monitor shall inspect the roadway and work sites throughout the day and log the time and weather conditions in the area. If adult or juvenile arroyo toads are found on the roadway, vehicle access shall be restricted until the animal has moved off the road or is relocated by a permitted arroyo toad biologist in accordance with the Biological Opinion. SCE shall conduct Fish and Wildlife Service-approved protocol surveys for arroyo toad at the following locations if suitable habitat is present near the proposed construction sites: Kentucky Wash, Aliso 	Kentucky Wash, Lynx Gulch, Big Tujunga Creek (Segment 6), West Fork San Gabriel River, NFS lands where access roads may affect individuals or suitable habitat for the arroyo toad.	 The resume of the proposed biologists shall be provided to the CPUC and FS. SCE shall submit documentation providing results of the protocol surveys for arroyo toads to the CPUC and FS for review and approval. If arroyo toad is detected in or adjacent to the proposed ROW, SCE shall submit a monitoring plan with compliance measures determined in consultation with USFWS, CDFG, FS, and CPUC. SCE's authorized biologist shall be present during all activities immediately adjacent to or within habitat that supports populations of arroyo toad. SCE's designated biologist shall monitor compliance with measures identified in the monitoring plan and provide a copy of the monitoring reports to the CPUC and FS for review on a weekly basis. 	 Minimize disturbance to arroyo toads, as verified by the EM. Effectiveness can be determined by monitoring implementation of the control measures. 	Prior to and during construction.

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Table 13-1. Mitigation Monitoring Program – Biological Resources				
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
Canyon, and Big Tujunga Creek (Segment 6/11) within two years to				
the start of construction. If arroyo toads are detected, further surveys within the area will not be required and the avoidance measures				
detailed below will be followed. If no arroyo toads are detected,				
nabitat assessments will be conducted every year until construction is				
completed. If the habitat assessment determines that suitable habitat				
exists, protocol surveys shall be conducted.				
Prior to the onset of construction activities, SCE shall provide				
all personnel who will be present on work areas within or adjacent to the Project area the following information:				
a) A detailed description of the arroyo toad including color				
photographs;				
b) The protection the arroyo toad receives under the				
Endangered Species Act and possible legal action that may				
be incurred for violation of the Act;				
c) The protective measures being implemented to conserve				
the arroyo toad and other species during construction activities associated with the Project; and				
d) A point of contact if arroyo toads are observed.				
 For all areas in which this species has been documented 				
SCE shall develop and implement a monitoring plan that				
includes the following measures in consultation with the FWS				
and Forest Service.				
o SCE shall retain a qualified biologist with demonstrated				
expertise with arroyo toads to monitor all construction activities in occupied arroyo toad habitat and assist SCE in				
the implementation of the monitoring program. The				
resumes of the proposed biologists will be provided to the				
CPUC and FS for concurrence. This biologist will be				
referred to as the authorized biologist hereafter. The				
authorized biologist will be present during all activities immediately adjacent to or within habitat that supports				
populations of arroyo toad.				
o All trash that may attract predators of the arroyo toad will be				
removed from work sites or completely secured at the end				
of each work day. Prior to the onset of any construction				
activities, SCE shall meet on-site with staff from the FS and the authorized biologist. SCE shall provide information on				
the general location of construction activities within habitat				
of the arroyo toad and the actions taken to reduce impacts				

litigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
to this species. Because arroyo toads may occur in various locations during different seasons of the year, SCE, FS, and authorized biologists will, at this preliminary meeting, determine the seasons when specific construction activities would have the least adverse effect on arroyo toads. O Any arroyo toads found during clearance surveys or otherwise removed from work areas will be placed in nearby suitable, undisturbed habitat. The authorized biologist will determine the best location for their release, based on the condition of the vegetation, soil, and other habitat features and the proximity to human activities. Clearance surveys shall occur on a daily basis in the work area.				
 The authorized biologist will have the authority to stop all activities until appropriate corrective measures have been completed. To ensure that diseases are not conveyed between work 				
sites by the authorized biologist or his or her assistants, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force will be followed at all times.				
o SCE shall restrict work to daylight hours, except during an emergency, or unless otherwise authorized by the FS (on NFS land) or the CPUC (on private land) in order to avoid nighttime activities when arroyo toads may be present on the access roads. Traffic speed shall be maintained at 15 mph or less in the work area.				
o A qualified biologist must permanently remove, from within the Project area, any individuals of exotic species, such as bullfrogs, crayfish, and centrarchid fishes, to the maximum extent possible and ensure that activities are in compliance with the California Fish and Game Code.				
 No stockpiles of materials will occur in areas occupied by arroyo toads. 				
 Any spills of any fluids that may be hazardous to aquatic fauna (gasoline, hydraulic fluid, motor oil, etc) in areas that may contain arroyo toads will be reported to the FS, FWS, and CPUC within one hour. 				

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Table 13-1. Mitigation Monitoring Program – Biological R	Table 13-1. Mitigation Monitoring Program – Biological Resources					
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action		
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-		
H-1a: Implement an Erosion Control Plan and demonstrate compliance with water quality permits. (See Impact B-1).	-	-	-	-		
H-1b: Dry weather construction. (See Impact B-8).	-	-	-	-		
Impact B-10: The Project could result in the loss of desert tortoise	S.					
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-		
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	1	-	-	-		
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	1	-	-	-		
preserve habitat, and implement avoidance measures. SCE shall contract with a Fish and Wildlife (FWS)-authorized biologist to conduct FWS protocol-surveys for desert tortoise in the vicinity of the proposed Windhub Substation site at the northern terminus of Segment 10, where historic tortoise burrows were documented and	Proposed Windhub Substation location and desert tortoise survey areas of the WMP.	 The resume of the proposed biologists shall be provided to the CPUC and FS. SCE shall submit documentation providing results of the protocol surveys for desert tortoises to the CPUC and FS for review and approval. If desert tortoise is detected in or adjacent to the proposed ROW, SCE shall submit a monitoring plan with compliance measures determined in consultation with USFWS, CDFG, FS, and CPUC. SCE's authorized biologist shall be present during all activities immediately adjacent to or within habitat that supports populations of desert tortoise. SCE's designated biologist will monitor compliance with measures identified in the monitoring plan and provide a copy of the monitoring reports to the CPUC and FS for review on a weekly basis. 	 Minimize disturbance to desert tortoise, as verified by the EM. Effectiveness can be determined by monitoring implementation of the control measures. 	Prior to and during construction.		

Table 13-1. Mitigation Monitoring Program – Biological Resources				
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
along with funding for enhancement of the land and an endowment for permanent management of the lands. SCE will provide verification to the CPUC that FWS- and CDFG-approved lands have been acquired.				
SCE shall develop and implement a mitigation and monitoring plan that includes the following measures in consultation with the FWS and CDFG.				
 Prior to the onset of construction activities, SCE shall provide all personnel who will be present on work areas within or adjacent to the Project area the following information: 				
 a) A detailed description of the desert tortoise including color photographs; 				
b) The protection the desert tortoise receives under the Endangered Species Act and possible legal action that may be incurred for violation of the Act;				
c) The protective measures being implemented to conserve the desert tortoise and other species during construction activities associated with the Project; and				
d) A point of contact if desert tortoises are observed.All trash that may attract predators of desert tortoises will be				
removed from work sites or completely secured at the end of each work day.				
• In construction areas in occupied desert tortoise areas, work and staging areas will be fenced with approved desert tortoise fencing in a manner that prevents equipment and vehicles from straying from the designated work area into adjacent habitat. The authorized biologist will assist in determining the boundaries of the area to be fenced in consultation with the FWS/CDFG/CPUC. All workers will be advised that equipment and vehicles must remain within the fenced work areas. Installation of the fencing and any necessary surveys will be directed and/or conducted by the authorized biologist in concurrence with the FWS/CDFG/CPUC.				
 If desert tortoises are found within an area that has been fenced to exclude the species, activities will cease until the authorized biologist moves the desert tortoises within 500 m of their original location. 				
 If desert tortoises are found in a construction area where fencing was deemed unnecessary, work will cease until the authorized biologist moves the individual(s) within 500 m of 				

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Table 13-1. Mitigation Monitoring Program – Biological F	Resources			
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
their original location. The authorized biologist in consultation with FWS/CDFG/CPUC will then determine whether additional surveys or fencing are needed. Work may resume while this determination is being made, if deemed appropriate by the authorized biologist.				
 Any desert tortoises found during clearance surveys or otherwise removed from work areas will be placed in nearby suitable, undisturbed habitat within 500 m of their original location. The authorized biologist will determine the best location for their release, based on the condition of the vegetation, soil, and other habitat features and the proximity to human activities. Clearance surveys shall occur on a daily basis in the work area if the area is not fenced. If the area is fenced, only monitoring will need to be conducted. 				
 SCE shall follow the tortoise Handling Guidelines at all times if handling tortoises is required. 				
 The authorized biologist will have the authority to stop all activities until appropriate corrective measures have been completed. 				
 SCE shall restrict work to daylight hours, except during an emergency, in order to avoid nighttime activities when desert tortoise may be present on the access road. Traffic speed shall be maintained at 15 mph or less in the work area. 				
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-
Impact B-11: The Project could result in mortality of desert tortoise	es as a result of i	ncreased predation by common rav	ens.	
No Recommendations.	-	-	-	-
Impact B-12: The Project could result in the loss of special-status	tish.			
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-
B-2: Implement RCA Treatment Plan. (See Impact B-2)	-	-	-	-
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-
B-8b: Conduct biological monitoring. (See Impact B-8).	-	-	-	-
H-1a: Implement an Erosion Control Plan and demonstrate compliance with water quality permits. (See Impact B-1).	-	-	-	-
H-1b: Dry weather construction. (See Impact B-8).	-	-	-	-

Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
B-12: Implement avoidance and minimization measures for Santa Ana Sucker and other aquatic organisms. On or near the West Fork Cogswell road, SCE shall pre-stage a complete Hazardous Material Spill kit(s) capable of containing the largest potential vehicle spill of gasoline, diesel, or other hazardous materials. The kit(s) shall be located and maintained in areas accessible to crews in the event a bridge or other road blockage has occurred. Contents of the kit(s) shall be approved by the FS. A biological monitor with knowledge of the special-status fishes known to occur in the area shall inspect the roadway a minimum of three times a day from October 1 to April 30 and one time a day from May 1 through September 30 (unless otherwise approved by the FS) during construction to inspect for leaks, spills, or other debris that may enter the San Gabriel River. Spills on the roadway will be logged and reported to the FS and CPUC monitor weekly and cleaned up immediately. Any spills along this road will be reported to the FS and CPUC within one hour. No loitering, maintenance, refueling, or equipment staging shall occur on the West Fork Cogswell road. Prior to vehicle access, metal plates, bridges, or other FS-approved structures shall be placed above all wet crossings, if deemed necessary by the FWS or the FS. Prior to any work in the San Gabriel River, Big Tujunga River, or their tributaries where flowing or ponded water is present SCE shall conduct surveys for fish and other special-status aquatic organisms. The species not in the project area shall be reported to the FS. No work shall be conducted in the flowing portion of the stream and water shall be diverted around the work area in a manner that does not restrict the movement of aquatic organisms unless authorized by the FS. Block nets or other barriers may be required, if deemed necessary by the FWS or the FS, and if fish or other special-status species are present. Block nets will not be used in areas supporting Santa Ana suckers. All activities that occur wi		 SCE shall submit documentation providing results of surveys for fish and other special status aquatic organism to the CPUC and FS for review and approval. SCE shall submit documentation of a complete Hazardous Material Spill kit to the CPUC and FS for review and approval. SCE's biological monitor with knowledge of the special status fishes known to occur in the area shall inspect the roadway for leaks, spills, or other debris a minimum of three times a day (unless otherwise approved by the FS)during construction. Spills on the roadway will be logged and reported to the CPUC and FS monitor weekly and cleaned up immediately. All activities that occur within ponded or flowing water shall be coordinated with the FS on NFS lands. At the completion of work at the San Gabriel and Big Tujunga Rivers, SCE shall prepare a report documenting the type and number of species located and any actions taken to relocate or exclude the species, and submitted to the CPUC no later than 30 days after construction. SCE's designated biologist shall monitor compliance with measures identified in the monitoring plan and provide a copy of the monitoring reports to the CPUC and FS. 	Minimize disturbance to desert tortoise, as verified by the EM. Effectiveness can be determined by monitoring implementation of the control measures.	Prior to, during and after construction.

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Table 13-1. Mitigation Monitoring Program – Biological F	Resources			
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
qualified biologist with a FWS permit for the Santa Ana sucker to monitor all construction activities in occupied Santa Ana sucker habitat and assist SCE in the implementation of the monitoring program. The resumes of the proposed biologists will be provided to the CPUC and FS for concurrence. This biologist will be referred to as the authorized biologist hereafter. The authorized biologist will have the authority to stop all activities until appropriate corrective measures have been completed.				
Impact B-13: The Project could result in the loss of Critical Habitat	for the Santa Ar	na sucker		
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-
B-2: Implement RCA Treatment Plan. (See Impact B-2).	-	-	-	-
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-
B-8b: Conduct biological monitoring. (See Impact B-8).	-	-	-	-
H-1a: Implement an Erosion Control Plan and demonstrate compliance with water quality permits. (See Impact B-1).	-	-	-	-
H-1b: Dry weather construction. (See Impact B-8).	-	-	-	-
B-12: Implement Avoidance and Minimization Measures for Fish and Aquatic Organisms. (See Impact B-12).	-	-	-	-
Impact B-14: The Project could result in the loss of California cond	lors.			
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-
B-2: Implement RCA Treatment Plan. (See Impact B-2).	-	-	-	-
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-
B-8b: Conduct biological monitoring. (See Impact B-8).	-	-	-	-

Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
B-14: Monitor construction in condor habitat and remove trash and micro-trash from the work area daily. SCE shall retain a qualified biologist with demonstrated knowledge of California condor dentification to monitor all construction activities within the Project area and assist SCE in the implementation of the monitoring program. The resumes of the proposed biologist(s) will be provided to the CPUC and FS for concurrence. This biologist(s) will be referred to as the authorized biologist hereafter. The authorized biologist will be oresent during all activities immediately adjacent to or within known condor-occupied areas. The authorized biologist will have the authority to stop all activities until appropriate corrective measures have been completed. If condors are observed in helicopter construction areas, SCE shall avoid further helicopter use until the animals have left the area. The authorized biologist will have radio contact with the project foreman, who will be in radio contact with the nelicopter pilot. The biologist will provide information to SCE to avoid conflicts with condors. All condor sightings in the Project area will be reported to the FWS and FS (on NFS lands). SCE will coordinate with FWS on the construction schedule and helicopter work areas to determine if any condors have been tracked or observed in the vicinity of the Project area. If condors are observed in helicopter construction areas, then SCE shall avoid further helicopter use until the animals have left the area and the FWS will be notified memediately. Should condors be found roosting within 0.5 miles of the construction area, no construction activity shall occur between 1 hour aperors unset to 1 hour after sunrise, or until the condors leave the area. Should condors be found nesting within 1.5 miles of the construction area, no construction activity will occur until further authorization from the FWS and FS on NFS lands. Microtrash. All trash is required to be disposed of as written in the Proper Disposal of Construction Workers	Entire Project.	 SCE shall submit a Waste Characterization and Management Plan to the CPUC and FS for review. CPUC and FS shall monitor compliance during construction. 	Construction and demolition waste would be properly disposed which would minimize potential for impacts to California condors.	Prior to and during construction.

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Table 13-1. Mitigation Monitoring Program – Biological	Resources			
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
and golden eagles; protective status and penalties for violation of the ESA; avoidance measures being implemented on the Project; and contact information for communicating condor sightings. Reporting. All California condor sightings in the Project area will be reported directly to the FWS, FS, and CPUC. Prior to the commencement of helicopter activity, SCE will coordinate with a FWS condor biologist to determine if any condors have been tracked or observed in the vicinity of the Project area.				
Impact B-15: The Project would disturb nesting southwestern will	ow flycatchers, le	east Bell's vireos, yellow-billed cucko	os, or their habitat.	T
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-
B-2: Implement RCA Treatment Plan. (See Impact B-2).	-	-	-	-
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-
B-5: Conduct pre-construction surveys and monitoring for breeding birds. (See Impact B-5).	-	-	-	-
B-15: Conduct protocol or focused surveys for listed riparian birds and avoid occupied habitat. If construction activities occur during the breeding season at the Whittier Narrows Recreation Area, Whittier Narrows Nature Center, Puente Hills Landfill Native Habitat Preservation Authority lands, and/or the Rio Hondo, or other areas including the ANF that have the potential to support listed riparian species, a qualified ornithologist shall conduct protocol surveys of the Project and adjacent areas within 500 feet. Fish and Wildlife Service (FWS) protocol surveys will be conducted for southwestern willow flycatcher, and least Bell's vireo. In known occupied habitat for listed riparian birds, SCE shall only conduct focused surveys of the Project and adjacent areas within 500 feet. The surveys shall be of adequate duration to verify potential nest sites if work is scheduled to occur during the breeding season.	Riparian areas, including the Whittier Narrows Recreation Area, Whittier Narrows Nature Center, Rio Hondo, and riparian areas on NFS lands within 500 feet of proposed Project.	 If construction activities occur during breeding season, prior to construction SCE shall submit documentation providing results of the protocol surveys for riparian birds to the CPUC and FS for review and approval. Because construction activities may not occur for several years or be conducted in phases, these surveys shall be conducted annually unless the species has been detected in the Project area. If a territory or nest is confirmed, 	Avoid impacts to riparian bird habitats, as verified by the EM.	For southwestern willow flycatcher, surveys shall be conducted between 15 May and 15 July. Surveys for least Bell's vireo shall be conducted from 10 April to 1 Aug. Surveys for yellow-billed cuckoo shall occur from 1 June to 31
Protocol or focused surveys, as appropriate, should be conducted within one year of start of construction and will continue annually until completion of construction activities. However, on NFS lands, annual surveys in suitable habitat may be required during construction. These surveys may be modified through the coordination with the FWS, CDFG, FS, USACE, State Parks (under Alternative 4), and the CPUC based on the condition of habitat, the observation of the species, or avoidance of riparian areas during the breeding season.		the FWS, CDFG, NFS, or Park, as applicable shall be notified immediately. In coordination with the FWS and CDFG, a 500-foot disturbance-free buffer shall be established and no construction shall occur within this buffer during the breeding season.		August. Surveys must occur prior to construction, and continue annually until construction is complete.

Table 13-1. Mitigation Monitoring Program – Biological F		Monitoring Dominons	Determination of Effectives	Timing of
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Action
If a territory or nest is confirmed in a previously unoccupied area, the FWS and CDFG shall be notified immediately. On NFS lands, USACE lands, or State Park (under Alternative 4) lands, these agencies would be notified immediately. In coordination with the FWS and CDFG, a 500-foot disturbance-free buffer shall be established and demarcated by fencing or flagging. This buffer may be adjusted provided noise levels do not exceed 60 dB(A)hourly Leq at the edge of the nest site as determined by a qualified biologist in coordination with a qualified acoustician. If the noise meets or exceeds the 60 dB(A) Leq threshold, or if the biologist determines that the construction activities are disturbing nesting activities, the biologist shall have the authority to halt the construction and shall devise methods to reduce the noise and/or disturbance in the vicinity. This may include methods such as, but not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nest site and the construction activities, and working in other areas until the young have fledged. If noise levels still exceed 60 dB(A) Leq hourly at the edge of nesting territories and/or a no-construction buffer cannot be maintained, construction shall be deferred in that area until the nestlings have fledged. All active nests shall be monitored on a weekly basis until the nestlings fledge. No construction or vehicle traffic shall occur within this buffer during the breeding season for these species.		SCE's designated biologist will monitor compliance with measures identified in the monitoring plan and provide a copy of the monitoring reports to the CPUC and FS for review on a weekly basis.		
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-
H-1a: Implement an Erosion Control Plan and demonstrate compliance with water quality permits. (See Impact B-1).	-	-	-	-
Impact B-16: The Project would result in the loss of coastal California	rnia gnatcatchers	S		
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-
B-16: Conduct protocol or focused surveys for coastal California gnatcatcher and implement avoidance measures. SCE shall conduct protocol surveys for coastal California gnatcatchers in areas supporting coastal sage scrub habitat that may be affected by the Project. In known occupied habitat for the California gnatcatcher, SCE shall only conduct focused surveys for coastal California gnatcatchers to determine the locations of nests and territories. Survey areas shall include a 500-foot buffer around Project disturbance areas.	Entire Project, in areas of suitable gnatcatcher habitat and within 500 feet of disturbance areas.	 Prior to construction, SCE shall submit documentation providing the results of the pre-construction focused surveys for coastal California gnatcatcher to the CPUC and FS for review and approval. If a territory or nest is confirmed, the FWS and CDFG shall be notified immediately. In 	Successful avoidance of coastal California gnatcatcher, as verified by the EM.	Six surveys mus be performed between 15 March and 30 June at least one week apart, and nine surveys must be performed between 1 July

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Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
If a territory or nest is confirmed, the FWS shall be notified immediately. In coordination with the FWS a 300-foot disturbance-free buffer shall be established and demarcated by fencing or flagging. This buffer may be adjusted provided noise levels do not exceed 60 dB(A)hourly Leq at the edge of the nest site as determined by a qualified biologist in coordination with a qualified acoustician. If the noise meets or exceeds the 60 dB(A) Leq threshold, or if the biologist determines that the construction activities are disturbing nesting activities, the biologist shall have the authority to halt the construction and shall devise methods to reduce the noise and/or disturbance in the vicinity. This may include methods such as, but not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nest site and the construction activities, and working in other areas until the young have fledged. If noise levels still exceed 60 dB(A) Leq hourly at the edge of nesting territories and/or a noconstruction buffer cannot be maintained, construction shall be deferred in that area until the nestlings have fledged. All active nests shall be monitored on a weekly basis until the nestlings fledge. No Project activities may occur in these areas unless otherwise authorized by FWS. SCE shall obtain incidental take authorization from the FWS prior to further activities.		coordination with the FWS and CDFG, a 500-foot disturbance-free buffer shall be established. No Project activities may occur in these areas unless otherwise authorized by FWS and CDFG, and SCE shall obtain incidental take authorization from the FWS prior to further activities. • SCE's designated biologist will monitor and provide a copy of the monitoring reports to the CPUC and FS for review on a weekly basis.		and 14 March a least two weeks apart, prior to construction.
Protocol or focused surveys, as appropriate, shall be conducted, at a minimum, within one year of start of construction and can stop at commencement of construction activities. These surveys may be modified through the coordination with the FS on NFS lands, USACE on USACE lands, State Parks in the Chino Hills State Park (Alternative 4 only), and the CPUC based on the condition of habitat, the observation of the species, or avoidance of nesting areas during the breeding season. Non-protocol nesting bird surveys for California gnatcatcher shall also occur in the Aliso Canyon in chaparral communities. This area shall also require a qualified gnatcatcher biologist to be present during any construction activities conducted during the breeding season. Non-protocol nesting bird surveys for California gnatcatcher shall also occur in the Aliso Canyon in chaparral communities. This area shall also require a qualified gnatcatcher biologist to be present during any construction activities conducted during the breeding season. Construction activities in occupied gnatcatcher habitat will be				

Table 13-1. Mitigation Monitoring Program – Biological Resources				
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
presence of a bird in the construction area. At a minimum one full- time monitor shall be present for every two miles of active construction within occupied habitat.				
SCE shall retain a FWS-permitted biologist to monitor construction activities within 100 feet of an active California gnatcatcher nests in the Montebello Hills area only and assist SCE in the implementation of the monitoring program. In the Montebello Hills, grading and vegetation management, including activities conducted during Project operations and maintenance, shall be conducted outside of the breeding season (March – August). A 300-foot buffer is required for all other areas. A biologist with applicable avian experience with the California gnatcatcher will monitor all construction activities within 300 feet of occupied California gnatcatcher habitat. The resumes of the permitted biologists will be provided to the CPUC for concurrence. This biologist will be referred to as the authorized biologist hereafter. The authorized biologist will have the authority to stop all activities until appropriate corrective measures have been completed.				
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See	-	-	-	-
Impact B-1). Impact B-17: The Project would result in the loss of critical and/or	occupied babita	t of the coastal California gnateatche		
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-		-	-
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-
B-16: Conduct protocol or focused surveys for coastal California gnatcatcher and implement avoidance measures. (See Impact B-15).	-	-	•	-
B-17: Preserve off-site habitat and/or habitat restoration for the coastal California gnatcatcher. To mitigate effects from Project construction, SCE shall acquire habitat occupied by the coastal California gnatcatcher and/or restore unoccupied coastal sage scrub. Mitigation acquisition shall occur at a 3:1 ratio for permanent effects unless otherwise approved by the FWS upon consultation. Temporary impacts will be mitigated at a 1:1 ratio on site. For lands located within the Montebello Hills HCP a 1:1 ratio for permanent effects will be implemented unless otherwise approved by the FWS. SCE shall enter into a binding legal agreement regarding the preservation of offsite lands describing the terms of the acquisition, enhancement, and management of those lands. Management of coastal California gnatcatcher mitigation areas will be necessary to maintain habitat suitability over time. Activities that need to be addressed in the	Entire Project.	 SCE shall acquire habitat occupied by the coastal California gnatcatcher and/or restore unoccupied coastal sage scrub based on agreed-upon ratio and location as approved by the FWS upon consultation. SCE shall ensure that mitigation areas are included in an existing management plan. SCE's designated biologist will monitor compliance and provide a copy of the monitoring reports to 	 Provide documentation of permanent protection of off-site coastal California gnatcatcher habitat to CPUC and FS. Off-site land successfully purchased or enhanced and transferred to an existing management plan. 	Prior to, during, and after construction.

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Table 13-1. Mitigation Monitoring Program – Biological Resources				
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
management plan include disturbances that reduce shrub cover, such as frequent fire, mechanical disruption, livestock grazing, off-highway vehicle use, and military training activities. Fee title acquisition of these habitat lands or a conservation easement shall be transferred to an entity approved by the FWS and the CPUC, along with funding for enhancement of the land and an endowment for management of the land in perpetuity.		the CPUC and FS for review on a weekly basis.		
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-
Impact B-18: The Project could disturb nesting Swainson's hawks				
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-
B-18a: Conduct pre-construction surveys for Swainson's hawks. To assure that nesting Swainson's hawks are not disturbed by construction activities, a qualified ornithologist shall conduct preconstruction surveys within one mile of the Project in regions with suitable nesting habitat for Swainson's hawks. The survey periods follow a specified schedule: Period I occurs from 1 January to 20 March, Period II occurs from 20 March to 5 April, Period III occurs from 5 April to 20 April, Period IV occurs from 21 April to 10 June, and Period V occurs from June 10 to July 30. Surveys are not recommended during Period IV because identification is difficult, as the adults tend to remain within the nest for longer periods of time. No fewer than three surveys per period in at least two survey periods shall be completed immediately prior to the start of Project construction. If a nest site is found, consultation with CDFG shall be required to ensure Project construction will not result in nest disturbance. CDFG recommends that no new disturbances or other Project-related activities that may cause nest abandonment or forced fledging be initiated within 0.25 mile of an active nest between 1 March and 15 September, or until 15 August if a Management Authorization is obtained for the Project from the CDFG (CDFG, 1994). These buffer zones may be adjusted as appropriate in consultation with a qualified ornithologist and CDFG.	Entire Project, in areas that support suitable Swainson's hawk habitat.	 SCE shall submit documentation providing results of the focused surveys for Swainson's hawks to the CPUC for review and approval. If nesting Swainson's hawks are detected in or adjacent to the proposed ROW, SCE will consult CDFG before project activities begin. SCE's authorized biologist will be present during all activities immediately adjacent to or within habitat that could support populations of Swainson's hawks. SCE's designated biologist will monitor compliance with measures identified in the monitoring plan and provide a copy of the monitoring reports to the CPUC and FS for review on a weekly basis. 	 Minimize disturbance to Swainson's hawks, as verified by the EM. Effectiveness can be determined by monitoring implementation of the control measures. 	Survey must be performed between 1 January and July 30, prior to construction.
B-18b: Removal of nest trees for Swainson's hawks. Nest trees for Swainson's hawks along the Project shall not be removed unless avoidance measures are determined to be infeasible. If a nest tree for a Swainson's hawk must be removed, a Management Authorization (including conditions to offset the loss of the nest tree) must be obtained from the CDFG. The Management Authorization will specify the tree removal period, generally between 1 October and 1	Entire Project.	 If a nest tree must be removed, a Management Authorization must be obtained from the CDFG prior to nest removal. If Swainson's hawks are present and direct impacts cannot be avoided, SCE's authorized biologist 	 Minimize disturbance to Swainson's hawks, as verified by the EM. Effectiveness can be determined by monitoring implementation of the control measures. 	Prior to and during construction. Removal period is generally between 1 October and 1

Table 13-1. Mitigation Monitoring Program – Biological Resources				
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
February. If construction or other Project-related activities that may cause nest abandonment by a Swainson's hawk or forced fledging are necessary within the specified buffer zone, monitoring of the nest site (funded by SCE) by a qualified biologist shall be required to determine if the nest is abandoned. If the nest is abandoned and if the nestlings are still alive, SCE shall fund the recovery and hacking (controlled release of captive reared young) of the nestling(s).		shall monitor the nest site to determine activity and make removal recommendations. If a nest is determined to be abandoned and contain live nestlings, SCE's authorized biologist will arrange for recovery and release of the young.		February.
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See full description under Air Quality, Section 3.3).	-	-	-	-
Impact B-19: The Project would result in the loss of foraging habit	at for Swainson'	s hawks.		,
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-
B-18a : Conduct pre-construction surveys for Swainson's hawks. (See Impact B-17).	-	-	-	-
B-19: Compensate for loss of foraging habitat for Swainson's hawks. Loss of foraging habitat for Swainson's hawks shall be mitigated by providing Habitat Management (HM) lands as described in the CDFG's Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California (CDFG, 1994) because the site is known foraging habitat for Swainson's hawks. The final acreage of HM lands to be provided on site shall depend on the distance between the Project area and the nearest active nest site (CDFG, 1994), as determined by nest surveys conducted in the spring prior to Project construction. Guidance on the acreage of HM lands to be acquired by SCE can be found in the 1994 CDFG staff report.	Entire Project, in areas that support suitable Swainson's hawk habitat.	 SCE shall submit nest surveys to the CPUC and FS for review. SCE shall coordinate with CDFG and CPUC to acquire and ensure permanent protection of Habitat Management lands. 	Successful protection of off-site Swainson's hawk habitat.	Prior to, during, and after construction.
Management Authorization holders/Project sponsors shall provide for the long-term management of the HM lands by funding a management endowment (the interest on which shall be used for managing the HM lands).				
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-
Impact B-20: The Project could result in electrocution of State and	l/or federally pro	tected birds.		
No Recommendations.	-	-	-	-
Impact B-21: The Project could result in collision with overhead w	ires by State and	/or federally protected birds.		
No Recommendations.	-	-	-	-

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Table 13-1. Mitigation Monitoring Program – Biological Resources				
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
Impact B-22: The Project could result in disturbance to Mohave gr	ound squirrels.			
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-
B-3a : Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-
B-22a: Conduct protocol surveys for Mohave ground squirrels. Protocol-level surveys for Mohave ground squirrels shall be performed in the portion of the Project containing suitable habitat for Mohave ground squirrel unless further consultation with the CDFG determines the surveys are not required. A qualified biologist will perform these surveys according to CDFG's (2003b) Mohave Ground Squirrel Survey Guidelines. The resumes of the proposed biologists will be provided to the CDFG and CPUC for concurrence prior to conducting the surveys. If at any time a Mohave ground squirrel is detected, trapping will cease. If these surveys obtain positive results for Mohave ground squirrel, or if Mohave ground squirrel presence is assumed within potential habitat, SCE shall obtain incidental take authorization from CDFG. If these surveys determine that the Mohave ground squirrel is absent, then no further action is necessary.	Northern Region, areas that support Mohave ground squirrel habitat.	 SCE shall submit documentation providing the results of the preconstruction protocol surveys for Mohave ground squirrels to the CPUC for review and approval. SCE's designated biologist shall monitor and provide a copy of the monitoring reports to the CPUC and FS for review on a weekly basis. 	Successful avoidance of Mohave ground squirrels, as verified by the EM.	Surveys must be performed between 15 March and 15 July, prior to construction.
B-22b: Implement construction monitoring for Mohave ground squirrels. A qualified biological monitor shall be on the site to survey for Mohave ground squirrel during initial ground-disturbing activities. The resumes of the proposed biologists will be provided to the CDFG and CPUC for concurrence prior to conducting the surveys. The name and phone number of the biological monitor shall be provided to a CDFG regional representative at least 14 days before the initiation of ground-disturbing activities. If the biological monitor observes a Mohave ground squirrel on the construction site, determines that a Mohave ground squirrel was killed by Project-related activities during construction, or observes a dead Mohave ground squirrel, a written report shall be sent to CDFG within five calendar days. The report will include the date, time of the finding or incident (if known), and location of the carcass and circumstances of its death (if known). Mohave ground squirrel remains shall be collected and frozen as soon as possible, and CDFG shall be contacted regarding ultimate disposal of the remains.	Northern Region, areas that support Mohave ground squirrel habitat.	SCE's designated biologist shall monitor and provide a copy of the monitoring reports to the CPUC for and FS review on a weekly basis.	Successful avoidance of Mohave ground squirrels, as verified by the EM.	Prior to construction.

Table 13-1. Mitigation Monitoring Program – Biological Resources					
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action	
B-22c: Preserve off-site habitat for the Mohave ground squirrel. To mitigate potential permanent impacts to occupied Mohave ground squirrel habitat from Project construction, SCE will acquire habitat occupied by Mohave ground squirrels. Guidance on Habitat Management (HM) lands to be acquired by SCE can be found in CDFG's (2003b) Mohave Ground Squirrel Survey Guidelines. • Three acres of off-site habitat supporting Mohave ground squirrels will be preserved for each acre of Mojave creosote bush scrub and Joshua tree woodland outside of the Habitat Conservation Area (HCA) delineated in the WMP. • One acre of off-site habitat supporting Mohave ground squirrels will be preserved for each acre of desert saltbush scrub that includes desert wash impacted by the Project outside of the HCA delineated in the WMP. • One-half acre of off-site habitat supporting Mohave ground squirrels will be preserved for each acre of desert saltbush scrub impacted by the Project outside of the HCA delineated in the WMP. • No mitigation will occur for agricultural, California annual grassland, or barren/developed ground within the Project area north of Vincent Substation. Mitigation acquisition shall occur at a CDFG-approved location and shall be coordinated through a CDFG-approved entity. SCE shall enter into a binding legal agreement regarding the preservation of off-site lands describing the terms of the acquisition, enhancement, and management of those lands. Fee title acquisition of habitat lands or a conservation easement over these lands will be transferred to an entity approved by CDFG and CPUC, along with funding for enhancement of the land and an endowment for permanent management of the land and an endowment for permanent management of the lands. Management of off-highway vehicles is necessary on Mohave ground squirrel mitigation areas to prevent burrow collapse, especially during the aestivation season. Mitigation areas should be relatively flat with a perennial plant cover ranging from 10 to 20 percent (Zembal and Gall,	Northern Region, areas that support Mohave ground squirrel habitat.	 SCE shall coordinate with CDFG and CPUC to acquire and ensure permanent protection of Habitat Management lands for Mohave ground squirrels. SCE shall provide documentation of permanent protection of off-site Mohave ground squirrel habitat to the CPUC. 	Off-site land successfully purchased or enhanced.	Prior to, during, and after construction.	
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-	

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Table 13-1. Mitigation Monitoring Program – Biological Resources				
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
Impact B-23: The Project would result in the loss of candidate, For	rest Service Sens	sitive, or special-status plant species		
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-
B-1b : Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-
B-7: Conduct preconstruction surveys for State and federally Threatened, Endangered, Proposed, Petitioned, and Candidate plants and avoid any located occurrences of listed plants. (See Impact B-7).	-	-	-	-
B-23: Preserve off-site habitat/management of existing populations of special-status plants. SCE shall conduct rare plant surveys, and implement avoidance/minimization/compensation strategies. SCE shall conduct surveys according to established and accepted protocol during the floristic period appropriate for each of the rare plant species identified with the potential to occur within the Project ROW and within 100 feet of all surface-disturbing activities. The completion of these surveys shall be coordinated with the CPUC and federal land manager. Populations of rare plants shall be flagged and mapped prior to construction. If rare plants are located during the focused surveys, then modification of the placement of structures, access roads, laydown areas, and other ground-disturbing activities would be implemented in order to avoid the plants, if feasible. A report of special-status plants observed shall be prepared and submitted to the CPUC, State Parks (for activities in CHSP associated with Alternative 4), and the federal land manager (FS and USACE). Impacts to non-listed plant species (i.e., FS Sensitive, CNPS List 1,2 and 4 species) shall first be avoided where feasible, and, where not feasible, impacts shall be compensated through reseeding (with locally collected seed stock), or other FS, USACE, and CPUC approved methods. If Project activities will result in loss of more than 10 percent of the known individuals within an existing population of FS Sensitive, and/or special-status plant species SCE shall preserve existing off-site occupied habitat that is not already part of the public lands in perpetuity at a 2:1 mitigation ratio (habitat preserved: habitat impacted). On federal lands, this ratio may be reduced at the discretion of the federal land manager. The CPUC may reduce this ratio depending on the sensitivity of the plant on nonfederal lands. The preserved habitat shall be occupied by the plant species impacted, and be of superior or similar habitat quality to the	Entire Project.	 SCE shall coordinate with the CPUC and federal land manager (FS and USACE) to acquire and ensure permanent protection of special-status plants. SCE shall provide documentation of permanent protection of off-site Mohave ground squirrel habitat to the CPUC and FS. 	Off-site land successfully purchased or enhanced. Implementation of a long-term management plan.	Prior to, during, and after construction.

Table 13-1. Mitigation Monitoring Program – Biological Resources				
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
impacted areas in terms of soil features, extent of disturbance, habitat structure, and dominant species composition, as determined by a qualified plant ecologist. All special-status plant species impacted by Project activities shall be documented in an annual report and submitted to the CPUC and federal land manager (FS and USACE). Where reseeding has occurred, SCE shall track the success of the plants during the course of the annual restoration monitoring. This information shall be				
submitted as part of the annual report to the CPUC and federal land manager (FS and USACE).				
H-1a: Implement an Erosion Control Plan and demonstrate compliance with water quality permits. (See Impact B-1).	-	-	-	-
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-
Impact B-24: The Project could result in mortality or injury of, and	loss of nesting l	nabitat for, southwestern pond turtles	i.	
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-
B-24: Conduct focused presence/absence surveys for southwestern pond turtle and implement monitoring, avoidance, and minimization measures. A qualified biologist shall conduct focused surveys for southwestern pond turtle in the area of Project crossings, including access and spur roads, at Amargosa Creek, Big Tujunga Creek (Segment 6), Alder Creek, Rio Hondo Substation, Whittier Narrows Recreation Area, Aliso Creek, and Tonner Creek. Since Southwestern pond turtles were observed at the San Gabriel River (Segments 6 and 7 and West Fork/Cogswell Road) and Brea Canyon during reconnaissance surveys conducted in September 2007, the species shall be assumed present at these locations. The resume of the proposed biologists will be provided to the CPUC, FS, and USACE (as appropriate) for concurrence prior to conducting the surveys. This biologist will be referred to as the authorized biologist hereafter. Focused surveys shall also occur on access and spur roads where road crossings could affect suitable habitat for this species. Focused surveys shall consist of a minimum of four daytime surveys, to be completed between 1 April and 1 June. The survey schedule may be adjusted in consultation with the CPUC, FS, and/or USACE, as appropriate, to reflect the existing weather or stream	Amargosa Creek, Lynx Gulch, Big Tujunga Creek (Segment 6), Rio Hondo, Tonner Creek, San Gabriel River (Segment 7), Brea Canyon, and access road crossings in suitable pond turtle habitat.	 SCE shall submit documentation providing pre-construction survey results to the CPUC review and approval. The resume of the proposed biologists shall be provided to the CPUC and FS. If avoidance of the nesting area is determined to be infeasible, the authorized biologist shall coordinate with CDFG, CPUC, and FS to identify if it is possible to relocate the pond turtles. Eggs or hatchlings shall not be moved without the written authorization from the CDFG and FS. SCE's authorized biologist, approved by the CPUC and FS, shall monitor compliance, conduct 	 Project activities do not disturb identified (flagged) areas. Minimize disturbance to the pond turtle, as verified by the EM. 	Prior to and during construction. Focused surveys shall consist of a minimum of four daytime surveys, to be completed between 1 April and 1 June.

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Table 13-1. Mitigation Monitoring Program – Biological Resources					
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action	
conditions. If southwestern pond turtles are detected in or adjacent to the Project, nesting surveys shall be conducted. Focused surveys for evidence of southwestern pond turtle nesting shall be conducted in, or adjacent to, the Project when suitable nesting habitat exists within 1,300 feet of occupied habitat in an area where Project-related ground disturbance will occur (i.e., tower sites, access/spur roads, wire setup sites, marshalling yards). If both of those conditions are met, a qualified biologist shall conduct focused, systematic surveys for southwestern pond turtle nesting sites. The survey area shall include all suitable nesting habitat located within 1,300 feet of occupied habitat in which Project-related ground disturbance will occur. This area may be adjusted based on the existing topographical features on a case-by-case basis with the approval of the CPUC, FS, and/or USACE, as appropriate. Surveys will entail searching for evidence of pond turtle nesting, including remnant eggshell fragments, which may be found on the ground following nest depredation. If a southwestern pond turtle nesting area would be adversely impacted by construction activities, SCE shall avoid the nesting area. If avoidance of the nesting area is determined to be infeasible, the authorized biologist shall coordinate with CDFG, CPUC, FS (on NFS lands), and USACE (on Army Corps lands) to identify if it is possible to relocate the pond turtles. Eggs or hatchlings shall not be moved without the written authorization from the CDFG and FS (on NFS lands). A qualified biologist with demonstrated expertise with southwestern pond turtles shall monitor construction activities where pond turtles are present or assumed present. The resume of the proposed biologist will be provided to the CPUC, FS, and USACE (as appropriate) for concurrence prior to the onset of ground-disturbing activities. This biologist will be referred to as the authorized biologist immediately adjacent to, or within, habitat that supports populations of southweste		clearance surveys for southwestern pond turtles at the beginning of construction each day, and provide a copy of the monitoring reports to the CPUC and FS for review on a weekly basis.		Action	
H-1a: Implement an Erosion Control Plan and demonstrate compliance with water quality permits. (See Impact B-1).	-	-	-	-	

Table 13-1. Mitigation Monitoring Program – Biological Resources				
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
H-1b: Dry weather construction. (See Impact B-1).				
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-
Impact B-25: The Project could result in injury or mortality of, and	loss of habitat fo	or, two-striped garter snakes and sou	th coast garter snakes.	
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).				
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-
B-25: Conduct focused surveys for two-striped garter snakes and south coast garter snakes and implement monitoring, avoidance, and minimization measures. A qualified biologist shall conduct focused surveys for two-striped garter snakes (both on and off NFS lands) and south coast garter snakes (non-NFS lands only) where suitable habitat is present and directly impacted by construction vehicle access, or maintenance. The resume of the proposed biologists will be provided to the CPUC, FS and USACE (as appropriate) for concurrence prior to conducting the surveys. This biologist will be referred to as the authorized biologist hereafter. Focused surveys shall consist of a minimum of four daytime surveys, to be completed between 1 April and 1 September. The survey schedule may be adjusted in consultation with the CPUC, FS, and/or USACE to reflect the existing weather or stream conditions. If either species is detected in or adjacent to the Project or at any wet fords to be traversed by motorized vehicles as part of Project construction activities, the following minimization measures will be required. SCE shall retain a qualified herpetologist with demonstrated expertise with garter snakes to monitor construction activities. The resume of the proposed biologist will be provided to the CPUC, FS, and USACE (as appropriate) for concurrence prior to the onset of ground-disturbing activities or vehicular crossings at wet fords. This biologist will be referred to as the authorized biologist hereafter. The authorized biologist will be present during all activities immediately adjacent to or within habitat that supports populations of the two-striped garter snake and/or south coast garter snake. Clearance surveys for garter snakes shall be conducted by the authorized biologist prior to the initiation of construction each day. Any snakes found within the area of disturbance or potentially affected by the Project will be relocated to the nearest suitable habitat that will not be affected by the Project.	Entire Project, where suitable habitat is present.	 SCE shall submit documentation providing pre-construction survey results to the CPUC and FS for review and approval. The resume of the proposed biologists will be provided to the CPUC and FS for approval. SCE's authorized biologist, approved by the CPUC and FS, shall monitor compliance, conduct clearance surveys for garter snakes at the beginning of construction each day, and provide a copy of the monitoring reports to the CPUC and FS for review on a weekly basis. 	 Project activities do not disturb identified (flagged) areas. Minimize disturbance to garter snake, as verified by the EM. 	Prior to and during construction. Focused surveys shall consist of a minimum of four daytime surveys, to be completed between 1 April and 1 September.

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Table 13-1. Mitigation Monitoring Program – Biological Resources					
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action	
H-1a: Implement an Erosion Control Plan and demonstrate compliance with water quality permits. (See Impact B-1).	-	-	-	-	
H-1b: Dry weather construction. (See Impact B-1).					
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-	
Impact B-26: The Project could result in injury or mortality of, and	loss of habitat fo	or, Coast Range newts.			
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).					
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-	
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-	
B-26: Conduct focused surveys for coast range newts and implement monitoring, avoidance, and minimization measures. A qualified biologist shall conduct focused surveys for Coast Range newt in suitable habitat on non-NFS lands, including Eaton Wash, Brea Canyon, and Tonner Creek. In addition, all tributary drainages that support habitat for this species shall be inspected if they are subject to Project disturbance. Focused surveys shall consist of a minimum of four daytime surveys, to be completed between 1 April and 1 September. If Coast Range newts are detected in or adjacent to the Project or at any wet fords to be traversed by motorized vehicles as part of Project construction activities, no work shall be authorized within 0.5 mile of the occupied active drainage channel and no vehicular crossings at fords of those channels shall be authorized until the biologist has inspected and cleared these areas.	Lynx Gulch, Big Tujunga Creek (within Segment 6), North Fork Mill Creek, West Fork San Gabriel River, wet ford crossings in suitable habitat.	 SCE shall submit documentation providing pre-construction survey results to the CPUC review and approval. SCE's authorized biologist, approved by the CPUC and FS, shall monitor compliance, conduct clearance surveys for Coast Range newts at the beginning of construction each day, and provide a copy of the monitoring reports to the CPUC and FS for review on a weekly basis. 	 Project activities do not disturb identified (flagged) areas. Minimize disturbance to the coast range newt, as verified by the EM. 	Prior to and during construction. Focused surveys shall consist of a minimum of four daytime surveys, to be completed between 1 April and 1 September.	
SCE shall retain a qualified biologist with demonstrated expertise with amphibians to monitor construction activities and assist SCE in the implementation of the monitoring program. The resume of the proposed biologist will be provided to the CPUC for concurrence prior to the onset of ground-disturbing activities or vehicular crossings at wet fords. This biologist will be referred to as the authorized biologist hereafter. The authorized biologist will be present during ground-disturbing activities immediately adjacent to or within habitat that supports populations of Coast Range newt. Clearance surveys for Coast Range newts shall be conducted by the authorized biologist prior to the initiation of construction each day. If individuals are found within the proposed area of disturbance they will be relocated to an area that will not be affected by construction activities. H-1b: Dry weather construction. (See Impact B-1).					

Table 13-1. Mitigation Monitoring Program – Biological Resources				
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-
Impact B-27: The Project could result in injury or mortality of, and and reptile species.	loss of habitat fo	or, terrestrial California Species of Sp	pecial Concern and Forest Service Se	nsitive amphibian
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-
B-27: Monitoring, avoidance, and minimization measures for special-status terrestrial herpetofauna. A qualified biologist with demonstrated expertise with special-status terrestrial herpetofauna shall monitor all construction activities and assist SCE in the implementation of the monitoring efforts. The resume of the proposed biologist will be provided to the CPUC, USACE, and FS (as appropriate) for concurrence prior to the onset of ground-disturbing activities. This biologist will be referred to as the authorized biologist hereafter. The authorized biologist will be present during ground-disturbing activities immediately adjacent to or within habitat that supports populations of the special-status terrestrial herpetofauna. Any special-status terrestrial herpetofauna found within a Project impact area shall be salvaged by the authorized biologist and relocated to suitable habitat outside the impact area. If the installation of exclusion fencing is deemed necessary by the authorized biologist, the authorized biologist will direct the installation of the fence. Clearance surveys for special-status herpetofauna shall be conducted by the authorized biologist prior to the initiation of construction each day.	Entire Project.	 SCE shall submit documentation providing monitoring efforts to the CPUC and FS. SCE's authorized biologist, approved by the CPUC and FS, shall monitor compliance, conduct clearance surveys for special-status herpetofauna at the beginning of construction each day, and provide a copy of the monitoring reports to the CPUC and FS for review on a weekly basis. 	Minimize disturbance to special- status herpetofauna, as verified by the EM.	Prior to and during construction.
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-
Impact B-28: The Project could disturb wintering mountain plover	S.			
No Recommendations.	-	-	-	-
Impact B-29: The Project would result in the loss of occupied burn	owing owl habita	at.		
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).				
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-

13-47 September 2009

Table 13-1. Mitigation Monitoring Program – Biological Resources					
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action	
 B-29: Implement CDFG protocol for burrowing owls. In conformance with federal and State regulations regarding the protection of raptors, a habitat assessment in accordance with CDFG protocol for burrowing owls (CBOC, 1993) shall be completed on non-NFS lands prior to the start of construction. Burrowing owl habitat within the Project area and within a 500-foot buffer zone shall be assessed ("Assessment Area"). If the habitat assessment concludes that the Assessment Area lacks suitable burrowing owl habitat, no additional action is required. However, if suitable habitat is located on the Assessment Area, all ground squirrel colonies or potential burrow locations shall be mapped at an appropriate scale, and the following mitigation measures shall be implemented: In conformance with federal and State regulations regarding the protection of raptors, a pre-construction survey for burrowing owls, in conformance with CDFG protocol, consisting of three site visits, shall be completed no more than 30 days prior to the start of construction within suitable habitat at the Project site(s) and buffer zone(s). Occupied burrows shall not be disturbed during the nesting season (1 February through 31 August) unless a qualified biologist approved by CDFG verifies through non-invasive methods that either the birds have not begun egg-laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent survival. Eviction outside the nesting season may be permitted pending evaluation of eviction plans and receipt of formal written approval from the CDFG, a 250-foot buffer, within which no activity will be permissible, will be maintained between Project activities and nesting burrowing owls during the nesting season. This protected area will remain in effect until 31 August or at CDFG's discretion and based upon monitoring evidence, until the young owls are foraging independently. If accidental ta	Entire Project plus 500-foot buffer zone.	 SCE shall submit documentation providing results of the preconstruction burrowing owl habitat assessment to the CPUC and FS for review and approval. If suitable habitat exists, SCE will submit a copy, at least thirty (30) days prior to construction, of ground squirrel colony maps and the results of the burrowing owl survey, to the CPUC and FS for review and approval. SCE's designated biologist will monitor compliance to ensure occupied burrows are not disturbed during the nesting season, new burrows and previously occupied burrows are not re-occupied, and provide a copy of the monitoring reports to the CPUC and FS for review on a weekly basis. 	 Project activities do not disturb identified areas. Minimize disturbance to burrowing owls, as verified by the EM. 	Prior to and during construction.	

Table 13-1. Mitigation Monitoring Program – Biological	Resources			
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-
Impact B-30: The Project would result in the loss of occupied Cali	fornia spotted ov	vl habitat.		
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-
B-30: Conduct pre-and during construction nest surveys for spotted owls. Prior to tree removal or construction activities within suitable habitat, SCE shall have a qualified biologist conduct FS protocol surveys for the California spotted owl to establish or confirm the location of nests within the Project. The resumes of the proposed biologists shall be provided to the FS and CPUC for concurrence. If nests or breeding pairs are found during the surveys, the limited operating period (LOP) will be applied according to the Forest Plan (Standard 20 – Part 3). No project-related activities will be allowed within these dates (February 1-August 15) or until chicks have fledged. Where a biological evaluation by a qualified ornithologist determines that a nest site would be shielded from planned activities by topographic or other features that would minimize disturbance, the buffer distance may be reduced upon approval of the FS on NFS lands. In addition, no helicopter construction will be allowed within 0.5 mile of breeding spotted owl territories. No helicopter overflights shall be authorized without FS approval. If approved minimum altitudes will be 300 feet above a territory at an altitude designated by the FS. This buffer may be adjusted through consultation with the FS and CPUC.	Central Region, in suitable habitat.	 SCE shall submit documentation providing pre-construction survey results to the CPUC and FS review and approval. The resume of the proposed biologists will be provided to the CPUC and FS for approval. SCE's designated biologist shall monitor compliance to ensure previously occupied nests are not re-occupied, and provide a copy of the monitoring reports to the CPUC and FS for review on a weekly basis. 	 Project activities do not disturb nest sites. Minimize disturbance to the spotted owl, as verified by the EM. 	Protocol surveys must be performed between February 1 and August 15, prior to construction. Monitoring will occur during construction.
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-
Impact B-31: The Project could disturb nesting California spotted	owls.			
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-
B-30: Conduct pre- and during- construction nest surveys for spotted owl. (See Impact B-30).	-	-	-	-
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-
Impact B-32: The Project could disturb nesting avian "species of	special concern.'			
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-

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Table 13-1. Mitigation Monitoring Program – Biological Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	- Action
B-2: Implement RCA Treatment Plan. (See Impact B-2).	-	-	-	-
B-5: Conduct pre-construction surveys and monitoring for breeding birds. (See Impact B-5).	-	-	-	-
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-
Impact B-33: The Project could result in mortality of, and loss of h	nabitat for, specia	al-status bat species.		
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-
B-2: Implement RCA Treatment Plan. (See Impact B-2).	-	-	-	-
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-
B-33a: Maternity colony or hibernaculum surveys for roosting bats. SCE shall conduct a pre-activity (e.g., vegetation removal, grading) survey for roosting bats within 200 feet of project activities within 15 days prior to any grading of rocky outcrops or removal of towers or trees (particularly trees 12 inches in diameter or greater at 4.5 feet above grade with loose bark or other cavities) within 200 feet of project activities. SCE shall also conduct surveys for roosting bats during the maternity season (1 March to 31 July) within 300 feet of project activities. Trees and rocky outcrops shall be surveyed by a qualified bat biologist (i.e., a biologist holding a CDFG collection permit and a Memorandum of Understanding with CDFG allowing the biologist to handle bats). Surveys shall include a minimum of one day and one evening. The resume of the biologist shall be provided to the CPUC, FS, and USACE (as appropriate) for concurrence prior to any Project activities. If active maternity roosts or hibernacula are found, the rock outcrop or tree occupied by the roost shall be avoided (i.e., not removed) by the Project, if feasible. If avoidance of the maternity roost is not feasible, the bat biologist shall survey (through the use of radio telemetry or other CDFG/FS/USACE approved methods) for nearby alternative maternity colony sites. If the bat biologist determines in consultation with and with the approval of the CDFG, FS, USACE (as appropriate), and CPUC that there are alternative roost sites used by the maternity colony and young are not present then no further action is required,	Entire Project, in areas that could support bats.	 SCE shall submit documentation providing pre-construction survey results to the CPUC review and approval. The resume of the proposed biologists shall be provided to the CPUC and FS. SCE's designated biologist shall monitor compliance to ensure previously occupied habitats are not re-occupied, and provide a copy of the monitoring reports to the CPUC and FS for review on a weekly basis. 	 Project activities do not disturb identified (flagged) areas. Minimize disturbance to the roosting bat, as verified by the EM. 	Surveys for roosting bats must be performed 15 days prior construction activities, and surveys for roosting bats must be performed between1 Marc and 31 July, pri to construction. Monitoring will occur during construction.

Table 13-1. Mitigation Monitoring Program – Biological Resources					
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action	
and it will not be necessary to provide alternate roosting habitat (i.e., Mitigation Measure B-33b would not apply although Mitigation Measure B-33c would still apply). However, if there are no alternative roosts sites used by the maternity colony, Mitigation Measure B-33b is required. If no active roosts are found, then no further action is required. If active maternity roosts are absent, but a hibernaculum (i.e., a non-maternity roost) is present, then Mitigation Measure B-33b is not necessary, but Mitigation Measure B-33c is required.					
B-33b: Provision of substitute roosting bat habitat. If a maternity roost will be impacted by the Project, and no alternative maternity roosts are in use near the site, substitute roosting habitat for the maternity colony shall be provided on, or in close proximity to, the Project site no less than three months prior to the eviction of the colony. Alternative roost sites will be constructed in accordance with the specific bats requirements in coordination with CDFG and the FS. By making the roosting habitat available prior to eviction (Mitigation Measure B-33c), the colony will have a better chance of finding and using the roost. Large concrete walls (e.g., on bridges) on south or southwestern slopes that are retrofitted with slots and cavities are an example of structures that may provide alternative roosting habitat appropriate for maternity colonies. Alternative roost sites must be of comparable size and proximal in location to the impacted colony. The CDFG shall also be notified of any hibernacula or active nurseries within the construction zone.	Entire Project, in areas that could support bats.	 SCE shall coordinate with CDFG, CPUC and FS to acquire and ensure provision of substitute habitats for roosting bats, if necessary. SCE shall provide documentation of alternative habitat to the CDFG, CPUC and FS. 	Substitute habitat successfully established. Minimize disturbance to the roosting bat, as verified by the EM.	Prior to and during construction.	
B-33c: Exclude bats prior to demolition of roosts. If non-breeding bat hibernacula are found in towers or trees scheduled to be removed or in crevices in rock outcrops within the grading footprint, the individuals shall be safely evicted, under the direction of a qualified bat biologist, by opening the roosting area to allow airflow through the cavity or other means determined appropriate by the bat biologist (e.g., installation of one-way doors). The resume of the bat biologist shall be provided to the CPUC, FS, and USACE (as appropriate) for concurrence prior to any Project activities. In situations requiring one-way doors, a minimum of one week shall pass after doors are installed and temperatures should be sufficiently warm for bats to exit the roost because bats do not typically leave their roost daily during winter months in southern coastal California. This action should allow all bats to leave during the course of one week. Roosts that need to be removed in situations where the use of one-way doors is not necessary in the judgment of the qualified bat biologist shall first be disturbed by various means at the direction of the bat biologist at dusk to allow bats to escape during the darker hours, and the roost	Entire Project, in areas that could support bats.	Under the direction of a qualified biologist, bats shall be safely evicted from trees or crevices within the grading footprint.	Avoid harming bats during the demolition period.	During construction.	

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Table 13-1. Mitigation Monitoring Program – Biological Resources				
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
tree shall be removed or the grading shall occur the next day (i.e., there shall be no less or more than one night between initial disturbance and the grading or tree removal).				, ione.
If an active maternity roost is located in an area to be impacted by the Project, and alternative roosting habitat is available, the demolition of the roost site must commence before maternity colonies form (i.e., prior to 1 March) or after young are flying (i.e., after 31 July) using the exclusion techniques described above.				
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-
Impact B-34: The Project could result in transmission line strikes	by special-status	bat species.		
No Recommendations.	-	-	-	-
Impact B-35: The Project could result in mortality of, and loss of h	abitat for, specia	l-status mammals.		
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-
B-2: Implement RCA Treatment Plan. (See Impact B-2).	-	-	-	-
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-
Impact B-36: The Project could result in mortality of San Diego de	sert woodrats.			
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-
B-36: Conduct focused surveys for San Diego desert woodrats and passively relocate. SCE shall implement pre-construction surveys for the San Diego desert woodrat in suitable habitats. If present, active woodrat nests will be flagged and ground-disturbing activities shall be avoided within a minimum of 10 feet surrounding each active nest unless otherwise authorized by the CDFG and CPUC. If avoidance is not possible, SCE will take the following sequential steps: (1) all understory vegetation will be cleared in the area immediately surrounding active nests followed by a period of one night without further disturbance to allow woodrats to vacate the nest, (2) each occupied nest will then be disturbed by a qualified	ANF, Chino Hills, and Puente Hills.	 SCE shall submit documentation providing pre-construction survey results to the CPUC and FS review and approval. SCE's designated biologist shall monitor compliance to ensure previously occupied nests are not re-occupied, and provide a copy of the monitoring reports to the CPUC and FS for review on a weekly 	 Project activities do not disturb identified (flagged) areas. Minimize disturbance to woodrats, as verified by the EM. 	Prior to and during construction.

Table 13-1. Mitigation Monitoring Program – Biological	Resources			
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
wildlife biologist until all woodrats leave the nest and seek refuge off- site, and (3) the nest sticks shall be removed from the Project site and piled at the base of a nearby hardwood tree (preferably a coast live oak or California walnut). Relocated nests shall not be spaced closer than 100 feet apart, unless a qualified wildlife biologist has determined that a specific habitat can support a higher density of nests. SCE shall document all woodrat nests moved and provide a written report to the CPUC, State Parks (for activities in CHSP associated with Alternative 4), USACE (as appropriate), and CDFG. The resumes of the proposed biologists shall be provided to the CPUC, State Parks, and USACE (as appropriate) for concurrence.		basis.		
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-
Impact B-37: The Project could result in mortality of, and loss of h	abitat for, the rin	gtail.		
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-
B-1b : Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-
B-37: Conduct focused surveys for ringtail and passively relocate during the non-breeding season. SCE shall conduct preconstruction ringtail surveys on non-NFS lands at sites with suitable denning habitat within the Project area. This includes at a minimum Amargosa Creek, Santa Anita Canyon, San Gabriel River, and Tonner Canyon within 200 feet of any ground disturbing activity. SCE shall provide a list to the CPUC and State Parks (for activities in CHSP associated with Alternative 4) of the proposed survey areas for approval. Occupied dens will be flagged and ground-disturbing activities within 200 feet will be avoided. If occupied dens are found in the Project area and avoidance is not possible, denning ringtail shall be safely evicted under the direction of a qualified biologist (as determined by a Memorandum of Understanding with CDFG). The qualified biologist shall facilitate the removal of ringtail by delaying construction activity for a minimum 20 days during the early puprearing season (1 May to 15 June) and a minimum of 5 days during the rest of the year (16 June to 30 April). If the qualified biologist documents ringtail voluntarily vacating the den site during this period, then construction may begin within 7 days following this observation. If the ringtails do not vacate the den voluntarily within the required period, then the qualified biologist will coordinate with CDFG to	Amargosa Creek, Upper Big Tujunga Creek, Mill Creek, Saucer Branch/Millard Canyon, Tonner Canyon, and other areas that support suitable habitat for ringtails.	 SCE shall submit documentation providing pre-construction survey results to the CPUC and FS review and approval. SCE's designated biologist will monitor compliance to ensure previously occupied dens are not re-occupied, and provide a copy of the monitoring reports to the CPUC and FS for review on a weekly basis. 	 Project activities do not disturb identified (flagged) areas. Minimize disturbance to ringtail, as verified by the EM. 	Prior to and during construction.

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Table 13-1. Mitigation Monitoring Program – Biological I	Resources				
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action	
passively relocate ringtail (excluding the early pup-rearing season: 1 May to 15 June). All activities that involve the ringtail shall be documented and reported to the CDFG, State Parks (as appropriate), and CPUC within 30 days of the activity.					
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	•	-	-	
H-1a: Implement an Erosion Control Plan and demonstrate compliance with water quality permits. (See Impact B-1).	-	-	-	-	
Impact B-38: The Project could result in mortality of American bac	dgers.				
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-	
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-	
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-	
B-38: Conduct focused surveys for American badgers and passively relocate during the non-breeding season. SCE shall implement pre-construction surveys for American badger within suitable habitat on non-NFS lands. If present, occupied badger dens shall be flagged and ground-disturbing activities avoided within 50 feet of the occupied den avoided. Maternity dens shall be avoided during pup-rearing season (15 February through 1 July) and a minimum 200-foot buffer established. Buffers may be modified with the concurrence of CDFG and CPUC. Maternity dens shall be flagged for avoidance, identified on construction maps, and a biological monitor shall be present during construction. If avoidance of a non-maternity den is not feasible, badgers shall be relocated by slowly excavating the burrow (either by hand or mechanized equipment under the direct supervision of the biologist, removing no more that 4 inches at a time) before or after the rearing season (15 February through 1 July). Any relocation of badgers shall occur only after consultation with the CDFG, USACE (as appropriate), State Parks (for activities in CHSP associated with Alternative 4), and CPUC monitor. A written report documenting the badger removal shall be provided to the CDFG, USACE (as appropriate), State Parks (as appropriate), and CPUC within 30 days of relocation.	Entire Project, in areas that support suitable badger habitat.	 SCE shall submit documentation providing pre-construction survey results for badgers to the CPUC and FS review and approval. SCE's designated biologist shall monitor compliance to ensure previously occupied dens are not re-occupied, and provide a copy of the monitoring reports to the CPUC and FS for review on a weekly basis. 	 Project activities do not disturb identified (flagged) areas. Minimize disturbance to badgers, as verified by the EM. 	Prior to and during construction.	
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-	
Impact B-39: The Project could result in the loss of wetland habitats.					
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-	

Table 13-1. Mitigation Monitoring Program – Biological R	esources			
Mitigation Measure	Location	Monitoring Requirement	Determination of Effectiveness	Timing of Action
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-
B-2: Implement RCA Treatment Plan. (See Impact B-2).	-	-	-	-
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-
B-12 Implement avoidance and minimization measures for Santa Ana sucker and other aquatic organisms. (See Impact B-12).	-	-	-	-
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-
H-1a: Implement an Erosion Control Plan and demonstrate compliance with water quality permits. (See Impact B-1).	-	-	-	-
Impact B-40: The Project could interfere with established bird and	bat migratory co	rridors.		
No Recommendations.	-	-	-	
Impact B-41: Corona noise could result in disturbance to wildlife.				
No Recommendations.	-	-	-	-
Impact B-42: The Project would result in effects to Management Inc	dicator Species.			
B-1a: Provide restoration/compensation for impacts to native vegetation communities. (See Impact B-1).	-	-	-	-
B-1b: Implement a Worker Environmental Awareness Program. (See Impact B-1).	-	-	-	-
B-1c: Treat cut tree stumps with Sporax (See Impact B-1).	-	-	-	-
B-2: Implement RCA Treatment Plan. (See Impact B-2).	-	-	-	-
B-3a: Prepare and implement a Weed Control Plan. (See Impact B-3).	-	-	-	-
B-3c: Remove weed seed sources from assembly yards/staging areas (See Impact B-3).	-	-	-	-
B-5: Conduct pre-construction surveys and monitoring for breeding birds. (See Impact B-5).	-	-	-	-
B-8b: Conduct biological monitoring. (See Impact B-8).	-	-	-	-
B-9: Conduct protocol surveys for arroyo toads and implement avoidance measures in occupied areas. (See impact B-9)				
B-30: Conduct pre- and during construction nest surveys for spotted owl. (See Impact B-30).	-	-	-	-
AQ-1a: Implement Construction Fugitive Dust Control Plan. (See Impact B-1).	-	-	-	-
H-1a: Implement an Erosion Control Plan and demonstrate compliance with water quality permits. (See Impact B-1).	-	-	-	-
H-1b: Dry Weather Construction. (See Impact B-8).	-	-	-	-

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