B0018-37

Attachment A
Revised "Additional Mitigation Measures"
LEAPS Transmission-Only Alternative
The Nevada Hydro Company, Inc.

Final EIR/EIS 3-1018 October 2008

REVISED ADDITIONAL MITIGATION MEASURES LEAPS TRANSMISSION-ONLY ALTERNATIVE¹

Number	Mitigation Measure
	Provide restoration/compensation for affected sensitive vegetation communities. Surface-disturbing components of the project shall be located in previously disturbed areas or where habitat quality is poor to the extent possible, and disturbance of vegetation and soils shall be minimized. If avoidance of sensitive vegetation communities is not feasible due, for example, to physical or safety constraints, the Applicant shall restore temporarily impacted areas to preconstruction conditions following construction (or emergency repairs) and shall permanently block off all public access to them, and/or shall purchase/dedicate suitable habitat for preservation to off-set permanently impacted areas. Restoration of some vegetation communities in temporarily impacted areas may not be possible if those areas are subject to vegetation management to maintain proper clearance between transmission lines and vegetation. In those instances, the mitigation shall consist of off-site acquisition and preservation of the vegetation community instead. Restoration involves recontouring the land, replacing the topsoil (if it was collected), planting seed and/or container stock, and maintaining (i.e., weeding, replacement planting, supplemental watering, etc.) and monitoring the restored area for a period five years. Restoration in the Cleveland National Forest (CNF) shall be maintained and monitored for a minimum of five years. The success of the restoration is usually based on how the habitat compares with similar, nearby, undisturbed habitat. Any restoration efforts would be subject to a Habitat Restoration Plan approved by the Lead Agencies [defined as the CPUC from a CEQA perspective and both FERC and the USDA Forest Service from a NEPA perspective] and other agencies with jurisdiction over the project. Mitigation ratios and mitigation acreages for construction within authorized limits on nonfederal lands in San Diego County are provided in Table D.2-7 [in the Sunrise DEIR/DEIS]. The mitigation ratios also apply to impacts from eme
	Non-federal lands in Riverside County will be addressed under the requirements of the "Western Riverside County Multiple Species Habitat Conservation Plan" (Riverside County MSHCP) and minimization efforts will be completed. Loss of habitat would be compensated through payment of a mitigation fee that would be used to purchase lands under the authority of the Riverside Conservation Authority (RCA) as a part of the Riverside County MSHCP requirement.
	USDA Forest Service lands and any other federal lands will require a habitat mitigation plan that meets USDA Forest Service habitat objectives and standards and provides additional enhancement measures to offset unavoidable effects that are inconsistent with the Land Management Plan. At a minimum, the plan will include mitigation ratios for the permanent loss of habitat at a ratio of 1:1 for habitats that are sensitive or support listed species, coastal sage scrub, and riparian oak woodlands.
	All limits of construction shall be delineated with orange construction fencing. During and after construction, entrances to access roads shall be gated to prevent the unauthorized use of these roads by the general public.
B-1a(LE)	Signs prohibiting unauthorized use of the access roads shall be posted on these gates.
	Any impacts associated with unauthorized activity (e.g., exceeding approved construction footprints) shall be mitigated at a 5:1 ratio (5.5:1 in FTHL MA [Flat Tailed Horned Lizard Management Area]) on non-federal lands in San Diego County. Restoration of the unauthorized impacts shall be credited at a 1:1 ratio (i.e., mitigated by in-place habitat restoration); the remaining 4:1 (or 4.5:1 in FTHL MA) shall be acquired off site on non-federal lands in San Diego County.
	Areas to be restored shall include all areas temporarily impacted by construction, such as tower construction sites, laydown/staging areas, temporary access and spur roads, and existing tower locations where towers are removed. Where on-site restoration is planned, the Applicant shall identify a qualified Habitat Restoration Specialist to be approved by the Lead Agencies and other agencies with jurisdiction over the project. The Habitat Restoration Specialist shall prepare and implement a Habitat Restoration Plan, for restoring temporarily impacted sensitive vegetation communities, to be approved by the Lead Agencies and other agencies with jurisdiction over the project. The Applicant shall work with the Lead Agencies and other agencies with jurisdiction over the project until a plan is approved by all. This Habitat Restoration Plan must be approved in writing by the above-listed agencies prior to the initiation of any vegetation disturbing activities. Hydroseeding, drill seeding, or an otherwise proven restoration technique shall be utilized on all disturbed surfaces using a locally endemic native seed mix approved by the Lead Agencies and other agencies with jurisdiction over the project. The Habitat Restoration Plan shall incorporate the measures identified in the May 25, 2006 Memorandum of Understanding among Edison Electric Institute, USDA Forest Service, BLM, USFWS, National Park Service, and the Environmental Protection Agency (Edison Electric Institute, et al., 2006) where applicable. The MOU discusses vegetation management along ROWs for electrical transmission and distribution facilities on federal lands. The major provisions of the MOU include reducing soil erosion and water quality impacts; promoting local ecotypes in revegetation projects; planting native species and protecting rare species; and reducing the introduction of non-native, invasive or noxious plant species to the ROWs. The MOU can be viewed online at http://www.eei.org/industry_issues/environment/land/vegetation_management/EEI_MOU_FINA
	The following habitat restoration requirements are not included in the MOU described above. The restoration of habitat shall be maintained and monitored for five years after installation by an experienced, licensed qualified Habitat Restoration Contractor, or until established success criteria identified in the Restoration Plan (specified percent cover of native and non-native species, species diversity, and species composition as compared with an undisturbed reference site) are met. Maintenance and monitoring for restoration in CNF shall be for a minimum of five years, even if established success criteria are met before the end of five years. Maintenance and monitoring shall be conducted following a prescribed schedule to assess progress and identify potential problems with the restoration.

REVISED "ADDITIONAL MITIGATION MEASURES" LEAPS TRANSMISSION-ONLY ALTERNATIVE

(Continued)

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Number	Mitigation Measure
B-1a(LE) (Cont.)	Remedial action (e.g., additional planting, weeding, erosion control, use of container stock, supplemental watering, etc.) shall be taken by an experienced, licensed gualified Habitat Restoration Contractor during the maintenance and monitoring period if necessary to ensure the success of the restoration. If the restoration fails to meet the established success criteria after the maintenance and monitoring period, maintenance and monitoring shall extend beyond the five-year period until the criteria are met or unless otherwise approved by the Lead Agencies and other agencies with jurisdiction over the project. For areas where habitat restoration cannot meet mitigation requirements, off-site purchase and dedication of habitat shall be provided at the mitigation ratios provided in Table D.2-7 [in the Sunrise DEIR/DEIS] or as otherwise required by other agencies with jurisdiction over the project.
	Tree Mitigation. Mitigation for loss of native trees or native tree trimming shall be provided by (1) acquiring and preserving habitat within which the trees occur and/or (2) restoring (i.e., planting) trees on land that would not be subject to vegetation clearing (either in the Applicant's ROW and/or on land acquired and preserved). Any land to be used for this mitigation shall be approved by the Lead Agencies and other agencies with jurisdiction over the project.
	For habitat acquisition and preservation on non-federal lands in San Diego County, the mitigation ratios shall follow those in Table D.2-7 [in the Sunrise DEIR/DEIS]. For example, removal of coast live oak trees (that occur in coast live oak woodland) shall require mitigation at a 3:1 ratio based on the permanent impact to the summed acreage of all individual coast live oak trees impacted. Therefore, if the total acreage of all individual coast live oak trees in coast live oak woodland impacted is 10 acres, then 30 acres of coast live oak woodland shall be acquired and preserved. For all trimmed native trees, the ratio shall be 1:1. For restoration (planting trees), these guidelines, based on recommendations from the CDFG, shall be followed. [1] Native trees that are removed shall be replaced in-kind as follows. [a] Trees less than five inches diameter at breast height (DBH) shall be replaced at 3:1. [b] Trees between five and 12 inches DBH shall be replaced at 2:1. [c] Trees between 12 and 36 inches shall be replaced in-kind as follows. [a] Trees less than 12 inches DBH shall be replaced at 2:1. [b] Trees greater than 12 inches DBH shall be replaced at 5:1.
	Non-federal lands in Riverside County will be addressed under the requirements of the Riverside County MSHCP and minimization efforts will be completed. Loss of coast live oak trees (that occur in coast live oak woodland) shall require mitigation at a 1:1 ratio based on the permanent impact to the summed acreage of all individual coast live oak trees impacted. Therefore, if the total acreage of all individual coast live oak trees in coast live oak woodland impacted is 10 acres, then 10 acres of coast live oak woodland shall be acquired and preserved. For all trimmed native trees, the ratio shall also be 1:1. The loss of habitat would be compensated for in a mitigation fee that would be used to purchase lands under the authority of the RCA as a part of the Riverside County MSHCP requirements.
	USDA Forest Service lands and any other federal lands will require a habitat mitigation plan that meets USDA Forest Service habitat objectives and standards and provide additional enhancement measures to offset unavoidable effects that are inconsistent with the Land Management Plan. At a minimum, the plan will include mitigation ratios for the permanent loss of habitat at 1:1 for habitats that are sensitive or support listed species, coastal sage scrub, and riparian oak woodlands.
	All restoration shall be maintained and monitored for a minimum of 40 <u>5</u> years. The restoration shall be directed according to a Habitat Restoration Plan approved by the Lead Agencies and other agencies with jurisdiction over the project.
	Mitigation Parcels/Habitat Management Plans. All off-site mitigation parcels shall be approved by the Lead Agencies and other agencies with jurisdiction over the project and must be acquired prior to the initiation of vegetation disturbing activities. Fees associated with the Riverside County MSHCP must be deposited prior to any vegetation disturbing activities, although the exact lands to be purchased or enhanced would be under the direction of the RCA. A Habitat Management Plan shall be prepared by a biologist approved by the Lead Agencies and other agencies with jurisdiction over the project for all acquired off-site mitigation parcels. The Habitat Management Plan must be approved in writing by the Lead Agencies and other agencies with jurisdiction over the project prior to the initiation of any vegetation disturbing activities. The Applicant shall work with the Lead Agencies and other agencies with jurisdiction over the project until a plan is approved by all. The Habitat Management Plan shall provide direction for the preservation and in-perpetuity management of all acquired, off-site mitigation parcels. The Habitat Management Plan shall include, but shall not be limited to: [1] Legal descriptions of all mitigation parcels approved by the Lead Agencies and other agencies with jurisdiction over the project. [b] Baseline biological data for all mitigation parcels. [3] Designation of a land management entity approved by the Lead Agencies and other agencies with jurisdiction over the project to provide in-perpetuity management. [4] A Property Analysis Record prepared by the designated land management entity that explains the amount of funding required to implement the Habitat Management Plan. [5] Designation of responsible parties and their roles (e.g., provision of endowment by the Applicant to fund the Habitat Management Plan and implementation of the Habitat Management Plan by the designated land management entity). [6] Management specifications including, but not limited to, regular biological surveys to c
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REVISED "ADDITIONAL MITIGATION MEASURES" LEAPS TRANSMISSION-ONLY ALTERNATIVE

(Continued)

Number	(Continued) Mitigation Measure
	Implement appropriate avoidance/minimization/compensation strategies for vernal pools and fairy shrimp habitat. Direct impacts to vernal pools and water-holding basins (aka road pools) shall be avoided where the absence of federally listed fairy shrimp has not been proven by USFWS protocol wet/dry sampling and/or where the absence of vernal pool indicator species has not been proven. Indirect impacts to vernal pool watersheds shall also be avoided. Temporary and permanent access roads shall not enter vernal pools or water holding basin areas unless absolutely necessary. Where not avoided, the following mitigation shall be implemented.
	Prior to construction, a qualified biologist (to be approved by the Lead Agencies and other agencies with jurisdiction over the project; see Mitigation Measure B-1c[LE]) shall clearly stake and flag all vernal pools and potential water-holding basins that occur in proximity to the project that are not within the impact zone. In addition to vehicles being restricted from the staked and flagged areas, crewmembers on foot shall also avoid these areas. The qualified biologist shall conduct a preconstruction training session for the construction crew to inform them of the constraints. The qualified biologist shall ensure compliance with this mitigation measure by being present during all construction activities in areas with vernal pools and water-holding basins.
	Access roads, including those used during maintenance activities, containing water-holding basins with demonstrated presence of federally listed species shall be used only when the water-holding basins are completely dry. If access roads must be used while any portion of the above identified depressions within the roads are wet, metal plating or bridging shall be placed over the depressions to prevent alteration of the depression topography and hydrology, and to prevent impacts to fairy shrimp (where the absence of fairy shrimp has not been proven). This bridging or plating shall not be left in place for more than three weeks. Any bridging or plating shall be considered a direct impact to federally listed fairy shrimp (where not proven absent) and shall be mitigated in accordance with this mitigation measure as follows.
	Permanent impacts to vernal pools shall be mitigated in the form of vernal pool habitat restoration at a 2:1 ratio outside the impact zone. Temporary impacts to vernal pools shall be mitigated at a 2 1:1 ratio in the form of 1:1 on-site habitat restoration and 1:1 vernal pool habitat restoration outside the impact zone.
B-1b(LE)	Permanent impacts to occupied federally listed fairy shrimp habitat shall be mitigated in the form of vernal pool habitat restoration at a 2:1 ratio outside the impact zone. Temporary impacts to occupied fairy shrimp habitat shall be mitigated at a 2 1:1 ratio in the form of 1:1 on-site habitat restoration and 1:1 vernal pool habitat restoration outside the impact zone.
	Unauthorized impacts to vernal pools or occupied fairy shrimp habitat shall be mitigated at a 5:1 ratio. Restoration of the unauthorized impacts shall be credited at a 1:1 ratio; the remaining 4:1 shall be mitigated in the form of vernal pool restoration outside the impact zone.
	The location selected for vernal pool restoration shall be located in the project region, be appropriate for vernal pool restoration, and be acceptable to the Lead Agencies and other agencies with jurisdiction over the project. The Applicant shall identify a qualified Habitat Restoration Specialist to be approved by the Lead Agencies and other agencies with jurisdiction over the project. The Habitat Restoration Specialist shall prepare and implement a Mitigation Plan to be approved in writing by the Lead Agencies and other agencies with jurisdiction over the project. This Mitigation Plan, including the specific location and methods of the restoration efforts (e.g., removal of non-native plant species, use of salvaged vernal pool soils), must be approved in writing prior to the initiation of any activities which will impact (directly or indirectly) vernal pools or water-holding basins. The Applicant shall work with the Lead Agencies and other agencies with jurisdiction over the project until a plan is approved by all.
	The restoration of vernal pool habitat shall include the salvage of vernal pool/water-holding basin soils that would be impacted and that likely contain federally listed fairy shrimp cysts. The soils shall be used in the restoration of vernal pool habitat. The restored vernal pool habitat shall be maintained and monitored for five years after installation, or until established success criteria identified in the Mitigation Plan (e.g., specified percent cover of native and non-native species, species diversity, and species composition as compared with undisturbed reference pools) are met. If the mitigation fails to meet the established success criteria after the five-year maintenance and monitoring period, maintenance and monitoring shall extend beyond the five-year period until the criteria are met or unless otherwise approved by the Lead Agencies and other agencies with jurisdiction over the project.
	A Habitat Management Plan shall be prepared by a biologist approved by the Lead Agencies and other agencies with jurisdiction over the project for all vernal pool habitat restoration areas. The Habitat Management Plan must be approved in writing by the Lead Agencies and other agencies with jurisdiction over the project prior to the initiation of any activities which may impact (directly or indirectly) vernal pools or water-holding basins. The Applicant shall work with the Lead Agencies and other agencies with jurisdiction over the project until a plan is approved by all. The Habitat Management Plan shall provide direction for the preservation and in-perpetuity management of all vernal pool habitat restoration areas.

REVISED "ADDITIONAL MITIGATION MEASURES" LEAPS TRANSMISSION-ONLY ALTERNATIVE

(Continued)

Number	Mitigation Measure
B-1b(LE) (Cont.)	The Habitat Management Plan shall include, but shall not be limited to: [1] Legal descriptions of all restoration areas approved by the Lead Agencies and other agencies with jurisdiction over the project. [2] Baseline biological data for all restoration areas. [3] Designation of a land management entity approved by the Lead Agencies and other agencies with jurisdiction over the project to provide in-perpetuity management. [4] A Property Analysis Record prepared by the designated land management entity that explains the amount of funding required to implement the Habitat Management Plan. [5] Designation of responsible parties and their roles (e.g., provision of endowment by the Applicant to fund the Habitat Management Plan by the designated land management entity). [6] Management specifications including, but not limited to, regular biological surveys to compare with baseline exotic, non-native species control; fence/sign replacement or repair, public education; trash removal; and annual reports to the Lead Agencies and other agencies with jurisdiction over the project.
B-1c(LE)	Conduct biological monitoring. Monitoring shall be provided by a qualified biologist approved by the Lead Agencies and other agencies with jurisdiction over the project to ensure that all impacts occur within designated limits. Monitoring entails communicating with contractors, taking daily notes, and ensuring that the requirements of the APMs [Applicant Proposed Measures] and mitigation measures are being met by being present during construction activities. The qualified biologist shall conduct monitoring for any area subject to disturbance from construction activities (or access roads used during maintenance activities in the case of vernal pools/water-holding basins; see Mitigation Measure B-1b[LE]). The Applicant, its contractors and subcontractors, and their respective project personnel, shall refer all environmental issues, including wildlife relocation, sick or dead wildlife, hazardous waste, or questions about environmental impacts to the qualified biologist. Experts in wildlife handling (e.g., Project Wildlife) may need to be brought in by the qualified biologist for assistance with wildlife relocations.
	The qualified biologist shall have the authority to issue stop work orders if any part of the mitigation measures or APMs are being violated. The qualified biologist shall immediately notify the Lead Agencies and other agencies with jurisdiction over the project of any significant events discovered during the monitoring. Reinitiation of work following a stop work order shall only occur when the Lead Agencies and other agencies with jurisdiction over the project are satisfied that the impacts have been fully documented, that compensation for these impacts shall be made, and that any additional protection measures they deem necessary shall be undertaken.
B-1d BIO-APM-1	Perform protocol surveys. The Applicant would perform any detailed on-the-ground protocol surveys, with regard to specific sensitive plant or wildlife species whose habitat would be impacted by the project based on final design, in accordance with State or federal regulations or statutes. The Applicant would submit results of these surveys to the USFWS and CDFG and consult on reasonable and feasible mitigation measures for potential impacts, prior to any ground disturbing activities in a particular area. Mitigation would prioritize avoidance as the primary means to address impacts. If avoidance is not feasible, then relocation/restoration would be implemented. Where relocation/restoration is not feasible or deemed not to fully address impacts, then mitigation through on- or off-site purchase or dedication of habitat at a ratio of 2:1 for impacts inside preserves and 1:1 for impacts outside of preserves would be identified and implemented. [BIO-APM-1]
B-1e BIO-APM-2	Train project personnel. Prior to construction, all the Applicant's contractors, subcontractors and project personnel would receive training regarding the appropriate work practices necessary to effectively implement the biological APMs [Applicant's Proposed Measures] and to comply with the applicable environmental laws and regulations including appropriate wildlife avoidance, and impact minimization procedures, the importance of these resources and the purpose and necessity of protecting them; and methods for protecting sensitive ecological resources. [BIO-APM-2]
B-1f BIO-APM-4	Construction and survey activities shall be restricted based on final design engineering drawings. The area limits of project construction and survey activities would be predetermined based on the temporary and permanent disturbance areas noted on the final design engineering drawings, with activity restricted to and confined within those limits. Survey personnel shall keep survey vehicles on existing roads. During project surveying activities, brush clearing for footpaths, line-of-sight cutting, and land surveying panel point placement in sensitive habitat would require prior approval from the project biological resource monitor in conformance with the APMs. Hiking off roads or paths for survey data collection is allowed year-round as long as other APMs are met. Stringing of new wire and reconductoring for the project would be allowed year round in sensitive habitats if the conductor is not allowed to drag on the ground or in brush and all vehicles used during stringing remain on project access roads. Where stringing requires that conductor drop within brush of drag on or through the brush or ground or vehicles leave project access roads, the Applicant would perform a site survey, or more as appropriate, to determine presence or absence of endangered nesting birds or other endangered species in the work area. The Applicant would submit results of this survey to the USFWS and CDFG and consult on reasonable and feasible mitigation measures for potential impacts, prior to dropping wire in brush, dragging wire on the ground or through brush, or taking vehicles off project access roads. However, this survey would not replace the need for the Applicant to perform detailed on-the-ground surveys as otherwise required by BIO-APM-1 [B-1d]. No paint or permanent discoloring agents would be applied to rocks or vegetation to indicate limits of survey or construction activity where any sensitive biological resources or wildlife habitats are encountered in the field. [BIO-APM-4]

REVISED "ADDITIONAL MITIGATION MEASURES" LEAPS TRANSMISSION-ONLY ALTERNATIVE

(Continued)

Number	Mitigation Measure
B-1g BIO-APM-5	Build access roads at right angles to streambeds and washes. To the extent feasible, access roads would be built at right angles to the streambeds and washes. Where it is not feasible for access roads to cross at right angles, the Applicant would limit roads constructed parallel to streambeds or washes to a maximum length of 500 feet at any one transmission line crossing location. Such parallel roads would be constructed in a manner that minimizes potential adverse impacts on "waters of the U.S." or waters of the State. Streambed crossings and roads constructed parallel to streambeds would require review and approval of necessary permits from the ACOE, CDFG, and RWQCB. Culverts would be installed where needed for right angle crossings, but rock crossings would be utilized across most right angle drainage crossings. All construction and maintenance activities would be conducted in a manner that would minimize disturbance to vegetation, drainage channels and stream banks (e.g., structures would not be located within a stream channel, construction activities would avoid sensitive features). Prior to construction in streambeds and washes, the Applicant would perform a pre-activity survey, or more as appropriate, to determine the presence or absence of endangered riparian species. However, this survey would not replace the need for the Applicant to perform detailed on-the-ground surveys as otherwise required by the BIO-APM-1 [B-1d], [BIO-APM-5]
B-1h BIO-APM-6	Comply with all applicable environmental laws and regulations. In the construction, operation, and maintenance of the project, the Applicant would comply with all applicable environmental laws and regulations, including, without limitation, those regulating and protecting wildlife and its habitat. [BIO-APM-6]
B-1i BIO-APM-3 BIO-APM-17	Restrict the construction of access and spur roads. Except when not feasible due to physical or safety constraints, all project vehicle movement would be restricted to existing access roads and access roads constructed as a part of the project and determined and marked by the Applicant in advance for the contractor, contractor-acquired accesses, or public roads. New access road construction for the project would be allowed year-round. However, when feasible, every effort would be made to avoid constructing roads during the nesting season. When it is not feasible to keep vehicles on existing access roads or to avoid constructing new access roads during the nesting, breeding, or flight season, the Applicant would perform a site survey, or more as appropriate, in the area where the work is to occur. This survey would be performed to determine presence or absence of endangered nesting birds, or other endangered species in the work area. The Applicant would submit results of this survey to the USFWS and CDFG and consult on reasonable mitigation measures to avoid or minimize for potential impacts, prior to vehicle use off existing access roads or the construction of new access roads. However, this survey would not replace the need for the Applicant to perform detailed on-the-ground surveys otherwise required by BIO-APM-1 [B-1d]. Parking or driving undermeath oak trees is not allowed in order to protect root structures. In addition to regular watering to control fugitive dust created during clearing, grading, earthmoving, excavation, and other construction activities which could interfere with plant photosynthesis, a 15 miles per hour speed limit shall be observed on dirt access roads to reduce dust and allow reptiles and small mammals to disperse. [BIO-APM-3]
	and new access roads or spur roads constructed as part of the project that are not required as permanent access for future project maintenance and operation would be permanently closed. Where required, roads would be permanently closed using the most effective feasible and least environmentally damaging methods appropriate to that area with the concurrence of the underlying landowner and the governmental agency having jurisdiction (e.g., stockpilling and replacing topsoil or rock replacement). This would limit new or improved accessibility into the area. Mowing of vegetation can be an effective method for protecting the vegetative understory while at the same time creating access to the work area. Mowing should be used when permanent access is not required since, with time, total re-vegetation is expected. If mowing is in response to a permanent access need, but the alternative of grading is undesirable because of downstream siltation potential, it should be recognized that periodic mowing would be necessary to maintain permanent access. The project biological construction monitor shall conduct checks on mowing procedures to ensure that mowing for temporary or permanent access roads is limited to a 14-foot-wide area on straight portions of the road and a 16- to 20-foot-wide area at turns, and that the mowing height is no less than 4 inches from finished grade. [BIO-APM-17]
B-2a(LE)	Provide restoration/compensation for affected jurisdictional areas. Impacts to areas under the jurisdiction of the ACOE, RWQCB, and CDFG shall be avoided to the extent feasible. Where avoidance of jurisdictional areas is not feasible (including for emergency repairs), the Applicant shall provide the necessary mitigation required as part of wetland permitting by creation/restoration/preservation of suitable jurisdictional habitat along with adequate buffers to protect the function and values of jurisdictional area mitigation. The location(s) of the mitigation would be determined in consultation with the Lead Agencies and other agencies with jurisdiction over the project as part of the wetland permitting process, it is anticipated that the sites would be in close proximity to the impacts or in the same watershed. A jurisdictional delineation and impact assessment shall be prepared based on the final alignment and final engineering plans when they are complete. Mitigation ratios would range from 4:4-up-to-4:4-and-would depend on the sensitivity of the jurisdictional habitat and on the requirements of the wetland permitting agencies. The width of wetland buffers would also depend on the sensitivity of the jurisdictional habitat and on the requirements of the wetland permitting agencies. Recommended mitigation ratios for vegetation communities that generally occur in jurisdictional areas are provided in Table D.2-7 [in the Sunrise-DEIR/DEIS]. It is anticipated that at least a 1:1 ratio of the mitigation would include creation of jurisdictional habitat so there would be no net loss of jurisdictional habitat.

REVISED "ADDITIONAL MITIGATION MEASURES" LEAPS TRANSMISSION-ONLY ALTERNATIVE

(Continued)

Number	Mitigation Measure
	For example, permanent impacts to emergent wetland would require a 2:1 mitigation ratio. Half (or 1:1) of the mitigation acreage would have to consist of created emergent wetland in an appropriate location to be preserved, and the other half (1:1) would require acquisition and preservation of already-existing emergent wetland (or other wetland community acceptable to the permitting agencies — ACOE, RWQCB, and other agencies with jurisdiction over the project). It is also anticipated that a 1:1 ratio would be required for impacts to jurisdictional non-wetland Waters of the U.S. in the form of wetland enhancement, restoration, or creation as determined in consultation with the permitting agencies. Wetland permits shall be obtained from the ACOE, RWQCB, and CDFG prior to initiating construction in jurisdictional areas.
	All limits of construction shall be delineated with orange construction fencing. All stakes, flagging, or fencing shall be removed no later than 30 days after construction is complete. During and after construction, entrances to access roads shall be gated to prevent the unauthorized use of these roads by the general public. Signs prohibiting unauthorized use of the access roads shall be posted on these gates.
	Any impacts associated with unauthorized activity (e.g., exceeding approved construction footprints) shall be mitigated as follows, unless otherwise directed by the ACOE, RWQCB, and CDFG: restoration of the unauthorized impacts shall be credited at a 1:1 ratio; the remaining 4:1 (or-4.5:1-in-FTHL-MA) shall be acquired off site.
B-2a(LE) (Cont.)	The Applicant shall identify a qualified Habitat Restoration Specialist to be approved by the Lead Agencies and other agencies with jurisdiction over the project. The Habitat Restoration Specialist shall prepare and implement a Wetland Mitigation Plan to be approved in writing by the Lead Agencies and other agencies with jurisdiction over the project. The Applicant shall work with the above-listed agencies until a plan is approved by all. The mitigation of habitat shall be maintained and monitored for five years after installation, or until established success criteria (specified percent cover of native and non-native species, species diversity, and species composition as compared with an undisturbed reference site) are met, to assess progress and identify potential problems with the mitigation. Remedial action (e.g., additional planting, weeding, erosion control, use of container stock, supplemental watering, etc.) shall be taken during the maintenance and monitoring period if necessary to ensure the success of the mitigation. If the mitigation fails to meet the established performance criteria after the five-year maintenance and monitoring period, maintenance and monitoring shall extend beyond the five-year period until the criteria are met or unless otherwise approved by the Lead Agencies and other agencies with jurisdiction over the project.
	A Habitat Management Plan shall be prepared by a biologist approved by the Lead Agencies and other agencies with jurisdiction over the project for all acquired off-site mitigation parcels. The Habitat Management Plan must be approved in writing by the Lead Agencies and other agencies with jurisdiction over the project prior to the initiation of any activities which may impact jurisdictional areas. The Applicant shall work with the Lead Agencies and other agencies with jurisdiction over the project until a plan is approved by all.
	The Habitat Management Plan shall provide direction for the preservation and in-perpetuity management of all acquired, off-site mitigation parcels. The Habitat Management Plan shall include, but shall not be limited to: [1] Legal descriptions of all mitigation parcels approved by the Lead Agencies and other agencies with jurisdiction over the project. [2] Baseline biological data for all mitigation parcels. [3] Designation of a land management entity approved by the Lead Agencies and other agencies with jurisdiction over the project to provide in-perpetuity management. [4] A Property Analysis Record prepared by the designated land management entity that explains the amount of funding required to implement the Habitat Management Plan. [5] Designation of responsible parties and their roles (e.g., provision of endowment by the Applicant to fund the Habitat Management Plan and implementation of the Habitat Management Plan by the designated land management entity). [6] Management specifications including, but not limited to, regular biological surveys to compare with baseline; exotic, non-native species control; fence/sign replacement or repair, public education; trash removal; and annual reports to Lead Agencies and other agencies with jurisdiction over the project.
B-2b BIO-APM-16	Identify environmentally sensitive times and locations for tree trimming. Environmentally sensitive tree trimming locations for the project would be identified in the Applicant's vegetation management tree trim database utilized by tree trim contractors. The biological field construction monitor shall be contacted prior to trimming in environmentally sensitive areas. Whenever feasible, trees in environmentally sensitive areas, such as areas of riparian or native scrub vegetation, would be scheduled for trimming during non-sensitive (i.e., outside breeding or nesting) times. Where trees cannot be trimmed during non-sensitive times, the Applicant would perform a site survey, or more as appropriate, to determine presence or absence of endangered nesting bird species in riparian or native scrub vegetation. The Applicant would submit results of this survey to the USFWS and CDFG and consult on mitigation measures for potential impacts, prior to tree trimming in environmentally sensitive areas. However, this survey would not replace the need for the Applicant to perform detailed on-the-ground surveys as otherwise required by BIO-APM-1 [B-1d]. Where riparian areas with over-story vegetation are crossed, tree removal (i.e., clear-cut) widths would be varied where feasible to minimize visual landscape contrast and to maintain habitat diversity at established wildlife corridor edges. Where tree removal widths cannot be varied, the Applicant would consult with the USFWS and CDFG to develop alternative tree removal options that could reasonably maintain edge diversity, [BIO-APM-16]