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**GAVIN NEWSOM, Governor**  
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Governor's Office of Planning & Research

July 8, 2020

**Jul 09 2020**

## STATE CLEARINGHOUSE

Eric Limas  
General Manger  
Lower Tule River Irrigation District  
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**Subject: Tule River Basin Investigation/Success Lake Capacity Expansion  
Notice of Preparation  
State Clearinghouse No. 1999044004**

Dear Mr. Limas:

The California Department of Fish and Wildlife (CDFW) received a Notice of Preparation from the Lower Tule River Irrigation District for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.<sup>1</sup>

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code. While the comment period may have passed, CDFW would appreciate if the Lower Tule River Irrigation District will still consider our comments.

### CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

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<sup>1</sup> CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code may be required.

**Nesting Birds:** CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs and nests include, sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

**Water Pollution:** Pursuant to Fish and Game Code section 5650, it is unlawful to deposit in, permit to pass into, or place where it can pass into "Waters of the State" any substance or material deleterious to fish, plant life, or bird life, including non-native species. It is possible that without mitigation measures, activities associated with the Project could result in pollution of Waters of the State from storm water runoff or construction-related erosion. Potential impacts to the wildlife resources that utilize these watercourses include the following: increased sediment input from road or structure runoff; toxic runoff associated with development activities and implementation; and/or impairment of wildlife movement along riparian corridors. The Regional Water Quality Control Board and United States Army Corps of Engineers also has jurisdiction regarding discharge and pollution to Waters of the State.

**Fully Protected Species:** CDFW has jurisdiction over fully protected species of birds, mammals, amphibians, reptiles, and fish, pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. CDFW prohibits and cannot authorize take of any fully protected species.

## **PROJECT DESCRIPTION SUMMARY**

**Proponents:** Crawford & Bowen Planning, Inc; Lower Tule River Irrigation District; United States Army Corps of Engineers

**Objective:** The objective of the Project is to increase the weir by 10-feet on Success Lake. Primary Project activities include constructing a 10-foot-high concrete ogee weir, which will raise the gross pool elevation from 655.1 feet to 665.1 feet. To accommodate the raise, California Highway 190 will be armored, rock slope protection

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will be added to Frazier Dike, and the existing transmission lines that cross the lake will be raised by Southern California Edison.

**Location:** Success Lake and Richard L. Schafer Dam which is located 5-mile east of Porterville, California, and is on Tule River.

**Timeframe:** Unspecified

## COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist Lower Tule River Irrigation District in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document.

There are many special-status resources present in and adjacent to the Project area. We recommend referring to the Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) (SCH#1999044004) prepared for the last Richard L. Schafer Dam raising project to assess potential impacts to special status species and other biological resources. There were many sensitive biological resources impacted by that proposed project, and presumably impacts to those resources would be more significant with another 10 feet of inundation. These special-status resources may need to be evaluated and addressed prior to any approvals that would allow ground-disturbing activities or land use changes. The Notice of Preparation does not mention if there are any potentially significant impacts. CDFW is concerned regarding potential impacts to special-status species including, but not limited to: the State threatened and federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*), the State and federally endangered southwestern willow flycatcher (*Empidonax traillii adastus*), least Bell's vireo (*Vireo bellii pusillus*), the State and federally endangered and State fully protected California condor (*Gymnogyps californianus*), the State endangered and fully protected bald eagle (*Haliaeetus leucocephalus*), the State fully protected golden eagle (*Aquila chrysaetos*), the State threatened Swainson's hawk (*Buteo swainsoni*), tricolored blackbird (*Agelaius tricolor*), the State endangered foothill yellow-legged frog (*Rana boylei*), the State endangered, Federally threatened, California Rare Plant Ranked (CRPR) 1B.1 San Joaquin adobe sunburst (*Pseudobahia peirsonii*), the State threatened and CRPR 1B.1 striped adobe-lily (*Fritillaria striata*), the State endangered and CRPR 1B.2 Springville clarkia (*Clarkia springvillensis*), the State threatened bank swallow (*Riparia riparia*), the State species of special concern northern California legless lizard (*Anniella pulchra*), the State species of special concern western pond turtle (*Emys marmorata*), and the State species of special concern burrowing owl (*Athene cunicularia*). In addition, lakes or streams and associated wetland or other hydrologically connected features that are subject to CDFW's lake and streambed

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alteration regulatory authority (Fish & G. Code, § 1600 et seq.) exist within the Project area.

In order to adequately assess any potential impacts to biological resources, focused biological surveys should be conducted by a qualified wildlife biologist/botanist during the appropriate survey period(s) in order to determine whether any special-status species and/or suitable habitat features may be present within the Project area. Properly conducted biological surveys, and the information assembled from them, are essential to identify any mitigation, minimization, and avoidance measures and/or the need for additional or protocol-level surveys, especially in the areas not in irrigated agriculture, and to identify any Project-related impacts under CESA and other species of concern. In addition, we recommend consulting the extensive biological resources section and related appendices of the EIR/EIS SCH#1999044004). That document included biological survey information from multiple years of study conducted by the Army Corps of Engineers, California Department of Water Resources (DWR), and several biological consultants. Copies of this document should be available from DWR, the Army Corps of Engineers (ACOE), and the State Clearinghouse.

#### **I. Environmental Setting and Related Impact**

**Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or the United States Fish and Wildlife Service (USFWS)?**

##### **COMMENT 1: San Joaquin Kit Fox (SJKF)**

**Issue:** SJKF have been documented to occur near the vicinity of the Project site (CDFW 2020). Review of aerial imagery indicates that some of the Project sites are bordered by annual grassland. SJKF den in right-of-ways (ROWs), vacant lots, etc., and populations can fluctuate over time. Presence/absence in any one year is not necessarily a reliable indicator of SJKF potential to occur on a site. SJKF may be attracted to project sites due to the type and level of ground-disturbing activities and the loose, friable soils resulting from intensive ground disturbance. As a result, there is potential for SJKF to colonize the Project sites or to occupy adjacent grassland.

**Specific impact:** Without appropriate avoidance and minimization measures for SJKF, potential significant impacts associated with Project construction include den collapse, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of young, and direct mortality of individuals.

**Evidence impact is potentially significant:** Habitat loss resulting from agricultural, urban, and industrial development is the primary threat to SJKF (Cypher et al. 2013). Very little suitable habitat remains in Tulare County (Cypher et al. 2013). The Project

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area represents some of the only remaining suitable habitat in the vicinity, which is otherwise intensively managed for agriculture, increasing the potential for SJKF to be encountered at the Project site. Therefore, ground-disturbing activities within the Project area have the potential to significantly impact local SJKF populations.

**Recommended Potentially Feasible Mitigation Measure(s)**

To evaluate potential impacts to SJKF associated with the Project, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the CEQA document prepared for this Project, and that these measures be made conditions of approval for the Project.

**Recommended Mitigation Measure 1: SJKF Habitat Assessment**

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation, to determine if the Project sites or its immediate vicinity contains suitable habitat for SJKF.

**Recommended Mitigation Measure 2: SJKF Surveys**

CDFW recommends assessing presence/absence of SJKF by conducting surveys following the protocol referenced in the USFWS "Standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance" (2011). Specifically, CDFW advises conducting these surveys in all areas of potentially suitable habitat no less than 14 days and no more than 30 days prior to beginning of ground disturbing activities.

**Recommended Mitigation Measure 3: SJKF Take Authorization**

SJKF detection warrants consultation with CDFW to discuss how to avoid take, or if avoidance is not feasible, to acquire an Incidental Take Permit (ITP) prior to ground-disturbing activities, pursuant to Fish and Game Code section 2081(b).

**COMMENT 2: Southwestern Willow Flycatcher (SWF)**

**Issue:** The Tule River Spillway Enlargement Road Realignment and Right Abutment Spillway Cut Project identifies the potential for SWF to occur in the Project area based on the nearby presence of adequate riparian habitat.

**Specific impact:** Potentially significant direct impacts associated with the Project's construction include nest abandonment, reduced reproductive success and reduced health and vigor of eggs and/or young. The extensive riparian area at the upper end of the reservoir would likely be eliminated by another 10 feet of reservoir inundation. This area contains potential SWF habitat.

**Evidence impact would be significant:** SWF is a neotropical migrant that breeds in the western United States and in California is primarily restricted to the Sierra Nevada and southern Cascades (Serena 1982). SWF was historically widespread in

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riparian willow thickets and montane meadow complexes; however, the quantity and quality of suitable habitat has been significantly reduced by many factors including urban development and the removal and destruction of riparian vegetation (USFWS 2014).

**Recommended Potentially Feasible Mitigation Measure(s)**

To evaluate potential impacts of the Project to SWF, CDFW recommends conducting the following assessment of the Project area and including the following measures as conditions of Project approval of the final CEQA document.

**Recommended Mitigation Measure 4: Focused SWF Surveys**

CDFW recommends that a qualified biologist conduct protocol-level surveys for SWF in areas of suitable habitat for the species. Specifically, CDFW recommends that surveys be conducted in accordance with the “Willow Flycatcher Survey Protocol for California” (Bombay et al. 2003).

**Recommended Mitigation Measure 5: SWF Avoidance**

If nesting SWF are observed, CDFW recommends the establishment of a ¼-mile no-disturbance buffer from May 1 to August 31, or until a qualified wildlife biologist has determined that the young have fledged and are no longer reliant on parental care for survival. Further, CDFW advises potential nesting and roosting habitat be retained to encourage occupancy by willow flycatchers within the Project area.

**Recommended Mitigation Measure 6: SWF Take Authorization**

If SWF are detected and implementation of a ¼-mile no-disturbance buffer is not feasible, consultation with CDFW is warranted to determine if the Project can avoid take. If SWF take cannot be avoided, acquisition of an ITP, pursuant Fish and Game Code section 2081(b) prior to vegetation- or ground-disturbing activities may be necessary to comply with CESA. In addition, compensatory habitat mitigation would be warranted to offset impacts to nesting habitat or habitat utilized by migrating individuals.

**COMMENT 3: Least Bell’s Vireo (LBV)**

**Issue:** LBV may occur within or near the Project site. Review of aerial imagery indicates riparian habitat is present in the southern portion of the Project area adjacent to the spillway, which could be suitable habitat.

**Specific impact:** Potentially significant direct impacts associated with the Project’s construction include nest abandonment, reduced reproductive success and reduced health and vigor of eggs and/or young.

**Evidence impact is potentially significant:** LBV were abundant and widespread in the U.S. until the 1950s (Grinnell and Miller 1944). By the 1960s, they were

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considered scarce (Monson 1960), and by 1980, there were fewer than 50 pairs remaining (Edwards 1980), although this number had increased to 2,500 by 2004 (Kus and Whitfield 2005). The primary cause of decline for this species has been the loss and alteration of riparian woodland habitats (USFWS 2006). Fragmentation of their preferred habitat has also increased their exposure to brown-headed cowbird (*Molothrus ater*) parasitism (Kus 2002). Current threats to their preferred habitat include colonization by non-native plants such as *Arundo donax* and altered hydrology (diversion, channelization, etc.) (USFWS 2006).

**Recommended Potentially Feasible Mitigation Measure(s)**

To evaluate potential impacts of the Project to LBV, CDFW recommends conducting the following assessment of the Project area and including the following measures as conditions of Project approval of the final CEQA document.

**Recommended Mitigation Measure 7: LBV Habitat Assessment**

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation, to determine if the Project Area or its immediate vicinity contains suitable habitat for LBV. Although LBV inhabit riparian woodlands, the species has also been found to benefit from non-riparian systems including brushy fields, second-growth forest or woodland, scrub oak, coastal chaparral, and mesquite brushlands (Kus and Miner 1989 *in* Poulin et al. 2011).

**Recommended Mitigation Measure 8: LBV Avoidance**

CDFW recommends that Project activities be timed to avoid the typical bird breeding season (February 1 through September 15).

**Recommended Mitigation Measure 9: LBV Surveys**

If Project activities must take place during the typical bird breeding season, and suitable LBV habitat is detected during habitat assessments, CDFW recommends assessing presence/absence of LBV by conducting surveys following the USFWS' "Least Bell's Vireo Survey Guidelines" (2001) well in advance of the start of Project implementation to evaluate presence/absence of LBV nesting in proximity to Project activities and to evaluate potential Project-related impacts and permitting needs. Additionally, CDFW advises conducting focused pre-construction surveys for LBV in all areas of potentially suitable habitat within 10 days of Project implementation, when initiated during the bird breeding season.

**Recommended Mitigation Measure 10: LBV Take Authorization**

LBV detection warrants consultation with CDFW to discuss how to avoid take, or if avoidance is not feasible, to acquire an ITP prior to ground-disturbing activities, pursuant to Fish and Game Code section 2081(b).

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**COMMENT 4: Nesting Raptors, Including California Condor (CACO), Bald Eagle (BAEA), Golden Eagle (GOEA), and Swainson's Hawk (SWHA)**

**Issue:** CACO, BAEA, and GOEA are known to occur in the vicinity of the Project area, and BAEA have been reported to roost, nest, and winter in the Project area (CDFW 2020). SWHA are known to nest in riparian habitat, which is present in the Project area. Although the Project is located on the eastern edge of the SWHA's range, there is potential for the species to occur. These species, and other nesting raptors, can forage in open grasslands, woodland foothills and riparian habitats.

**Specific impact:** Without appropriate avoidance and minimization measures for nesting raptors, potential significant impacts associated with the Project's construction include loss of foraging and/or nesting habitat, nest abandonment, reduced reproductive success, and reduced health and vigor of eggs and/or young.

**Evidence impact would be significant:** Without appropriate survey methods, CACO, BAEA, and GOEA nesting in the vicinity of a project can remain undetected resulting in avoidance and minimization measures not being effectively implemented (AERI 2010). In addition, human activity near nest sites can cause reduced provisioning rates of GOEA chicks by adults (Steidl et al. 1993 *in* Kochert et al. 2002). The primary threat to SWHA in California is loss of foraging and nesting habitat resulting from urban development and incompatible agriculture (CDFW 2016). Depending on the timing of construction, Project activities including noise, vibration, odors, and movement of workers or equipment could affect nests and have the potential to result in nest abandonment, significantly impacting local nesting raptors.

**Recommended Potentially Feasible Mitigation Measure(s)**

To evaluate potential impacts to nesting raptors associated with Project construction, CDFW recommends conducting the following evaluation of the Project area and including the following mitigation measures as conditions of approval.

**Recommended Mitigation Measure 11: Focused Surveys for Nesting Raptors**

CDFW recommends that a qualified wildlife biologist conduct surveys for nesting raptors following the survey methodology developed by the SWHA Technical Advisory Committee (SWHA TAC 2000) prior to project initiation, the "Protocol for Golden Eagle Occupancy, Reproduction, and Prey Population Assessment" (Driscoll 2010, and the "Protocol for Evaluating Bald Eagle Habitat and Populations in California" (Jackman & Jenkins 2004), as appropriate for specific species. If ground-disturbing activities take place during the normal bird breeding season (February 1 through September 15), CDFW recommends that additional pre-construction surveys for active nests be conducted by a qualified biologist no more than 10 days prior to the start of construction.



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**Recommended Mitigation Measure 12: Raptor Avoidance**

If an active raptor nest is found, CDFW recommends implementation of a minimum ½-mile no-disturbance buffer until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival.

**Recommended Mitigation Measure 13: Take Authorization**

If nesting raptors are detected and the ½-mile no-disturbance nest buffer is not feasible, consultation with CDFW is warranted to determine if the Project can avoid take. If SWHA take cannot be avoided, acquisition of an ITP, pursuant Fish and Game Code sections 2081(b) prior to vegetation- or ground-disturbing activities may be necessary to comply with CESA. Please note that CACO, BAEA and GOEA are State fully protected species. Therefore, no take, incidental or otherwise, of those species can be authorized by CDFW.

**Recommended Mitigation Measure 14: Roost Tree Avoidance and Replacement**

Reservoir inundation of (and impact to) potential eagle and other raptor roosting trees should be assessed in the DEIR prepared for the project. The DEIR should also evaluate whether or not roost tree mitigation required to minimize impacts for the previous dam raising project (EIR/EIS SCH#1999044004) would be impacted by the proposed project.

**COMMENT 5: Tricolored blackbird (TRBL)**

**Issue:** TRBL have been documented in the Project vicinity (CDFW 2020). TRBL are known to nest in riparian habitat, which is present in the southern portion of the Project adjacent to the spillway.

**Specific impact:** Without appropriate avoidance and minimization measures for TRBL, potential significant impacts associated with the Project include nest and/or colony abandonment, reduced reproductive success, and reduced health and vigor of eggs and/or young.

**Evidence impact would be significant:** TRBL aggregate and nest colonially, forming colonies of up to 100,000 nests (Meese et al. 2014). Approximately 95% of the global population is found in California (Kelsey 2008). Increasingly, TRBL are forming larger colonies that contain progressively larger proportions of the species' total population (Kelsey 2008). Their narrow geographic range and highly colonial breeding habits make TRBL particularly susceptible to disturbance and habitat loss (Kelsey 2008). Nesting can occur synchronously, with all eggs laid within one week (Orians 1961). For these reasons, depending on timing, disturbance to nesting colonies can cause abandonment, significantly impacting TRBL populations (Meese et al. 2014).

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**Recommended Potentially Feasible Mitigation Measure(s)**

To evaluate potential impacts to TRBL, CDFW recommends conducting the following evaluation of the Project site and its vicinity and including the following mitigation measures as conditions of approval.

**Recommended Mitigation Measure 15: TRBL Surveys**

CDFW recommends that construction be timed to avoid the normal bird breeding season (February 1 through September 15). However, if construction must take place during that time, CDFW recommends that a qualified wildlife biologist conduct surveys for nesting TRBL no more than 10 days prior to the start of implementation to evaluate presence/absence of TRBL nesting colonies in proximity to Project activities and to evaluate potential Project-related impacts.

**Recommended Mitigation Measure 16: TRBL Avoidance**

If an active TRBL nesting colony is found during preconstruction surveys, CDFW recommends implementation of a minimum 300-foot no-disturbance buffer in accordance with CDFW's "Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields in 2015" (CDFW 2015). CDFW advises that this buffer remain in place until the breeding season has ended or until a qualified biologist has determined that nesting has ceased, the birds have fledged, and are no longer reliant upon the colony or parental care for survival. It is important to note that TRBL colonies can expand over time, and for this reason, the colony should be reassessed to determine the extent of the breeding colony within 10 days of Project initiation.

**Recommended Mitigation Measure 17: TRBL Take Avoidance**

In the event that a TRBL nesting colony is detected during surveys, consultation with CDFW is warranted to discuss how to implement the project and avoid take, or if avoidance is not feasible, to acquire an ITP, pursuant to Fish and Game Code section 2081(b), prior to any ground-disturbing activities.

**COMMENT 6: Foothill Yellow-Legged Frog (FYLF)**

**Issue:** FYLF are primarily stream dwelling and requires shallow, flowing water in streams and rivers with at least some cobble-sized substrate (Thomson et al. 2016). The Project area is within the range of foothill yellow-legged frog and contains potentially suitable riparian habitat. Avoidance and minimization measures are necessary to reduce impacts to FYLF to a level that is less than significant.

**Specific impact:** Without appropriate avoidance and minimization measures for FYLF, potentially significant impacts associated with the Project's activities include burrow collapse, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of eggs, larvae and/or young, and direct mortality of individuals.

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**Evidence impact would be significant:** FYLF populations throughout the State have experienced ongoing and drastic declines and many have been extirpated; historically, FYLF occurred in mountain streams from the San Gabriel River in Los Angeles County to southern Oregon west of the Sierra-Cascade crest (Thomson et al. 2016). Habitat loss from growth of cities and suburbs, invasion of non-native plants, impoundments, water diversions, stream maintenance for flood control, degraded water quality, and introduced predators, such as bullfrogs are the primary threats to FYLF (Thomson et al. 2016, USFWS 2017). Project activities could have the potential to significantly impact the species.

**Recommended Potentially Feasible Mitigation Measure(s)**

To evaluate potential impacts to FYLF, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the CEQA document prepared for this Project, and that these measures be made conditions of approval for the Project.

**Recommended Mitigation Measure 18: FYLF Surveys**

CDFW recommends that a qualified wildlife biologist conduct surveys for FYLF in accordance with the USFWS “Revised Guidance on Site Assessment and Field Surveys for the California Red-legged Frog” (USFWS 2005) to determine if FYLF are within or adjacent to the Project area; while this survey is designed for California red-legged frog, the survey may be used for FYLF with focus on stream/river habitat.

**Recommended Mitigation Measure 19: FYLF Avoidance**

If any FYLF are found during pre-construction surveys or at any time during construction, consultation with CDFW is warranted to determine if the Project can avoid take. CDFW recommends that initial ground-disturbing activities be timed to avoid the period when FYLF are most likely to be moving through upland areas (November 1 and March 31). When ground-disturbing activities must take place between November 1 and March 31, CDFW recommends a qualified biologist monitor construction activity daily for FYLF.

**Recommended Mitigation Measure 20: FYLF Take Authorization**

If through surveys it is determined that FYLF are occupying or have the potential to occupy the Project site and take cannot be avoided, take authorization would be warranted prior to initiating ground-disturbing activities. Take authorization would occur through issuance of an ITP by CDFW, pursuant to Fish and Game Code section 2081(b).

**COMMENT 7: Special-status Plants**

**Issue:** Several special-status plants are known to occur in and near the Project area, including San Joaquin adobe sunburst, striped adobe-lily and Springville clarkia (CDFW 2020, EIR/EIS SCH#1999044004). Review of aerial imagery

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indicates that some of the Project site is bordered by valley and foothill grasslands known to support special-status plant species, and San Joaquin adobe sunburst, striped adobe-lily and Springville clarkia are known to occur around Success Reservoir (EIR/EIS SCH#1999044004).

**Specific impact:** Without appropriate avoidance and minimization measures for special-status plants, potential significant impacts resulting from ground- and vegetation-disturbing activities associated with construction of the Project and associated reservoir inundation may occur, including the inability to reproduce and direct mortality from changes in soil saturation and direct impacts to soil and the associated seed bank.

**Evidence impact would be significant:** Many of the special-status plant species with potential to occur at the Project site are threatened by agricultural, urban, energy, and road construction and development. Many historical occurrences of these species are presumed extirpated (CNPS 2018). Though new occurrences have recently been discovered, impacts to existing populations have the potential to significantly impact these species.

**Recommended Potentially Feasible Mitigation Measure(s)**

To evaluate potential impacts to special-status plants associated with the Project, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the CEQA document prepared for this Project, and that these measures be made conditions of approval for the Project.

**Recommended Mitigation Measure 21: Special-status Plant Surveys**

CDFW recommends that the Project area be surveyed for special-status plants by a qualified botanist following the “Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities” (CDFW 2018). This protocol, which is intended to maximize detectability, includes the identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period. In the absence of protocol-level surveys being performed, additional surveys may be necessary. In addition, we recommend consulting the extensive biological resources section and related appendices of the EIR/EIS SCH#1999044004). That document includes the results of botanical surveys conducted by DWR. During those special-status plant surveys, seven (7) populations of Tulare psuedobahia (*Pseudobahia peirsonii*) and two (2) populations of striped adobe lily (*Fritillaria striata*) were located. The locations of these plant populations are depicted on a map in EIR/EIS SCH#1999044004.

**Recommended Mitigation Measure 22: Special-status Plant Avoidance**

CDFW recommends special-status plant species be avoided whenever possible by delineation and observing a no-disturbance buffer of at least 50 feet from the outer

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edge of the plant population(s) or specific habitat type(s) required by special-status plant species. If buffers cannot be maintained, then consultation with CDFW is warranted to determine appropriate minimization and mitigation measures for impacts to special-status plant species. Reservoir inundation of (and impact to) potential eagle and other raptor roosting trees should be assessed in the DEIR prepared for the project. The DEIR should also evaluate whether or not roost tree mitigation required to minimize impacts for the previous dam raising project (EIR/EIS SCH#1999044004) would be impacted by the proposed project. In addition, reservoir inundation and direct construction-related impacts to special-status plants should be assessed in the DEIR prepared for the project. The DEIR should also evaluate whether or not avoidance and mitigation measures for special status plants required by the previous project (EIR/EIS SCH#1999044004) would be directly or indirectly impacted by the proposed project.

**Recommended Mitigation Measure 23: State-listed Plant Take Authorization**

If a plant species listed pursuant to CESA or the Native Plant Protection Act is identified during botanical surveys, consultation with CDFW is warranted to determine if the Project can avoid take. If take cannot be avoided, take authorization prior to any ground-disturbing activities may be warranted. Take authorization would occur through issuance of an ITP by CDFW, pursuant to Fish and Game Code section 2081(b).

**COMMENT 8: Other Special-status Species**

**Issue:** Project-related activities have the potential to impact other special-status species. Northern California legless lizard has been documented to occur in the Project area (CDFW 2020). CDFW has received past reports of bank swallows occupying the spillway. CDFW recommends that the CEQA document includes an impact analysis on all species with the potential to occur in the Project area including, but not limited to, Northern California legless lizard and bank swallow.

**Specific impact:** Without appropriate avoidance and minimization measures for the species mentioned above, potential significant impacts associated with the Project's construction include burrow or den collapse, nest destruction, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individual special-status wildlife species.

**Evidence impact would be significant:** The San Joaquin Valley supports a high number of narrowly distributed endemic species (USFWS 1998). Habitat loss resulting from development is among the primary threats to special-status species in the greater San Joaquin Valley. As a result, ground disturbance resulting from development of the Project has the potential to impact habitat that supports special-status species, which may result in significant impacts to local populations of these species.

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**Recommended Potentially Feasible Mitigation Measure(s)**

To evaluate potential impacts of the Project to special-status species, CDFW recommends conducting the following assessment of the Project area, including the following mitigation measures, and requiring them as conditions of approval in the Project's CEQA document.

**Recommended Mitigation Measure 24: Habitat Assessment**

CDFW recommends that a qualified biologist conduct a habitat assessment, well in advance of Project implementation, to determine if individual project areas or their immediate vicinity contain habitat suitable to support special-status plant or animal species, including, but not limited to, those mentioned above.

**Recommended Mitigation Measure 25: Species-specific Surveys**

If suitable habitat is present, CDFW recommends assessing presence/absence of special-status species by conducting surveys following recommended protocols or protocol-equivalent surveys. Recommended protocols vary by species. More information on survey and monitoring protocols for sensitive species can be found at CDFW's website (<https://www.wildlife.ca.gov/Conservation/Survey-Protocols>).

**Recommended Mitigation Measure 26: Take Avoidance**

Detection of special-status plant or animal species within or in the vicinity of the Project area, warrants consultation with CDFW to discuss how to implement ground-disturbing activities and avoid take.

**Recommended Mitigation Measure 27: Take Authorization**

In the case of State-listed species, detection warrants consultation with CDFW to discuss how to avoid take, or if avoidance is not feasible, to acquire an ITP prior to ground-disturbing activities, pursuant to Fish and Game Code section 2081(b).

**COMMENT 9: Western Pond Turtle (WPT)**

**Issue:** WPT are known to occur near the area of the Project site (CDFW 2020). WPT are known to nest in the spring or early summer within 100 meters of a water body, although nest sites as far away as 500 meter have also been reported (Thomson et al. 2016).

**Specific impact:** Without appropriate avoidance and minimization measures for WPT, potentially significant impacts associated with Project activities could include nest reduction, inadvertent entrapment, reduced reproductive success, reduction in health or vigor of eggs and/or young, and direct mortality.

**Evidence impact is potentially significant:** The Project site is in close proximity of known WPT habitat. Additionally, noise, vegetation removal, movement of workers,

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and ground disturbance as a result of Project activities have the potential to significantly impact WPT populations.

**Recommended Potentially Feasible Mitigation Measure(s)**

To evaluate potential impacts to WPT, CDFW recommends conducting the following evaluation of the Project site, adding to the CEQA document to include the following measures specific to WPT, and that these measures be made conditions of approval for the Project.

**Recommended Mitigation Measure 28: WPT Surveys**

CDFW recommends that a qualified biologist conduct focused surveys for WPT 10 days prior to Project implementation. In addition, CDFW recommends that focused surveys for nests occur during the egg-laying season (March through August) and that any nests discovered remain undisturbed until the eggs have hatched.

**Recommended Mitigation Measure 29: WPT Relocation**

CDFW recommends that if any WPT are discovered at the site immediately prior to or during Project activities, they be allowed to move out of the area on their own.

**COMMENT 10: Burrowing Owl (BUOW)**

**Issue:** BUOW may occur near the Project site. BUOW inhabit open grassland or adjacent canal banks, ROWs, vacant lots, etc., containing small mammal burrows, a requisite habitat feature used by BUOW for nesting and cover. Review of aerial imagery indicates that some of the Project site is bordered by valley and foothill grasslands and may be present within the Project site.

**Specific impact:** Potentially significant direct impacts associated with subsequent activities include burrow collapse, inadvertent entrapment, nest abandonment, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individuals.

**Evidence impact is potentially significant:** BUOW rely on burrow habitat year-round for their survival and reproduction. Habitat loss and degradation are considered the greatest threats to BUOW in California's Central Valley (Gervais et al. 2008). Subsequent ground-disturbing activities associated with the Project have the potential to significantly impact local BUOW populations. In addition, and as described in CDFW's "Staff Report on Burrowing Owl Mitigation" (CDFG 2012), excluding and/or evicting BUOW from their burrows is considered a potentially significant impact under CEQA.

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### **Recommended Potentially Feasible Mitigation Measure(s)**

To evaluate potential impacts to BUOW, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the CEQA document prepared for this Project, and that these measures be made conditions of approval for the Project.

#### **Recommended Mitigation Measure 30: BUOW Surveys**

CDFW recommends that a qualified biologist assess if suitable BUOW habitat features are present within or adjacent to the Project site (e.g., burrows). If suitable habitat features are present, CDFW recommends assessing presence/absence of BUOW by having a qualified biologist conduct surveys following the California Burrowing Owl Consortium's (CBOC) "Burrowing Owl Survey Protocol and Mitigation Guidelines" (CBOC 1993) and CDFW's Staff Report on Burrowing Owl Mitigation" (CDFG 2012). Specifically, CBOC and CDFW's Staff Report suggest three or more surveillance surveys conducted during daylight with each visit occurring at least three weeks apart during the peak breeding season (April 15 to July 15), when BUOW are most detectable.

#### **Recommended Mitigation Measure 31: BUOW Avoidance**

CDFW recommends no-disturbance buffers, as outlined in the "Staff Report on Burrowing Owl Mitigation" (CDFG 2012), be implemented prior to and during any ground-disturbing activities. Specifically, CDFW's Staff Report recommends that impacts to occupied burrows be avoided in accordance with the following table unless a qualified biologist approved by CDFW verifies through non-invasive methods that either: 1) the birds have not begun egg laying and incubation; or 2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

Location	Time of Year	Level of Disturbance		
		Low	Med	High
Nesting sites	April 1-Aug 15	200 m*	500 m	500 m
Nesting sites	Aug 16-Oct 15	200 m	200 m	500 m
Nesting sites	Oct 16-Mar 31	50 m	100 m	500 m

\* meters (m)

#### **Recommended Mitigation Measure 32: BUOW Passive Relocation and Mitigation**

If BUOW are found within these recommended buffers and avoidance is not possible, it is important to note that according to the Staff Report (CDFG 2012), exclusion is not a take avoidance, minimization, or mitigation method and is considered a potentially significant impact under CEQA. However, if necessary, CDFW recommends that burrow exclusion be conducted by qualified biologists and only during the non-breeding season, before breeding behavior is exhibited and after



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the burrow is confirmed empty through non-invasive methods, such as surveillance. CDFW recommends replacement of occupied burrows with artificial burrows at a ratio of 1 burrow collapsed to 1 artificial burrow constructed (1:1) as mitigation for the potentially significant impact of evicting BUOW. BUOW may attempt to colonize or re-colonize an area that will be impacted; thus, CDFW recommends ongoing surveillance, at a rate that is sufficient to detect BUOW if they return.

#### **COMMENT 11: Bats**

During the Tule River Basin Investigation (EIR/EIS SCH#1999044004), DWR staff and Dr. Elizabeth Pierson conducted bat surveys (Anabat/visual, mine walking surveys, and emergence counts) of the abundant abandoned mines present around Lake Success. Of the 11 bat species detected during these surveys, four are proposed or classified as special-status species; Pallid bat (*Antrozous pallidus*), nursery colony; Townsend's big-eared bat (*Corynorhinus townsendii*), maternity colony likely; long-legged myotis (*Myotis volans*), tentatively identified; and Western mastiff bat (*Eumops perotis*), foraging. These bats were detected along the upstream reach of Lake Success, near the previously proposed aggregate mining location (SCH# 2001014005). Potential project-related impacts to these special-status bats, as well as to other bat nursery or maternity colonies should be evaluated and disclosed in the DEIR. Potential project related impacts to bats inhabiting these mines could occur from direct construction impacts, noise, vibration, and inundation of one or more mine entrances from raised reservoir levels, as well as impacts to continued suitability as bat habitat from related temperature and moisture changes.

**Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS?**

#### **COMMENT 12: Riparian Habitat Removal and Disturbance**

**Issue:** The Project proposes construction of a concrete ogee weir by 10-feet to raise the gross pool elevation from 655.1 feet to 665.1 feet. The spillway channel is for most of its length a natural, pre-existing stream that drains a higher elevation area to the west and north toward the main channel of the Tule River, and is therefore a tributary stream. Aerial imagery shows that this stream and Success Lake supports vegetation within its bed and banks, including woody (i.e., tree/shrub) and herbaceous or grass species of plants. The vegetation that is within and dependent upon the stream and lake is riparian habitat. In addition, other streams that drain either into the tributary stream or the Tule River, in addition to the Tule River itself, are present in the area.

**Specific impact:** Riparian vegetation is present within the spillway stream channel as well as other streams that could be affected by Project activity. Direct impacts to

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riparian vegetation could include removal either prior to or during construction activity, within the extent of the stream and any floodplain that is present. Riparian habitat and vernal pools or other seasonal wetland features that occur adjacent to the Project site, including habitat and wetland features that may occur within the area that will be submerged when the gross pool elevation is increased to 665.1 feet.

**Evidence impact is potentially significant:** Riparian and associated floodplain and wetland areas along the Tule River, its tributaries, and surrounding Success Lake are valuable for their ecosystem processes such as protecting water quality by filtering pollutants and transforming nutrients; stabilizing stream banks to prevent erosion and sedimentation/siltation; and dissipating flow energy during flood conditions, thereby spreading the volume of surface water, reducing peak flows downstream, and increasing the duration of low flows by slowly releasing stored water into the channel through subsurface flow. The riparian vegetation and wetland features in the Project area provide potential habitat for many species, potentially including those with special status addressed above. In addition, dust creation from Project activities could settle on plant material in riparian habitats on site or off site and affect processes such as respiration, photosynthesis, pollination, and seed set.

**Recommended Mitigation Measure 33: Avoidance, Minimization and Mitigation of Riparian Habitat Impacts**

CDFW recommends that the riparian and wetland habitats of the spillway stream and off-site streams potentially and surrounding Success Lake impacted by the Project, including the Tule River and other tributaries that are within the Project activity, be described to establish the baseline condition. CDFW also recommends that the potential direct and indirect impacts to these habitats be analyzed according to each Project activity. Based on those potential impacts, CDFW recommends that the CEQA document includes measures to avoid, minimize, and/or mitigate those impacts. CDFW recommends that impacts to riparian vegetation and wetland features consider the effects to stream function and hydrology from riparian habitat loss or damage, as well as potential effects from the loss of riparian habitat or wetland features to special-status species already identified herein. CDFW specifically recommends that the addition of the weir and all involved modifications should incorporate an appropriate design to address and replace, as needed, the current stream function with riparian habitat restoration using native vegetation to replace the value to fish and wildlife provided by the lost riparian habitats. The amount of riparian habitat that is restored may need to exceed the area lost during Project implementation. If on-site restoration to replace riparian habitat that is lost due to Project activity is not feasible or not proposed, CDFW recommends off-site mitigation by restoring in-kind riparian habitat and providing for the long-term management and protection of the mitigation area. CDFW also has a no-net-loss policy regarding impacts to wetlands. When wetland habitat cannot be avoided, CDFW recommends impacts to wetlands be compensated for by the creation of new

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wetland habitat, preferably in-kind, on a minimum of an acre-for-acre basis. CDFW recommends that the riparian habitat and wetland analysis and any proposed mitigation be available for CDFW review and comment prior to the Projects approval.

## II. Editorial Comments and/or Suggestions

**Federally Listed Species:** CDFW recommends consulting with the USFWS on potential impacts to federally listed species including, but not limited to, SJKF, SWF, LBV, CACO, BAEA and plants. Take under the federal Endangered Species Act (FESA) is more broadly defined than CESA; take under FESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting. Consultation with the USFWS in order to comply with FESA is advised well in advance of any ground-disturbing activities.

**Lake and Streambed Alteration:** The Project contains activities that may result in the Project site being subject to CDFW's regulatory authority pursuant Fish and Game Code section 1600 et seq. Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may (a) substantially divert or obstruct the natural flow of any river, stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake; or (c) deposit debris, waste or other materials that could pass into any river, stream, or lake. "Any river, stream, or lake" includes those that are ephemeral or intermittent, such as the unnamed stream within the Project site, as well as those that are perennial in nature.

For additional information on notification requirements, please contact our staff in the Lake and Streambed Alteration Program at (559) 243-4593. It is important to note, CDFW is required to comply with CEQA, as a Responsible Agency, when issuing a Lake or Streambed Alteration Agreement (LSAA). If inadequate, or no environmental review, has occurred, for the Project activities that are subject to notification under Fish and Game Code section 1602, CDFW will not be able to issue the Final LSAA until CEQA analysis for the project is complete. This may lead to considerable Project delays.

**Nesting Birds:** CDFW encourages that Project implementation occur during the bird non-nesting season; however, if ground-disturbing or vegetation-disturbing activities must occur during the breeding season (February through mid-September), the Project applicant is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or relevant Fish and Game Codes as referenced above.

To evaluate Project-related impacts on nesting birds, CDFW recommends that a qualified wildlife biologist conduct pre-activity surveys for active nests no more than 10 days prior to the start of ground or vegetation disturbance to maximize the probability

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that nests that could potentially be impacted are detected. CDFW also recommends that surveys cover a sufficient area around the Project site to identify nests and determine their status. A sufficient area means any area potentially affected by the Project. In addition to direct impacts (i.e., nest destruction), noise, vibration, and movement of workers or equipment could also affect nests. Prior to initiation of construction activities, CDFW recommends that a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests. Once construction begins, CDFW recommends having a qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If behavioral changes occur, CDFW recommends halting the work causing that change and consulting with CDFW for additional avoidance and minimization measures.

If continuous monitoring of identified nests by a qualified wildlife biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or on-site parental care for survival. Variance from these no-disturbance buffers is possible when there is compelling biological or ecological reason to do so, such as when the construction area would be concealed from a nest site by topography. CDFW recommends that a qualified wildlife biologist advise and support any variance from these buffers and notify CDFW in advance of implementing a variance.

## **ENVIRONMENTAL DATA**

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a data base which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special-status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link: [http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDDB\\_FieldSurveyForm.pdf](http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDDB_FieldSurveyForm.pdf). The completed form can be mailed electronically to CNDDDB at the following email address: [CNDDDB@wildlife.ca.gov](mailto:CNDDDB@wildlife.ca.gov). The types of information reported to CNDDDB can be found at the following link: [http://www.dfg.ca.gov/biogeodata/cnddb/plants\\_and\\_animals.asp](http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp).

## **FILING FEES**

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be

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operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

## CONCLUSION

CDFW appreciates the opportunity to comment on the Notice of Preparation to assist the Lower Tule River Irrigation District in identifying and mitigating Project impacts on biological resources.

More information on survey and monitoring protocols for sensitive species can be found at CDFW's website (<https://www.wildlife.ca.gov/Conservation/Survey-Protocols>). Please see the enclosed Mitigation Monitoring (MMRP) table which corresponds with recommended mitigation measures in this comment letter. Questions regarding this letter or further coordination should be directed to Aimee Braddock, Environmental Scientist, at (559) 243-4014, extension 243, or [aimee.braddock@wildlife.ca.gov](mailto:aimee.braddock@wildlife.ca.gov).

Sincerely,

DocuSigned by:  
  
FA83F09FE08945A...

Julie A. Vance  
Regional Manager

Attachment 1

ec: Office of Planning and Research, State Clearinghouse, Sacramento

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**Attachment 1**

**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE  
RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM  
(MMRP)**

**PROJECT: Tule River Basin Investigation/Success Lake Capacity Expansion**

<b>RECOMMENDED MITIGATION MEASURE</b>	<b>STATUS/DATE/INITIALS</b>
<i>Before Disturbing Soil or Vegetation</i>	
Mitigation Measure 1: SJKF Habitat Assessment	
Mitigation Measure 2: SJKF Surveys	
Mitigation Measure 3: SJKF Take Authorization	
Mitigation Measure 4: Focused SWF Surveys	
Mitigation Measure 6: SWF Take Authorization	
Mitigation Measure 7: LBV Habitat Assessment	
Mitigation Measure 9: LBV Surveys	
Mitigation Measure 10: LBV Take Authorization	
Mitigation Measure 11: Focused Surveys for Nesting Raptors	
Mitigation Measure 13: Raptors Take Authorization	
Mitigation Measure 15: TRBL Surveys	
Mitigation Measure 17: TRBL Take Authorization	
Mitigation Measure 18: FYLF Surveys	
Mitigation Measure 20: FYLF Take Authorization	
Mitigation Measure 21: Special-Status Plant Surveys	
Mitigation Measure 23: State-listed Plant Take Authorization	
Mitigation Measure 24: Other Species-specific Habitat Assessment	
Mitigation Measure 25: Other Species-specific Surveys	
Mitigation Measure 27: Other Species-specific Take Authorization	
Mitigation Measure 28: WPT Surveys	
Mitigation Measure 29: WPT Relocation	
Mitigation Measure 30: BUOW Surveys	
Mitigation Measure 32: BUOW Passive Relocation and Mitigation	
Mitigation Measure 33: Avoidance, Minimization and Mitigation of Riparian Habitat Impacts	
<i>During Construction</i>	
Mitigation Measure 5: SWF Avoidance	
Mitigation Measure 8: LBV Avoidance	

<b>RECOMMENDED MITIGATION MEASURE</b>	<b>STATUS/DATE/INITIALS</b>
Mitigation Measure 12: Raptor Avoidance	
Mitigation Measure 14: Raptor Roost Tree Avoidance and Replacement	
Mitigation Measure 16: TRBL Avoidance	
Mitigation Measure 19: FYLF Avoidance	
Mitigation Measure 22: Special-status Plant Avoidance	
Mitigation Measure 26: Other Species-specific Take Avoidance	
Mitigation Measure 31: BUOW Avoidance	