State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Central Region
1234 East Shaw Avenue
Fresno, California 93710
(559) 243-4005
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

March 01, 2024

Steven Stadler
San Luis Water District
1015 6th Street
Los Banos, California 93635
sstadler@slwd.net

Chris Rigby
United States Bureau of Reclamation
1243 N Street
Fresno, California 93721
crigby@usbr.gov

Subject: San Luis Water District Los Banos Creek Detention Reservoir Storage Program (Project)
JOINT MITIGATED NEGATIVE DECLARATION/ENVIRONMENTAL ASSESSMENT (MND/EA)
State Clearinghouse No. 2024010511
CGB-EA-2023-021

Dear Steven Stadler and Chris Rigby:

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent to Adopt an MND/EA from the San Luis Water District (SLWD) and United States Bureau of Reclamation (Reclamation) for the above-referenced Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

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, CDFW appreciates 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 CEQA comment period may have ended, CDFW respectfully requests that SLWD still consider our comments.

[1] 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.

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.

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 will be required.

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. Take of any fully protected species was previously prohibited and CDFW was not able authorize their incidental take. Senate Bill No. 147, which became effective on July 10, 2023, amended Fish and Game Code sections 3511, 4700, 5050, and 5515, and added section 2081.15, to authorize CDFW to issue a permit under CESA that authorizes the take of a fully protected species resulting from impacts attributable to the implementation of specified projects, which include maintenance, repair, or improvement projects to critical regional or local water agency infrastructure, if certain conditions are satisfied. The fully protected blunt-nosed leopard lizard (*Gambelia sila*), bald eagle (*Haliaeetus leucocephalus*), and golden eagle (*Aquila chrysaetos*) are known to occur in the Project area (CNDDB 2024).

Other Special Status Species: Species of plants and animals need not be officially listed as Endangered, Rare, or Threatened on any State or federal list pursuant to CESA and/or the federal Endangered Species Act (ESA) to be considered Endangered, Rare, or Threatened under CEQA. If a species can be shown to meet the criteria specified in the CEQA Guidelines (Cal. Code Regs., tit. 14, Chapter 3, § 15380), it should be fully considered in the environmental analysis for the Project.

Bird Protection: CDFW has jurisdiction over actions that may 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 section 3503 (regarding unlawful take, possession, or needless destruction of the nest or eggs of any bird), section 3503.5 (regarding the take, possession, or destruction of any birds-of-prey or their nests or eggs), and section 3513 (regarding unlawful take of any migratory nongame bird).

Water Rights: The capture of unallocated stream flows is subject to appropriation and approval by the SWRCB pursuant to Water Code section 1200 et seq. Temporary changes to existing water rights are subject to approval by the State Water Resources Control Board (SWRCB) pursuant to Water Code section 1725 et seq. CDFW, as Trustee Agency, is consulted by SWRCB during the water rights process to provide terms and conditions designed to protect fish and wildlife prior to appropriation of the State's water resources. Certain fish and wildlife are reliant upon aquatic and riparian ecosystems, which in turn are reliant upon adequate flows of water. CDFW therefore has a material interest in assuring that adequate water flows within streams for the protection, maintenance, and proper stewardship of those resources. CDFW provides, as available, biological expertise to review and comment on environmental documents and impacts arising from Project activities.

PROJECT DESCRIPTION SUMMARY

SLWD is the Lead Agency for the purpose of CEQA. Reclamation's federal discretionary action (Proposed Action) would fund and authorize the installation, maintenance, and operation of new facilities within Reclamation right-of-way operated by the California Department of Water Resources (DWR) and California Department of Parks and Recreation. These facilities would convey non-Los Banos Creek water for storage in the Los Banos Creek Reservoir (Reservoir).

The Project Participants consist of the SLWD, Grassland Water District, and the member agencies of the San Joaquin River Exchange Contractors Water Authority, which consists of the Central California Irrigation District, the San Luis Canal Company, the Firebaugh Canal Water District, and the Columbia Canal Company. The Project proposes to operate the existing Los Banos Creek Detention Dam (Detention Dam) in the spring to route natural Los Banos Creek flows to riparian lands downstream of the facility, making space available for storage. Reclamation would fund and authorize installation, maintenance, and operation of new facilities that would convey non-Los Banos Creek water for storage in the Reservoir. To convey the Project Participant water to the Reservoir, a pipeline would be constructed from an existing SLWD pump station lateral to the Reservoir. In addition to the proposed pipeline, the Project would include the following components:

- Enlarging the existing Turnout 9-1 pipeline connection
- A filter (fish screen) with backwash system at SLWD Lateral 9 Turnout 9-1 connection point into an existing stock water pond
- A pipeline and appurtenances varying in size from 30 inches to 48 inches in diameter
- Water control valve(s) at engineered location(s)
- Below-ground crossings of three existing 20-foot wide roads with three feet of cover
- A water flow energy dissipation flare at the Reservoir discharge location
- Removable weights placed at various locations on the ground along the pipe to keep it from rolling (if pipe is placed above ground)
- Construction of a box culvert with capacity of 450 cubic feet per second
- Construction of a boat ramp extension

The Project would also alter existing Reservoir operations to allow for water supply storage and beneficial release; routing natural Los Banos Creek flows to riparian lands for irrigation and refuge use downstream of the facility making space available for storage in the spring, pumping outside water supplies into the Reservoir's available storage, and releasing water supplies into the Los Banos Creek for re-diversion. Reclamation's Proposed Action associated with the Project include the following:

- Funding through the Community Action Authorization pursuant to Public Law 117-103.
- Authorization for the installation, maintenance and operation of new facilities within Reclamation right-of-way that would allow the storage of non-Los Banos Creek water in the federally owned Reservoir.
- Facilitation of any applicable SWRCB action(s) to allow Central Valley Project and other water sources not from Los Banos Creek to be stored in the Reservoir.
- Water acquisition/exchange agreement for Central Valley Project Improvement Act Incremental Level 4/Level 2 Refuge water supplies between Reclamation and the Project Participants.
- Execution of a San Joaquin River Exchange Contractors Water Authority exchange/transfer agreement with Project Participants.

Sources of Water: The Project Participants would make water available for delivery and storage into the Reservoir by using conserved water, groundwater, recovered tailwater, or water stored in the Meyers Water Bank in lieu of surface water from San Luis Reservoir.

Project Proponents: SLWD, Grassland Water District, Central California Irrigation District, San Luis Canal Company, Firebaugh Canal Water District, Columbia Canal Company, and Reclamation.

Objectives: The Project area is subject to reoccurring flooding, multiple dry years, overdraft of the groundwater subbasin, capacity limitations on facilities during peak irrigation season, and lack of flexibility to meet water demands. The Project would allow for more effective management of the Reservoir in order to maximize flood control and downstream benefits while maintaining recreational use of the Reservoir and continuing to adhere to the existing United State Army Corps of Engineers operating rules. Project objectives are to:

- Reduce flooding and poor water quality
- Increase groundwater recharge
- Maximize water availability to wildlife refuges, riparian habitat, landowners, disadvantaged communities and water districts, by preserving any refuge water that would otherwise be lost due to rescheduling limitations in the San Luis Reservoir
- Reduce groundwater pumping by up to 2,666 acre-feet per year
- Provide year-round access to the Reservoir
- Improve wetland and riparian habitats
- Optimize use of existing infrastructure

Location: The Project components will be implemented in the Los Banos Creek Detention Reservoir and the surrounding area, located south of the City of Los Banos, Merced County.

Timeframe: None given.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist SLWD and Reclamation in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (i.e., biological) resources. Based on a review of the Project description, a review of California Natural Diversity Database (CNDDB) records, our familiarity with the Project area, and a review of aerial photographs of the Project and surrounding habitat, several special status species could potentially be impacted by Project activities.

In particular, CDFW is concerned regarding potential impacts for the following special status wildlife species and habitats known to occupy the Project area: the State threatened and federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*); the State and federally threatened California tiger salamander – central California distinct population segment (DPS) (*Ambystoma californiense* pop. 1); the State endangered foothill yellow-legged frog – Central Coast DPS (*Rana boylii* pop. 4); the State endangered and fully protected bald eagle; the fully protected golden eagle (*Aquila chrysaetos*); the State threatened Swainson's hawk (*Buteo swainsoni*) and tricolored

blackbird (*Agelaius tricolor*); the State and federally endangered and State fully protected blunt-nosed leopard lizard (*Gambelia sila*); the State candidate for listing Crotch's bumble bee (*Bombus crotchii*); the federally threatened and State species of special concern California red-legged frog (*Rana draytonii*); the federally proposed threatened and State species of special concern western pond turtle (*Emys marmorata*); the California Rare Plant Rank (CRPR) 1B.1 lesser saltscale (*Atriplex minuscula*); the CRPR 1B.2 Lemmon's jewelflower (*Caulanthus lemmonii*), heartscale (*Atriplex cordulata* var. *cordulata*), Lost Hills crownscale (Atriplex coronata var. *vallicola*), recurved larkspur (*Delphinium recurvatum*), and California alkali grass (*Puccinellia simplex*); the CRPR 4.2 crownscale (*Atriplex coronata* var. *coronata*); and the State species of special concern American badger (*Taxidea taxus*), western mastiff bat (*Eumops Perotis* ssp. *californicus*), Yuma myotis (*Myotis yumanensis*), San Joaquin coachwhip (*Masticophis flagellum ruddocki*), northern California legless lizard (*Anniella pulchra*), coast horned lizard (*Phrynosoma blainvillii*), and loggerhead shrike (*Lanius ludovicianus*). Other species of birds, amphibians, reptiles, mammals, fish, invertebrates, and plants also compose the local ecosystem within the Project boundary. Valley sink scrub habitat is documented to the west of the Project area, and Sycamore alluvial woodland, a rare natural community, is present in Los Banos Creek upstream of the existing Reservoir. Other riparian habitat types are associated with the Reservoir and Los Banos Creek downstream of the Detention Dam.

CDFW recommends that the following modifications and/or edits be incorporated into the MND/EA, including proposed avoidance, minimization, and compensatory measures, prior to its adoption by SLWD and Reclamation.

COMMENT 1: San Joaquin kit fox (SJKF)

SJKF are known to occur within the Project area including the vicinity of Los Banos Creek (CDFW 2024a). The Project area provides medium suitability SJKF habitat and is bordered by highly suitable habitat (Cypher et al. 2013). Specifically, several SJKF observations have been made to the north, west, and south of the Reservoir, particularly in areas of gentle topographic relief, such as large plateaus and valleys. This area was extensively surveyed for SJKF by CDFW on behalf of DWR to evaluate potential project related impacts to biological resources associated with the proposed Los Banos Grandes project, which never came to fruition. The area to the north, south, and west of the Reservoir is an important movement corridor for SJKF; as such there are numerous conservation easements, mitigation lands, and mitigation banks in close proximity to the Reservoir. As a result, SJKF should be assumed to be present in all suitable habitat within the Project boundary and surrounding area. Without appropriate avoidance and minimization measures for SJKF, potential significant impacts associated with construction and elements of Project implementation include habitat loss, ;oss in connectivity, den collapse,

inadvertent entrapment, reduced reproductive success, reduction in health and vigor of young, and direct mortality of individuals.

Mitigation Measure BIO-5a recommends preconstruction surveys within a 200-foot buffer of the Project area. Mitigation Measure BIO-5c states that if a SJKF is observed within a pipe, the U.S. Fish and Wildlife Service (USFWS) will be notified, and the pipe moved from the path of construction only to allow for the fox to escape

Recommended Mitigation Measure 1: SJKF Surveys and Minimization
CDFW recommends assuming presence of SJKF in the Project Area and assessing presence of SJKF dens by having qualified biologists conducting surveys of Project areas and a 500-foot buffer of Project areas to detect SJKF and their sign. CDFW also recommends following the USFWS (2011) *Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* during Project implementation.

Recommended Mitigation Measure 2: SJKF Take Authorization
SJKF activity or den detection in or adjacent to the Project construction footprint warrants consultation with CDFW to discuss how to avoid take or, if avoidance is not feasible, to acquire an Incidental Take Permit (ITP) for SJKF prior to ground-disturbing activities, pursuant to Fish and Game Code section 2081, subdivision (b).

COMMENT 2: Swainson's Hawk (SWHA)

The MND/EA acknowledges that SWHA are known to the Project area and have the potential to nest in riparian habitat and other mature trees located within the Project site and within ½ mile of the Project. Suitable foraging habitat for this species exists within the vicinity of the Project site, including annual grassland. Project construction and habitat conversion may result in degradation or loss of riparian habitat and subsequent loss of nesting habitat, nest abandonment, and reduced reproductive success, including mortality of young and reduced health and vigor of eggs and/or young. In the San Joaquin Valley, suitable nest trees may be a limiting factor for SWHA productivity. The loss of suitable nest trees, particularly in proximity to foraging habitat, has the potential to significantly impact local SWHA (CDFW 2016). CDFW considers removal of known bird-of-prey nest trees, even outside of the nesting season, a potentially significant impact under CEQA.

Mitigation Measure BIO-1b in Table 2-1 (page 8) of the MND/EA states that a qualified biologist will conduct surveys of potential SWHA within ¼ mile using the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (SWHA TAC 2000). Mitigation Measure BIO-1c states that if an active nest is observed, the biologist would establish a suitable construction-

free buffer around the nest. The MND/EA analysis does not provide a biological basis of how a no-disturbance buffer will be determined as adequate to avoid significant impacts, including but not limited to take of individuals through nest failure or other means, as a result of Project implementation.

Recommended Mitigation Measure 3: SWHA Nest Tree Avoidance and Mitigation
In addition to avoiding occupied nest trees, CDFW recommends that impacts to known nest trees be avoided at all times of year, or that mitigation occurs for these impacts. Regardless of nesting status, if potential or known SWHA nesting trees are removed, CDFW recommends that they be replaced with an appropriate native tree species, planted at a ratio of 3:1 (replaced to removed), in an area that will be protected in perpetuity. This mitigation would offset potential impacts of the loss of nesting habitat.

Recommended Mitigation Measure 4: Focused SWHA Surveys
To reduce potential Project-related impacts to SWHA, CDFW recommends that a qualified biologist conduct surveys for nesting birds of prey, including SWHA, following the survey methodology developed by the SWHA Technical Advisory Committee (SWHA TAC 2000) during the nesting season of or prior to Project initiation, within the Project area and a ½-mile buffer around the Project area. In addition, if Project activities will take place during the species nesting season (i.e., March 1 through September 15), CDFW recommends that additional preconstruction surveys for active nests be conducted by a qualified biologist no more than 10 days prior to the start of construction.

Recommended Mitigation Measure 5: SWHA Buffers
If an active SWHA nest is found during preconstruction surveys, CDFW recommends implementing 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 site or parental care for survival.

Recommended Mitigation Measure 6: SWHA Take Authorization
If a ½-mile no-disturbance nest buffer is not feasible, consultation with CDFW is warranted, and an ITP for SWHA may be necessary prior to project implementation to avoid unauthorized take, pursuant to Fish and Game Code section 2081, subdivision (b).

COMMENT 3: Nesting Bald Eagle (BAEA) and Golden Eagle (GOEA)

BAEA and GOEA occurrences have been documented within the vicinity of the Project boundary (CDFW 2024a). The MND/EA acknowledges the presence of

these species, but did not offer specific mitigation measures for BAEA or GOEA. Nesting BAEA and GOEA have the potential to occur in the Project area and its vicinity, including the Los Banos Creek corridor and surrounding grasslands. Without appropriate survey methods, nesting eagle could remain undetected, resulting in avoidance and minimization measures not being effectively implemented. In addition, human activity near nest sites can cause reduced provisioning rates of GOEA chicks by adults (Steidl et al. 1993). Without appropriate avoidance and minimization measures, potentially 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.

Recommended Mitigation Measure 7: Focused Surveys for Nesting Eagles
CDFW recommends that a qualified wildlife biologist conduct surveys for nesting raptors following 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 and Jenkins 2004). If Project activities take place during the bird nesting season of 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.

Recommended Mitigation Measure 8: Eagle Avoidance
If an active eagle 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 site for survival.

Recommended Mitigation Measure 9: Eagle Take Authorization
Please note that BAEA and GOEA are State fully protected species pursuant to Fish and Game Code section 3511. With the passage of Senate Bill No. 147, the incidental take of BAEA and GOEA may be authorized for certain categories of projects, including maintenance, repair, or improvement to critical regional or local water agency infrastructure. If nesting eagles are detected and the ½-mile no-disturbance buffer is infeasible, or if the Project proponent chooses to assume presence during Project implementation, consultation with CDFW is recommended to discuss how to implement the Project and avoid take; or if avoidance is not feasible, to potentially acquire an ITP for BAEA and GOEA prior to Project activities, pursuant Fish and Game Code section 2081, subdivision (b).

COMMENT 4: Tricolored Blackbird (TRBL)

TRBL have been documented within and adjacent to the Project area, and in the vicinity (CDFW 2024a). The MND/EA acknowledges that a breeding colony of TRBL was documented in 1992 in Los Banos Creek downstream of the Reservoir. The MND/EA does not include mitigation measures to avoid, minimize, or mitigate Project impacts to TRBL. Without appropriate avoidance and minimization measures for TRBL, potential significant impacts associated with subsequent development include nesting habitat loss, nest and/or colony abandonment, reduced reproductive success, and reduced health and vigor of eggs and/or young.

Recommended Mitigation Measure 10: TRBL Surveys
CDFW recommends that Project activities be timed to avoid the bird nesting season of February 1 through September 15. If Project activity that could disrupt nesting must take place during that time, CDFW recommends that a qualified biologist conduct surveys for nesting TRBL no more than 10 days prior to the start of implementation to evaluate presence or absence of TRBL nesting colonies in proximity to Project activities and to evaluate potential Project-related impacts.

Recommended Mitigation Measure 11: TRBL Colony Avoidance
If an active TRBL nesting colony is found during surveys, CDFW recommends implementation of a minimum 300-foot no-disturbance buffer in accordance with CDFW's (2015) *Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields in 2015*, until the breeding season has ended or until a qualified biologist has determined that nesting has ceased and the young have fledged and are no longer reliant upon the nest site for survival.

Recommended Mitigation Measure 12: TRBL Take Authorization
If the avoidance buffer around a TRBL nesting colony is infeasible, consultation with CDFW is warranted to discuss whether the Project can avoid take and, if take avoidance is not feasible, to acquire an ITP for TRBL pursuant to Fish and Game Code section 2081, subdivision (b), prior to any Project activities.

COMMENT 5: Foothill Yellow-Legged Frog (FYLF) and California Red-Legged Frog (RLF)

FYLF are primarily stream-dwelling and require shallow, flowing water in streams and rivers with at least some cobble-sized substrate (Thomson et al. 2016). RLF spend the bulk of their life in or near water sources like streams or stock ponds, which the species uses for breeding. RLF move into neighboring upland areas to feed and shelter when stream flow levels are high. In the summer, they seek relief from the heat by hiding under rocks or boulders, leaf litter, small stream channels or animal burrows (USFWS, 2024). Both FYLF and RLF have been documented to

occur within Los Banos Creek (CDFW 2024a), specifically upstream (east) of the existing Reservoir pool. The Project site therefore contains habitat that may support both frog species. Without appropriate avoidance and minimization measures for FYLF and RLF, potentially significant impacts associated with the Project's construction and subsequent Reservoir operation include burrow collapse, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of eggs, larvae and/or young, and direct mortality of individuals.

Recommended Mitigation Measure 13: FYLF and RLF Surveys
CDFW recommends that a qualified biologist conduct surveys for FYLF and RLF in accordance with the *Revised Guidance on Site Assessment and Field Surveys for the California Red-legged Frog* (USFWS 2005) to determine if FYLF or RLF will be impacted by Project construction or modified Reservoir pool inundation or operation. These surveys should be conducted within, upstream, and adjacent to the Project area. While the survey is designed for California red-legged frog (*Rana draytonii*), it may also be used for FYLF with a focus on stream/river habitat.

Recommended Mitigation Measure 14: FYLF and RLF Avoidance
If any FYLF or RLF are found during preconstruction 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 and RLF are most likely to be moving through upland areas (i.e., November 1 to March 31). When ground-disturbing activities must take place between November 1 and March 31, CDFW recommends that a qualified biologist monitor construction activity daily for FYLF and RLF.

Recommended Mitigation Measure 15: FYLF and RLF Take Authorization
If take avoidance of FYLF is infeasible, take authorization would be required via an ITP for FYLF pursuant to Fish and Game Code section 2081, subdivision (b), prior to any Project activities. If avoidance of RLF is infeasible, consultation with the USFWS is warranted to determine the need for take authorization.

COMMENT 6: California Tiger Salamander (CTS)

CTS are known to occur in the Project area and its vicinity (CDFW 2024a) and the Project area or its immediate surroundings may support small mammal burrows, a requisite upland habitat feature for CTS. Without appropriate avoidance and minimization measures for CTS, potential significant impacts associated with any construction or ground disturbing activity include burrow collapse; inadvertent entrapment; reduced reproductive success; reduction in health and vigor of eggs, larvae and/or young; and direct mortality of individuals. Depending on the design of any activity, the Project has the potential to result in creation of barriers to dispersal.

Recommended Mitigation Measure 16: CTS Habitat Assessment
CDFW recommends that a qualified biologist conduct a habitat assessment well in advance of Project implementation, to determine if any Project area or its vicinity contains suitable habitat (upland or breeding) for CTS.

Recommended Mitigation Measure 17: CTS Avoidance
CDFW advises that avoidance for CTS include a minimum 50-foot no disturbance buffer delineated around all small mammal burrows and a minimum 250-foot no-disturbance buffer around potential breeding pools within and adjacent to the Project area. CDFW also recommends avoiding any impacts that could alter the hydrology or result in sedimentation of breeding pools.

Recommended Mitigation Measure 18: Focused CTS Surveys
If avoidance of burrows and/or pools is not feasible, CDFW recommends that a qualified biologist evaluate potential Project-related impacts to CTS using the USFWS (2003) *Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander*. CDFW advises that the survey include a 100-foot buffer around the areas in wetland and upland habitats that could support CTS.

Recommended Mitigation Measure 19: CTS Take Authorization
If CTS occupy the Project area and if take cannot be avoided, take authorization would be warranted prior to initiating Project activities by acquiring an ITP, pursuant to Fish and Game Code section 2081, subdivision (b), before Project activities occur. Alternatively, in the absence of protocol surveys, the applicant can assume presence of CTS and obtain an ITP.

COMMENT 7: Blunt-Nosed Leopard Lizard (BNLL)

BNLL have been documented in the Project area and review of aerial imagery indicates presence of suitable habitat (CDFW 2024a). Suitable BNLL habitat includes areas of grassland and upland scrub that contain requisite habitat elements, such as small mammal burrows. BNLL also use open space patches between suitable habitats, including disturbed sites and unpaved access roadways.

Recommended Mitigation Measure 20: BNLL Habitat Assessment
CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation, to determine where the Project area or its immediate vicinity contains suitable habitat for BNLL.

Recommended Mitigation Measure 21: BNLL Surveys
Where suitable habitat is present, prior to initiating any vegetation- or ground-disturbance activities, CDFW recommends conducting surveys in accordance with the *Approved Survey Methodology for the Blunt-nosed Leopard Lizard* (CDFW 2019), which is designed to optimize BNLL detectability. CDFW advises completion of BNLL surveys no more than one year prior to initiation of ground disturbance. Please note that protocol level surveys must be conducted on multiple dates during late spring, summer, and fall of the same calendar year, within specific date, temperature, and time parameters. As a result, protocol level surveys for BNLL are not synonymous with 30-day "preconstruction surveys" often recommended for other wildlife species. In addition, the BNLL protocol specifies different survey effort requirements based on whether the disturbance results from maintenance activities or if the disturbance results in habitat removal (CDFW 2019).

Recommended Mitigation Measure 22: BNLL Take Avoidance or Authorization
With the passage of Senate Bill No. 147, the incidental take of BNLL may be authorized for certain categories of projects, including maintenance, repair, or improvement to critical regional or local water agency infrastructure. If BNLL protocol surveys find that the Project site is occupied, or if the Project proponent chooses to assume presence for BNLL, consultation with CDFW is recommended to discuss how to implement the Project and avoid take; or if avoidance is not feasible, to potentially acquire an ITP prior to any ground disturbing activities, pursuant Fish and Game Code section 2081, subdivision (b).

COMMENT 8: Special-Status Bat Species

Western mastiff bat and Yuma myotis have been documented to occur in the vicinity of the Project area (CDFW 2024a). Western mastiff bat and Yuma myotis are known to roost in buildings, caves, tunnels, cliffs, crevices, and trees (CDFW 2024b, CDFW 2024c). Project activities have the potential to affect habitat upon which special-status bat species depend for successful breeding and have the potential to impact individuals and local populations. Without appropriate avoidance and minimization measures, potential significant impacts resulting from ground- and vegetation-disturbing activities associated with Project activities include habitat loss, inadvertent entrapment, roost abandonment, reduced reproductive success, reduction in health and vigor of young, and direct mortality.

Recommended Mitigation Measure 23: Bat Roost Habitat Assessment
CDFW recommends that a qualified biologist conduct a habitat assessment well in advance of Project implementation to determine if the Project area or its immediate vicinity contains suitable roosting habitat for special-status bat species.

Recommended Mitigation Measure 24: Bat Surveys
If suitable habitat is present, CDFW recommends assessing presence or absence of special-status bat roosts by conducting surveys during the appropriate seasonal period of bat activity. CDFW recommends methods such as evening emergence surveys or bat detectors to determine whether bats are present.

Recommended Mitigation Measure 25: Bat Roost Disturbance Minimization and Avoidance
If bats are present, CDFW recommends that a 100-foot no-disturbance buffer be placed around the roost and that a qualified biologist who is experienced with bats monitor the roost for signs of disturbance to bats from Project activity. If a bat roost is identified and work is planned to occur during the breeding season, CDFW recommends that no disturbance to maternity roosts occurs and that CDFW be consulted to determine measures to prevent breeding disruption or failure.

COMMENT 9: Western Pond Turtle (WPT)

WPT occur in the Project area (CDFW 2024a), and a review of aerial imagery shows habitats that WPT utilize for nesting, overwintering, dispersal, and basking, including streams, ponded areas, irrigation canals, and riparian and upland habitats. 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 meters have also been reported (Thomson et al. 2016). Noise, vegetation removal, movement of workers, construction and ground disturbance as a result of Project activities have the potential to significantly impact WPT populations. 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.

Recommended Mitigation Measure 26: WPT Surveys
CDFW recommends that a qualified biologist conduct focused surveys for WPT within 10 days prior to Project implementation, and that focused surveys for nests occur during the egg-laying season of March through August.

Recommended Mitigation Measure 27: WPT Avoidance and Minimization
CDFW recommends that any WPT nests that are discovered remain undisturbed with a no-disturbance buffer maintained around the nest until the eggs have hatched and neonates are no longer in the nest or Project areas. If WPT individuals are discovered at the site during surveys or Project activities, CDFW recommends that they be allowed to move out of the area of their own volition without disturbance.

COMMENT 10: Crotch's Bumble Bee (CBB)

The Project is within the known range for CBB, and a review of aerial imagery shows that the Project area supports suitable habitat for the species (CDFW 2023a) such as grasslands and upland scrub. CBB primarily nest in late February through late October underground in abandoned small mammal burrows, but may also nest under perennial bunch grasses or thatched annual grasses, underneath brush piles, in old bird nests, and in dead trees or hollow logs (Williams et al. 2014, Hatfield et al. 2015). Overwintering sites for CBB mated queens include soft, disturbed soil (Goulson 2010) or leaf litter or other debris (Williams et al. 2014). Without appropriate avoidance and minimization measures for CBB, potentially significant impacts from ground- and vegetation-disturbing Project activities include direct mortality, loss of foraging plants, changes in foraging behavior, burrow collapse, nest abandonment, reduced nest success, and reduced health and vigor of eggs, young and/or queens.

Recommended Mitigation Measure 28: CBB Surveys and Avoidance
CDFW recommends that a qualified biologist conduct a habitat assessment for CBB that documents foraging resources and potential nesting sites, including small mammal burrows, perennial bunch grasses, thatched annual grasses, brush piles, old bird nests, dead trees, and hollow logs. In areas of suitable habitat, CDFW recommends a that qualified biologist conduct a bumble bee survey using a protocol developed according to the CDFW (2023b) *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* to identify bumble bees and potential nesting sites during the vegetation blooming period prior to activities at Project sites. If any CBB or a nest are detected, CDFW advises consultation with CDFW to develop adequate take avoidance measures. If a nest is observed at any time, avoidance would include protection for underground overwintering queens.

Recommended Mitigation Measure 29: CBB Take Authorization
If avoidance of take of any CBB is not feasible, take authorization would be required via an ITP, pursuant to Fish and Game Code section 2081, subdivision (b).

COMMENT 11: Burrowing Owl (BUOW)

The MND/EA acknowledges that BUOW occur withing the Project area. Potentially significant direct impacts associated with Project activities include habitat loss, burrow collapse, inadvertent entrapment, nest abandonment, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individuals.

Mitigation Measures BIO-2b and BIO-2c describe buffers that are recommended by the California Burrowing Owl Consortium's CDFW's *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) for low level of disturbance activities. The sizes of buffers depend on type and intensity of disturbance, presence of visual buffers, and other variables that could affect susceptibility of the owls to disturbance. The MND/EA analysis does not provide a basis of how the no-disturbance buffer is determined as adequate to avoid significant impacts, including but not limited to take of individuals.

Recommended Mitigation Measure 30: BUOW Habitat Assessment
CDFW recommends that a qualified biologist conduct a habitat assessment in advance of implementation of Project-specific activities, to determine if the Project area or its vicinity contains suitable habitat for BUOW.

Recommended Mitigation Measure 31: BUOW Surveys
If suitable habitat is present on or in the vicinity of the Project area, CDFW recommends assessing presence or absence of BUOW by having a qualified biologist conduct surveys following the California Burrowing Owl Consortium's *Burrowing Owl Survey Protocol and Mitigation Guidelines* (CBOC 1993) and CDFW's *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). These reports suggest three or more surveillance surveys conducted during daylight with each visit occurring at least three weeks apart during the peak breeding season (i.e., April 15 to July 15), when BUOW are most detectable. In addition, CDFW advises that surveys include a minimum 500-foot buffer around the Project area.

Recommended Mitigation Measure 32: BUOW Avoidance
CDFW recommends that 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, and specifically 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 33: BUOW Eviction and Mitigation
If BUOW are found within the recommended buffers and avoidance is not possible, it is important to note that evicting birds from burrows is not an avoidance, minimization, or mitigation method and is instead considered a potentially significant impact under CEQA (CDFG 2012). If it is necessary for Project implementation, CDFW recommends that burrow eviction be conducted by qualified biologists and only during the non-breeding season, before breeding behavior is exhibited and after the burrow is confirmed empty through non-invasive methods, such as surveillance. CDFW then recommends mitigation in the form of replacement of occupied burrows with artificial burrows at a ratio of one burrow collapsed to one artificial burrow constructed (1:1) to mitigate for evicting BUOW and the loss of burrows. Because BUOW may attempt to colonize or re-colonize an area that will be impacted, CDFW recommends ongoing surveillance that is sufficient to detect BUOW if they return.

COMMENT 12: Other State Species of Special Concern

American badger, northern California legless lizard, San Joaquin coachwhip, coast horned lizard, and loggerhead shrike are known to occur in the vicinity of the Project (CDFW 2024a), which supports habitats these species are known to use, including grassland and upland shrub areas with friable soils (Williams 1986, Thomson et al. 2016). Without appropriate avoidance and minimization measures for these species, potentially significant impacts associated with ground disturbance include habitat loss, nest/den/burrow abandonment, which may result in reduced health or vigor of eggs and/or young, and direct mortality.

Recommended Mitigation Measure 34: Habitat Assessment
CDFW recommends that a qualified biologist conduct a habitat assessment in advance of project implementation, to determine if Project areas or their immediate vicinity contain suitable habitat for the species mentioned above.

Recommended Mitigation Measure 35: Surveys
If suitable habitat is present, CDFW recommends that a qualified biologist conduct focused surveys for the species and their requisite habitat features to evaluate potential impacts resulting from ground and vegetation disturbance.

Recommended Mitigation Measure 36: Avoidance
Avoidance whenever possible is encouraged via delineation and observance of a 50-foot no-disturbance buffer around dens of mammals like the American badger as well as the entrances of burrows that can provide refuge for small mammals, reptiles, and amphibians. CDFW also advises that any individuals observed be allowed to leave the Project area of their own volition.

COMMENT 13: Special-Status Plants

State- and federally listed and other special-status plant species meeting the definition of rare or endangered under CEQA section 15380 are known to occur in the Project vicinity, including the species listed above (CDFW 2024a). Many of the species are threatened by grazing and agricultural, urban, and energy development, and many historical occurrences of these species are presumed extirpated (CNPS 2024). Though new populations have recently been discovered, impacts to existing populations have the potential to significantly impact populations of plant species. Without appropriate avoidance and minimization measures for special-status plants, potential significant impacts associated with subsequent Project-specific activities include loss of habitat, loss or reduction of productivity, and direct mortality.

Recommended Mitigation Measure 37: Special-Status Plant Surveys
CDFW recommends that individual Project sites 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 is intended to maximize detectability and, includes the identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period.

Recommended Mitigation Measure 38: Special-Status Plant Avoidance
CDFW recommends that special-status plant species be avoided whenever possible by delineating and observing a no-disturbance buffer of at least 50 feet from the outer 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 may be warranted to determine appropriate minimization and mitigation measures for impacts to special-status plant species.

Recommended Mitigation Measure 39: Listed Plant Species Take Authorization
If a State-listed plant species is identified during botanical surveys, consultation with CDFW is warranted to determine if the Project can avoid take. If take cannot be avoided, then take authorization is warranted through issuance of an ITP, pursuant to Fish and Game Code section 2081, subdivision (b).

COMMENT 14: Wetland and Riparian Habitats, including Sycamore Alluvial Woodland (SAW)

Portions of the Project area includes Los Banos Creek and associated riparian and wetland habitat both up and downstream of the Reservoir. Sycamore Alluvial Woodland (SAW) is present in Los Banos Creek upstream of the Reservoir; this habitat type provides important wildlife habitat and is recognized as a rare natural

community throughout the State. SAW has limited distribution, especially in the Central Valley and there are less than six viable occurrences and/or less than 2,000 acres of SAW in the State and worldwide, and the California Native Plant Society (CNPS) ranks the plant community as very threatened (Ornuff et al., 2003). Construction and modified operation of the Detention Dam after construction have the potential to result in temporary and permanent impacts to these features through habitat conversion including through modified hydrology, grading, fill, and related development. The Fish and Game Commission policy regarding wetland resources discourages development or conversion of wetlands that results in any net loss of wetland acreage or habitat value. Habitat conversion, construction, grading, and fill activities within these features also has the potential to impact downstream waters as a result of Project site impacts leading to erosion, scour, and changes in stream morphology.

Recommended Mitigation Measure 40: Stream and Wetland Habitat and SAW Mitigation
CDFW recommends that the potential direct and indirect impacts to stream/riparian and wetland habitat, including a specific analysis of project related impacts to SAW be analyzed according to each Project activity, including operation, and that the MND/EA include measures to avoid, minimize, and/or mitigate those impacts. CDFW recommends that impacts to SAW and other riparian habitats (i.e., biotic and abiotic features) take into account the effects to stream function and hydrology from riparian habitat loss or damage, modified Reservoir inundation and operation, as well as potential effects from the loss of SAW and other riparian habitat to special-status species already identified herein. CDFW recommends that losses to wetland or SAW and other riparian habitats be offset with corresponding habitat restoration incorporating native vegetation to replace the value to fish and wildlife provided by the habitats lost from Project construction and implementation. If on-site restoration to replace habitats is infeasible, CDFW recommends perpetual offsite mitigation by restoring or enhancing in-kind SAW and other riparian or wetland habitat and providing funding for the long-term management and protection of the mitigation area, as well as recordation of a CDFW approved Conservation Easement to ensure its persistence.

EDITORIAL COMMENTS AND/OR SUGGESTIONS

Water Rights: The MND/EA references the petition for temporary change for 11 water rights submitted by Reclamation to the SWRCB Division of Water Rights pursuant to Water Code section 1725 et seq., to temporarily add Los Banos Creek Detention Reservoir and three locations below the reservoir as points of rediversion in order to re-store up to 8,000 acre-feet of Central Valley Project water from the San Luis Reservoir and subsequently deliver the water to various wildlife refuges and irrigation districts within the Project Proponents boundaries. The SWRCB Order approving the temporary

change petition was issued on August 01, 2019, and the transfer or exchange was required to be effectuated within a one-year period commencing on the date of the Order. This temporary change petition was necessary to test the validity of the Project as proposed.

As stated previously, the capture of unallocated stream flows is subject to appropriation and approval by the SWRCB pursuant to Water Code section 1200 et seq. Temporary changes to existing water rights are subject to approval by the SWRCB pursuant to Water Code section 1725 et seq. CDFW recommends that the MND/EA include a detailed description of the water rights and water entitlements that would pertain to the Project and address any applications or change petitions that may be filed. CDFW, as Trustee Agency, is consulted by the SWRCB during the water rights process to provide terms and conditions designed to protect fish and wildlife prior to appropriation of the State's water resources. Given the potential for impacts to sensitive species and their habitats, it is advised that required consultation with CDFW occur well in advance of the SWRCB water right application process.

Lake and Streambed Alteration: Project activities that substantially change the bed, bank, and channel of streams and associated wetlands or divert or store flow are 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 (including the removal of riparian vegetation): (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 as well as those that are perennial. CDFW is required to comply with CEQA in the issuance of a Lake or Streambed Alteration (LSA) Agreement; therefore, if the CEQA document approved for the Project does not adequately describe the Project and its impacts, a subsequent CEQA analysis may be necessary for LSA Agreement issuance. Additional information on notification requirements is available through the Central Region LSA Program at (559) 243-4593 or R4LSA@wildlife.ca.gov, and the CDFW website: https://wildlife.ca.gov/Conservation/LSA.

Nesting Birds: CDFW encourages that Project implementation occur during the bird non-nesting season; however, if Project activities must occur during the breeding season (i.e., 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 biologist conduct pre-activity surveys for active nests no more than 10 days prior to the start of ground disturbance to maximize the probability that nests that could

potentially be impacted by the Project are detected. CDFW also recommends that surveys cover a sufficient area around the work 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 that a qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If behavioral changes occur, CDFW recommends that the work causing that change cease and that CDFW be consulted 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 parental care for survival. Variance from these no-disturbance buffers is possible when there is compelling biological or ecological reason to do so. CDFW recommends that a qualified biologist advise and support any variance from these buffers.

Endangered Species Act Consultation: CDFW recommends consultation with the USFWS prior to Project ground disturbance, due to potential Project related impacts to federally listed species. Take under the ESA is more stringently defined than under CESA; take under ESA may also include 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 ESA is advised well in advance of Project implementation.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database that 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 (CNDDB). The CNDDB field survey form can be obtained at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

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 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 MND/EA to assist SLWD and Reclamation in identifying and mitigating Project impacts on biological resources. If you have questions regarding this letter, please contact Annette Tenneboe, Senior Environmental Scientist (Specialist), at (559) 580-3202 or by email at Annette.Tenneboe@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Julie Vance
FA83F09FE08945A...

Julie A. Vance
Regional Manager

ec: State Clearinghouse
Governor's Office of Planning and Research
State.Clearinghouse@opr.ca.gov

Rain Emerson
Acting Water Conservation Branch Chief
United States Bureau of Reclamation
remerson@usbr.gov

Patricia Cole
Division Chief, San Joaquin Valley Division
United States Fish and Wildlife Service
Patricia_Cole@fws.gov

Karen Dulik
Environmental Program Manager
California Department of Water Resources- South Central Region Office
Karen.Dulik@water.ca.gov

California Department of Fish and Wildlife
Jefferey Shu
Annette Tenneboe

REFERENCES

California Burrowing Owl Consortium (CBOC). 1993. Burrowing Owl Survey Protocol and Mitigation Guidelines. Pages 171-177 *in* Lincer, J. L. and K. Steenhof (editors). 1993. The Burrowing Owl, Its Biology and Management. Raptor Research Report Number 9.

California Department of Fish and Game (CDFG). 2012. Staff Report on Burrowing Owl Mitigation. California Department of Fish and Game. March 7, 2012.

California Department of Fish and Wildlife (CDFW). 2015. Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields in 2015. March 19, 2015.

CDFW. 2016. Status Review: Swainson's hawk (*Buteo swainsoni*) in California. Reported to California Fish and Game Commission. Five years status report.

CDFW. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. California Department of Fish and Wildlife. March 20, 2018.

CDFW. 2019. Approved Survey Methodology for the Blunt-nosed Leopard Lizard. California Department of Fish and Wildlife, October 2019 (revised).

CDFW. 2023a. Crotch's Bumble Bee (*Bombus crotchii*) Current and Historic Species Ranges. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213184&inline.

CDFW. 2023b. Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species. California Department of Fish and Wildlife. June 6, 2023. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline

CDFW. 2024a. Biogeographic Information and Observation System (BIOS). https://www.wildlife.ca.gov/Data/BIOS. Accessed 23 February 2024.

CDFW. 2024b. California Wildlife Habitat Relationships System. Western Mastiff Bat. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2357. Accessed 23 February 2024.

CDFW. 2024c. California Wildlife Habitat Relationships System. Yuma Myotis. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2319&inline=1. Accessed 23 February 2024.

California Native Plant Society, Rare Plant Program. 2024. Rare Plant Inventory (online edition, v9.5). https://www.rareplants.cnps.org. Accessed 24 February 2024.

Cypher, B.L., S.E. Phillips, and P.A. Kelly. 2013. Quantity and distribution of suitable habitat for endangered San Joaquin kit foxes: conservation implications. Canid Biology & Conservation 16(7): 25-31. http://www.canids.org/CBC/16/San_Joaquin_kit_fox_habitat_suitability.pdf

Driscoll, D.E. 2010. Protocol for Golden Eagle Occupancy, Reproduction, and Prey Population Assessment. American Eagle Research Institute, Apache Jct., AZ. 55pp.

Goulson, D. 2010. Bumblebees: behaviour, ecology, and conservation. Oxford University Press, New York. 317pp.

Hatfield, R., S. Jepsen, R. Thorp, L. Richardson, and S. Colla. 2015. Bombus crotchii. The IUCN Red List of Threatened Species. https://www.iucnredlist.org/species/44937582/46440211. Accessed 10 February 2024.

Jackman, R.E. and J.M. Jenkins. 2004 Protocol for Evaluating Bald Eagle Habitat and Populations in California. Prepared for U.S. Fish and Wildlife Service Endangered Species Division, Sacramento, CA, USA.

Ornduff, R., P.M. Faber, T. Keeler-Wolf. 2003. Introduction to California Plant Life, , California Natural History Guides No. 69, University of California Press, Ltd., 2003, ISBN 978-0-520-23704-9

Steidl, R.J., K.D. Kozie, G.J. Dodge, T. Pehovski, and E.R. Hogan. 1993. Effects of human activity on breeding behavior of golden eagles in Wrangell-St. Elias National Park and Preserve; a preliminary assessment. Copper Center, AK: National Park Service, Wrangell-St. Elias National Park Preserve.

Swainson's Hawk Technical Advisory Committee (SWHA TAC). 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in the Central Valley of California. Swainson's Hawk Technical Advisory Committee. May 31, 2000.

Thomson, R.C., A.N. Wright, and H. B. Shaffer. 2016. California Amphibian and Reptile Species of Special Concern. California Department of Fish and Wildlife and University of California Press: 84-92.

United States Fish and Wildlife Service (USFWS). 1998. Recovery Plan for Upland Species of the San Joaquin Valley, California. United States Fish and Wildlife Service, Region 1, Portland, Oregon, USA.

USFWS. 2003. Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander, October 2003.

USFWS. 2005. Revised Guidance on Site Assessment and Field Surveys for the California Red-legged Frog. March 2005. 26 pp.

USFWS. 2011. Standard Recommendations for the Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance. United States Fish and Wildlife Service. January 2011.

USFWS. 2024. Red-legged Frog Species Account. https://www.fws.gov/species/california-red-legged-frog-rana-draytonii

Weintraub, K., T.L. George, and S.J. Dinsmore. 2016. Nest survival of tricolored blackbirds in California's Central Valley. Condor 118(4): 850–861.

Williams, D.F. 1986. Mammalian species of special concern in California. Calif. Dept. Fish and Game, Sacramento. Admin. Rep. 86-1. 112pp.

Williams, P. H., R. W. Thorp, L. L. Richardson, and S .R. Colla. 2014. Bumble bees of North America: An Identification guide. Princeton University Press, Princeton, New Jersey. 208pp.

Attachment 1

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

PROJECT: San Luis Water District Los Banos Creek Detention Reservoir Storage Program
STATE CLEARINGHOUSE No.: 2024010511

RECOMMENDED MITIGATION MEASURES	STATUS/DATE/INITIALS
Before Project Activity	
Recommended Mitigation Measure 1: SJKF Surveys and Minimization	
Recommended Mitigation Measure 2: SJKF Take Authorization	
Recommended Mitigation Measure 3: SWHA Nest Tree Avoidance and Mitigation	
Recommended Mitigation Measure 4: Focused SWHA Surveys	
Recommended Mitigation Measure 5: SWHA Buffers	
Recommended Mitigation Measure 6: SWHA Take Authorization	
Recommended Mitigation Measure 7: Focused Surveys for Nesting Eagles	
Recommended Mitigation Measure 8: Eagle Avoidance	
Recommended Mitigation Measure 9: Eagle Take Authorization	
Recommended Mitigation Measure 10: TRBL Surveys	
Recommended Mitigation Measure 11: TRBL Colony Avoidance	
Recommended Mitigation Measure 12: TRBL Take Authorization	
Recommended Mitigation Measure 13: FYLF and RLF Surveys	
Recommended Mitigation Measure 14: FYLF and RLF Avoidance	
Recommended Mitigation Measure 15: FYLF and RLF Take Authorization	
Recommended Mitigation Measure 16: CTS Habitat Assessment	

RECOMMENDED MITIGATION MEASURES	STATUS/DATE/INITIALS
Recommended Mitigation Measure 17: CTS Avoidance	
Recommended Mitigation Measure 18: Focused CTS Surveys	
Recommended Mitigation Measure 19: CTS Take Authorization	
Recommended Mitigation Measure 20: BNLL Habitat Assessment	
Recommended Mitigation Measure 21: BNLL Surveys	
Recommended Mitigation Measure 22: BNLL Take Avoidance or Authorization	
Recommended Mitigation Measure 23: Bat Roost Assessment	
Recommended Mitigation Measure 24: Bat Surveys	
Recommended Mitigation Measure 25: Bat Roost Disturbance Minimization and Avoidance.	
Recommended Mitigation Measure 26: WPT Surveys	
Recommended Mitigation Measure 27: WPT Avoidance and Minimization	
Recommended Mitigation Measure 28: CBB Surveys and Avoidance	
Recommended Mitigation Measure 29: CBB Take Authorization	
Recommended Mitigation Measure 30: BUOW Habitat Assessment	
Recommended Mitigation Measure 31: BUOW Surveys	
Recommended Mitigation Measure32: BUOW Avoidance	
Recommended Mitigation Measure 33: BUOW Eviction and Mitigation	
Recommended Mitigation Measure 34: Habitat Assessment – American Badger, Northern California Legless Lizard, San Joaquin Coachwhip, Coast Horned Lizard, and Loggerhead Shrike	
Recommended Mitigation Measure 35: Surveys – American Badger, Northern California Legless Lizard, San Joaquin Coachwhip, Coast Horned Lizard, and Loggerhead Shrike	

RECOMMENDED MITIGATION MEASURES	STATUS/DATE/INITIALS
Recommended Mitigation Measure 36: Avoidance – American Badger, Northern California Legless Lizard, San Joaquin Coachwhip, Coast Horned Lizard, and Loggerhead Shrike	
Recommended Mitigation Measure 37: Special-Status Plant Surveys	
Recommended Mitigation Measure 38: Special-Status Plant Avoidance	
Recommended Mitigation Measure 39: Listed Plant Species Take Authorization	
Recommended Mitigation Measure 40: Stream and Wetland Habitat and SAW Mitigation	
During Project Activity	
Recommended Mitigation Measure 1: SJKF Surveys and Minimization	
Recommended Mitigation Measure 3: SWHA Nest Tree Avoidance and Mitigation	
Recommended Mitigation Measure 5: SWHA Buffers	
Recommended Mitigation Measure 8: Eagle Avoidance	
Recommended Mitigation Measure 11: TRBL Colony Avoidance	
Recommended Mitigation Measure 14: FYLF Avoidance	
Recommended Mitigation Measure 25: Bat Roost Disturbance Minimization and Avoidance.	
Recommended Mitigation Measure 27: WPT Avoidance and Minimization	
Recommended Mitigation Measure 28: CBB Surveys and Avoidance	
Recommended Mitigation Measure32: BUOW Avoidance	
Recommended Mitigation Measure 36: Avoidance – American Badger, Northern California Legless Lizard, San Joaquin Coachwhip, Coast Horned Lizard, and Loggerhead Shrike	

RECOMMENDED MITIGATION MEASURES	STATUS/DATE/INITIALS
Recommended Mitigation Measure 38: Special-Status Plant Avoidance	