State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Central Region
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May 4, 2023

Javier Almaguer
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Fresno, California 93726

Subject: State Route 99 Delano to Pixley 6-Lane Widening Project (Project) Draft Environmental Impact Report/Environmental Assessment (DEIR/EA) SCH No. 2020110281

Dear Javier Almaguer:

The California Department of Fish and Wildlife (CDFW) received a DEIR/EA from the California Department of Transportation (Caltrans), as Lead Agency, for the Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1] CDFW previously submitted comments in response to the Notice of Preparation (comment letter provided to Caltrans on December 16, 2020).

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.

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

[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.

proposed, for example, the Project may be subject to CDFW's lake and streambed alteration (LSA) 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.

In this role, CDFW is responsible for providing, as available, biological expertise during public agency environmental review efforts (e.g., CEQA), focusing specifically on Project activities that have the potential to adversely affect fish and wildlife resources. CDFW provides recommendations to identify potential impacts and possible measures to avoid or reduce those impacts.

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 appropriate mitigation measures, implementation of 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 have 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. Take of any fully protected species is prohibited and CDFW cannot authorize their incidental take.

Unlisted Species: Species of plants and animals need not be officially listed as Endangered, Rare, or Threatened (E, R, or T) on any State for Federal list to be considered E, R, or T under CEQA. If a species can be shown to meet the criteria for E, R, or T as specified in the CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, § 15380), CDFW recommends it be fully considered in the environmental analysis for this Project.

PROJECT DESCRIPTION SUMMARY

Proponent: Caltrans

Objective: The proposed Project would involve widening and rehabilitating 13.5 miles of State Route (SR) 99. The project would construct an additional lane, shoulder, and concrete barrier in the existing median throughout the project limits along with pavement rehabilitation of the existing highway. The additional lanes would be added within the median by constructing an inside 12-foot lane and 10-foot inside shoulder in both directions. The existing drainage system, pumping systems, and Transportation Management Systems would be upgraded within the project limit. Drainage system upgrades to culvert facilities would include entire replacement of the culvert, relining of the barrel section of the culvert, repairing culverts joints, replacing end sections or replacing culvert headwalls. The Project will require the use and staging of heavy equipment to accomplish grubbing, cold planning, cut-and-fill, grading, paving, hauling, jack-and-bore, and tree and shrub removal.

Location: The proposed project is located on SR 99, from post miles 56.4 to 57.6 in Kern County and post miles 0.0 to 13.5, between the cities of Delano in Kern County and Pixley in Tulare County.

Timeframe: The project is slated to start in the fall of 2024 and finish in the fall of 2026.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist Caltrans in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. The attached Mitigation Monitoring and Reporting Program (MMRP) provides a summary of CDFW's additional impact minimization, mitigation and monitoring recommendations that are described below. Editorial comments or other suggestions may also be included to improve the document.

CDFW submitted comments to Caltrans on the Notice of Preparation on December 16, 2020 that indicated that CDFW was concerned regarding potential impacts to the following special-status species: State threatened Swainson's hawk (*Buteo swainsoni*), State threatened and federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*), State species of special concern burrowing owl (*Athene cunicularia*) and American badger (*Taxidea taxus*). CDFW also submitted comments regarding potentially significant impacts to two streams that may be subject to CDFW's regulatory authority, Deer Creek and White River. CDFW provided recommended avoidance, minimization and avoidance measures for these resources. Based on additional information in the DEIR/EA, CDFW is also concerned about potential impacts to the following additional State species of special concern: pallid bat (*Antrozous*

pallidus), Townsend's big-eared bat (*Corynorhinus townsendii*), spotted bat (*Euderma maculatum*), and western mastiff bat (*Eumops perotis californicus*).

I. Project Description and Related Impacts

COMMENT 1: Swainson's Hawk (SWHA)

Issue: The DEIR/EA found that the Project site contains potentially suitable nesting habitat for SWHA and identified avoidance and minimization measures to conduct pre-construction surveys and establish 500-foot buffers around actives nests. However, Caltrans has not conducted protocol surveys, SWHA may be nesting near the Project site, and Project activities could impact nesting activities or remove nest trees. SWHA nest in lone trees in agricultural fields or pastures, roadside trees adjacent to suitable foraging habitat, or within riparian trees (CDFW 2016). Because Project activities will involve a level of disturbance that is greater than standard traffic and agricultural activities in the region, CDFW considers it possible that the Project activities would represent a novel stimulus which could result in nest abandonment if they occur within half-mile of an active SWHA nest. If nesting in the Project vicinity, Project activities have the potential to result in nest abandonment and/or loss of foraging habitat, significantly impacting local nesting SWHA.

Recommended Avoidance, Minimization, and/or Mitigation Measures for SWHA:

Due to the potential that SHWA will be found nesting on or near the Project site and likelihood that Project activities will be required during the nesting season, CDFW recommends that Caltrans consult with CDFW regarding the acquisition of an Incidental Take Permit (ITP) for SWHA, pursuant to Fish and Game Code section 2081, subdivision (b). CDFW advises that a qualified biologist conduct protocol surveys for SWHA following the entire survey methodology developed by the SWHA Technical Advisory Committee (SWHA TAC 2000) in the survey season immediately prior to Project implementation. If Project activities will take place during the nesting season (March 1 to September 15), and active nests are identified, CDFW recommends that a minimum half-mile no-disturbance buffer be delineated and maintained around each nest. The no-disturbance buffer should be maintained 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, to prevent nest abandonment and other take of SWHA due to Project activities. If an active SWHA nest is detected, and a no-disturbance buffer is not feasible, consultation with CDFW is warranted to discuss how to implement the Project and avoid take. If take cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081, subdivision (b) is necessary to comply with CESA.

COMMENT 2: San Joaquin kit fox (SJKF)

Issue: The Project site is within the known geographic range of SJKF, and multiple historical and recent occurrences have been documented in the region (CDFW 2023), but the DEIR/EA did not include an impact evaluation on this species. SJKF population sizes are known to fluctuate over time, and absence in any one year does not necessarily indicate a negative finding. In addition to native habitats, SJKF are also known to den in right of ways, vacant lots, parks, landscaped areas, golf courses, oil fields, etc. Further, SJKF may be attracted to the Project site due to the type and level of ground disturbing activities and the loose, friable soils resulting from intensive ground disturbance. If present within or near the Project site, Project activities have the potential to significantly impact local SJKF populations.

The proposed Project will also increase the existing barrier for connecting populations of SJKF present on either side of the highway. The DEIR/EA does not address wildlife connectivity for SJKF, or other rare or common wildlife species. Roadways and development may increase population fragmentation, reduce survival by impeding movement to refugia habitat (i.e., disperse to adjacent habitat, locate food sources) or reproductive habitat (i.e., breeding habitat), and impede recolonization of potential habitat (Haddad et al. 2015). Limiting movement and passage of species can lead to the reduction of genetic fitness in populations making them more vulnerable to changing or extreme conditions, the inability for populations to recolonize habitat after disturbance events (e.g. fires, floods, droughts), the loss of resident wildlife populations by altered community structure (e.g. species composition, distribution), and/or partial or complete loss of populations of migrant species due to blocked access to critical habitats (Haddad et al. 2015; Nicholson et al. 2006). CDFW considers that expansion of SR 99 without improving wildlife passage represents a significant impact to SJKF. Increasing or preserving the current barrier without a wildlife movement analysis limits the opportunity that this project has to design structures that allow for improved habitat connectivity.

Recommended Avoidance, Minimization, and/or Mitigation Measures for SJKF:

While SJKF are already known to occur in the Project Area, limiting the utility of so called general “presence/absence” surveys, CDFW advises that a qualified biologist conduct pre-activity clearance surveys using transects, to detect SJKF dens within the Project site and a 250-foot buffer of the Project site within 30 days prior to project implementation. CDFW recommends implementing no-disturbance buffers, as described in the USFWS’ “Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance” (2011) (USFWS Protocol) around potentially suitable or known SJKF den sites, summarized in the table below. If the no-disturbance buffers outlined in the USFWS Protocol for SJKF are not feasible, CDFW recommends that consultation with CDFW occur to discuss how to implement the Project and avoid take. If take cannot be avoided, take authorization

through the issuance of an ITP, pursuant to Fish and Game Code section 2081, subdivision (b) is necessary to comply with CESA.

Den Type	Buffer (feet)	Protective Measure
Potential	50	No-disturbance markers
Atypical	50	No-disturbance markers
Known	100	Exclusionary fencing
Natal/Pupping	Contact USFWS and CDFW	

CDFW recommends that Caltrans also conduct an evaluation of habitat connectivity for SJKF and other wildlife as part of the DEIR/EA, including performing a review of Caltrans' Wildlife Connectivity Analysis Tool (WildCAT) and an evaluation of existing and proposed crossing opportunities in the Project site. To mitigate for Project impacts on wildlife connectivity, CDFW encourages Caltrans to incorporate improvements for wildlife passage into the project design that could be used by SJKF and other wildlife.

COMMENT 3: Burrowing Owl (BUOW)

Issue: The Project site is within the known range of BUOW and based on our review of aerial imagery, BUOW has the potential to occur within or adjacent to the Project site. BUOW inhabit open grassland or adjacent canal banks, rights-of-ways, vacant lots, containing small mammal burrows, a requisite habitat feature used by BUOW for nesting and cover (Gervais et al. 2008). 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 (Gervais et al. 2008). Potentially significant direct impacts associated with Project 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. 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. Construction activities near active burrows could result in potentially significant impacts to nesting or overwintering owls.

Recommended Avoidance, Minimization, and/or Mitigation Measures for BUOW:

CDFW advises that a qualified biologist assess if suitable BUOW habitat features are present within 500 feet of the Project site (e.g., burrows) the year prior to Project construction. If suitable habitat features are present, CDFW recommends assessing presence/absence of BUOW by having a qualified biologist conduct surveys following guidelines by the California Burrowing Owl Consortium (CBOC 1993) and

CDFW (CDFG 2012). Specifically, CBOC and CDFW recommend 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.

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	Medium	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)

COMMENT 4: American Badger (AMBA)

Issue: The DEIR/EA did not provide an assessment of potential impacts to AMBA. However, there are records of AMBA in the region (CNDDB 2023) and suitable habitat for this species likely occurs near or within portions of the Project site. AMBA are most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils, and dig burrows in friable soil for cover (Williams 1986).. Without appropriate avoidance and minimization measures for AMBA, Project activities may result in significant impacts to these species, including potential inadvertent entrapment, loss of upland refugia, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individuals.

Recommended Avoidance, Minimization, and/or Mitigation Measures for AMBA:

CDFW recommends that a qualified biologist conduct focused surveys for AMBA and their requisite habitat features to evaluate potential impacts resulting from Project activities. Avoidance whenever possible is encouraged via delineation and observance of a 50-foot no-disturbance buffer around habitat resources. If AMBA are observed in the Project site during Project activities, CDFW recommends halting work in their immediate vicinity and individuals be allowed to leave the Project site on their own accord. CDFW does not recommend that badgers be evicted from

burrows unless a qualified biologist has confirmed that no dependent young are present.

COMMENT 5: Special Status Bats

Issue: The DEIR/EA did not provide an assessment of potential impacts to special status or other bats and suitable roosting habitat is present for bats within and near the Project site. Pallid, Townsend's big-eared, spotted and western red bats may roost in a variety of natural and man-made habitats that are present in the Project area, including trees, cliffs, and man-made structures such as buildings, bridges and culverts. Bats are particularly more likely to utilize man-made structures even near busy highways and urban areas when natural habitat is limited, such as in the Project vicinity. Without appropriate avoidance and minimization measures for bats, Project activities may result in potentially significant impacts to roosting or maternal bats, including potential inadvertent entrapment, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individuals.

Recommended Avoidance, Minimization, and/or Mitigation Measures for Bats:

CDFW advises that a qualified biologist conduct focused surveys for bats and potential roosting habitat within 400 feet of the Project site prior to Project activities. Avoidance whenever possible is encouraged via delineation and observance of no-disturbance buffers according to activity and species, as recommended in Table 7-1 of "Caltrans Bat Mitigation: A Guide to Developing Feasible and Effective Solutions" (H. T. Harvey & Associates 2021), ranging from 100 feet to 400 feet. If roosting bats are observed on the Project site and buffer areas, CDFW recommends that Caltrans stop work in the buffer area and coordinate with CDFW for site-specific impact minimization recommendations. To mitigate for potential Project impacts on bats, CDFW encourages Caltrans to incorporate bat habitat into the Project design.

II. Editorial Comments and/or Suggestions

CDFW requests that the EIR/EA fully identify potential impacts to biological resources, including the above-mentioned species. To adequately assess any potential impacts to biological resources, focused biological surveys should be conducted by qualified wildlife biologists/botanists during the appropriate survey period(s) for each species in order to determine whether any special-status species and/or suitable habitat features may be present within the Project site. 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, and to identify any Project-related impacts under CESA and other species of concern. CDFW recommends the EIR/EA address potential impacts to these species and provide measurable mitigation measures that, as needed, will reduce impacts to less than

significant levels. Information on survey and monitoring protocols for sensitive species can be found at CDFW's website (https://www.wildlife.ca.gov/Conservation/SurveyProtocols).

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 1 through September 15), 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 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 counsel and support any variance from these buffers and notify CDFW in advance of implementing a variance.

Lake and Streambed Alteration: There are Project activities that may be 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, as well as those that are perennial in nature.

The Project crosses the White River and Deer Creek, and tributary streams may also be present within the Project site. Project activities have the potential to result in impacts to streams, including potential widening of bridges and culverts that convey these resources or removal of streambank vegetation. Streams function in the collection of water from rainfall, storage of various amounts of water and sediment, discharge of water as runoff and the transport of sediment, and they provide diverse sites and pathways in which chemical reactions take place and provide habitat for fish and wildlife species. Disruption of stream systems such as these within the Project area can have significant physical, biological, and chemical impacts that can extend into the adjacent properties, thereby adversely affecting the flora and fauna in the adjacent habitat. CDFW recommends that the DEIR/EA identify if Caltrans may need to submit a Notification, pursuant to Fish and Game Code 1602 prior to commencing the Project-related activities in streams within the Project site.

Federally Listed Species: CDFW recommends consulting with the USFWS on potential impacts to federally listed species including, but not limited to SJKF. Take under the federal Endangered Species Act (ESA) is more broadly defined than CESA; take under ESA 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/denning. CDFW advises that Caltrans consult with the USFWS to comply with the ESA well in advance of any ground-disturbing activities.

Cumulative Impacts: CDFW recommends that a cumulative impact analysis be conducted for all biological resources that will either be significantly or potentially significantly impacted by implementation of the Project, including those whose impacts are determined to be less than significant with mitigation incorporated or for those resources that are rare or in poor or declining health and will be impacted by the Project, even if those impacts are relatively small (i.e. less than significant). Cumulative impacts should be analyzed using an acceptable methodology to evaluate the impacts of past, present, and reasonably foreseeable future projects on resources and should be focused specifically on the resource, not the project. An appropriate resource study area should be identified and utilized for this analysis. CDFW staff is available for consultation in support of cumulative impacts analyses as a trustee and responsible agency under CEQA.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database 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 CNDDB. The CNDDB field survey form can be found 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

If it is determined that the Project has the potential to impact biological resources, an assessment of filing fees will be 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 for the underlying Project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish and Game Code, § 711.4; Pub. Resources Code, § 21089).

CONCLUSION

CDFW appreciates the opportunity to comment on the Project to assist Caltrans in identifying and mitigating the Project's impacts on biological resources.

If you have any questions, please contact Mindy Trask, Senior Environmental Scientist (Specialist), at the address provided on this letterhead, by telephone at (559) 939-0282, or by electronic mail at mary.trask@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Julie Vance
FA83F09FE08945A...

Julie A. Vance
Regional Manager

ATTACHMENTS

Literature Cited
Recommended Mitigation Monitoring and Reporting Program (MMRP)

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

PROJECT: State Route 99 Delano to Pixley 6-Lane Widening Project

CDFW provides the following measures be incorporated into the MMRP for the Project:

RECOMMENDED MITIGATION MEASURE	**STATUS/ DATE/ INITIALS**
Before Disturbing Soil or Vegetation	
Potential Swainson's Hawk (SWHA) Section 2081 Incidental Take Permit	
SWHA Surveys	
SAN Joaquin kit fox (SJKF) surveys	
Potential SJKF Section 2081 Incidental Take Permit	
Incorporate Wildlife Passage into the Project Design	
Burrowing Owl (BUOW) Surveys	
American Badger (AMBA) Surveys	
Bat surveys	
Incorporate Bat Habitat into the Project Design	
During Construction	
SWHA Avoidance	
SJKF Avoidance	
BUOW Avoidance	
AMBA Avoidance	
Bat Avoidance	