



State of California – The Natural Resources Agency

DEPARTMENT OF FISH AND WILDLIFE

Central Region

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January 21, 2025

Sam Blue, Resource Manager
Arvin-Edison Water Storage District
20401 East Bear Mountain Boulevard
Arvin, California 93203
SBlue@aewsd.org

**Subject: North Canal Spreading Works Expansion Project (Project)
Mitigated Negative Declaration (MND)
SCH Number: 2024120994**

Dear Sam Blue:

The California Department of Fish and Wildlife (CDFW) received an MND from Arvin-Edison Water Storage District (AEWSD), as Lead Agency, for the Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

Thank you for the opportunity to provide recommendations regarding the activities proposed at the Project site that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects on the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under 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

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.

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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 & Game Code, § 2050 et seq.), related authorized 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.

Land Conversion: Project activities that result in land conversion may also result in habitat loss for special-status species, migration/movement corridor limitations, or fragmentation of sensitive habitat. Loss of habitat to development and agriculture are contributing factors to the decline of many special-status species and game species.

Cumulative Impacts: General impacts from Projects include habitat fragmentation, degradation, habitat loss, migration/movement corridor limitations, and potential loss of individuals to the population. CDFW recommends the lead agency consider all approved and future projects when determining impact significance to biological resources.

Water Pollution: Pursuant to Fish and Game Code Section 5650, it is unlawful to deposit in, permit to pass into, or place where it can pass into "Waters of the State" any substance or material deleterious to fish, plant life, or bird life, including non-native species. It is possible that without mitigation measures this 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 surface water in the Project area include the following: increased sediment input from road; toxic runoff associated with Project-related activities and implementation; and/or impairment of wildlife movement. 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.

Water Rights: The capture of unallocated stream flows to artificially recharge groundwater aquifers is subject to appropriation and approval by the State Water Resources Control Board (SWRCB) pursuant to Water Code section 1200 et seq.

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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.

Bird Protection: 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).

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: Arvin-Edison Water Storage District

Objective: The proponent seeks to construct 160 acres of new groundwater recharge basins and make modifications to 35 acres of pre-existing basins to meet the goals of the project. The current recharge basin diverts surface water from the Arvin-Edison North Canal. The basins will be excavated using heavy machinery and the removed material is to be used on site to create berms for the basins. Components of the recharge basin include: six foot high embankments from existing grade; basin cells connected by interbasin structures; new berm dirt roads for operation and maintenance activities; new perimeter fencing and gates; and connections to the existing gravity pipeline infrastructure along the northern portion of the site which diverts surface water from the Arvin-Edison North Canal. The average annual recharge benefit is expected to be approximately 5,200 acre-fee per year.

Location: The Project site is located in Kern County, California, southeast of the City of Bakersfield, and approximately 1.5-miles north of the City of Arvin. The Project will take place on Assessor's Parcel Numbers: 89-400-01, 189-400-02, 189-400-03, 189-400-04, 189-400-05, 189-400-06, 189-400-07, 189-400-08, 189-400-11, 189-390-01, 189-390-

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02, 189-390-03. Approximate centroid point of the Project is 35°14'30.67"N, 118°50'17.02"W.

Timeframe: Project will start in spring 2025 and last approximately six months.

COMMENTS AND RECOMMENDATIONS

CDFW offers the following recommendations to assist AEWSD in adequately identifying and/or mitigating future development of the Project site. Editorial comments or other suggestions may also be included to improve the document.

Aerial imagery of the Project site and its surroundings show the area contains agricultural lands including row crops and orchards, and an existing recharge basin directly adjacent to the north and east of the site.

Currently, the MND acknowledges that the Project area is within the geographic range of several special-status animal species but concludes that the Project site does not contain suitable habitat for any special-status species. Review of the California Natural Diversity Database (CNDDDB) (CDFW 2025) reveals records for several special-status species within the vicinity of the Project area including, but not limited to the State threatened and federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*), the State candidate endangered Crotch's bumble bee (*Bombus crotchii*), and State candidate western burrowing owl (*Athene cunicularia hypugaea*). Based on a review of the Project description, a review of CNDDDB records, and the surrounding habitat, special-status species could potentially be impacted by Project activities.

San Joaquin Kit Fox (SJKF)

The MND states, in Table 2 of the Appendix B Biological Evaluation, that the habitat present at the Project site is unsuitable for SJKF and is the reason for being considered absent. CDFW disagrees with this determination due to SJKF being known to den and forage within rights-of-way, vacant lots, agricultural lands, and other disturbed areas in addition to undisturbed habitats. SJKF absence in any one year is not necessarily a reliable predictor of future SJKF potential to occur on a site (Cypher et al. 2013). SJKF may be attracted to Project areas due to the type and level of ground-disturbing activities and the loose, friable soils resulting from intensive ground disturbance. SJKF will forage in fallow and agricultural fields and utilize streams and canals as dispersal corridors. Habitat loss resulting from land conversion to agricultural, urban, and industrial development is the primary threat to SJKF (Cypher et al. 2013).

Recommended Mitigation Measure 1: SJKF Habitat Assessment

For all Project-specific components including construction and land conversion, CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation, to determine if the Project area or its immediate vicinity contains suitable habitat for SJKF.

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Recommended Mitigation Measure 2: SJKF Surveys and Minimization

CDFW recommends assessing presence or absence of SJKF by having qualified biologists conduct surveys of Project areas and a 500-foot buffer of Project areas to detect SJKF and their sign. CDFW also recommends following the U.S. Fish and Wildlife Service (USFWS 2011) Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance during Project implementation.

Recommended Mitigation Measure 3: SJKF Take Authorization

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

Crotch's Bumble Bee (CBB)

The MND states, in Table 2 of the Appendix B Biological Evaluation, that the habitat present at the Project site is unsuitable for CBB and is the reason for being considered absent. The MND Appendix B Biological Evaluation, Section 2.2.1, states that small mammal burrows were found on the Project site. The Project site is within the range of CBB, and while dispersal and foraging distances can vary, bumble bee species can travel several miles to forage (CDFW 2023). Based on the Project location and presence of small mammal burrows, CDFW disagrees that there isn't suitable habitat for CBB within the Project area. Suitable CBB habitat includes areas of grasslands and upland scrub that contain requisite habitat elements, such as small mammal burrows. 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 utilized by CBB mated queens include soft, disturbed soil (Goulson 2010) or leaf litter or other debris (Williams et al. 2014). Therefore, ground disturbance and vegetation removal associated with Project implementation has the potential to significantly impact local CBB populations. As such, CDFW recommends the following:

Recommended Mitigation Measure 4: CBB Surveys Prior to Construction

CDFW recommends that a qualified biologist conduct focused surveys for CBB, and their requisite habitat features following the methodology outlined in the Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species (CDFW 2023).

Recommended Mitigation Measure 5: CBB Avoidance Buffer

If CBB is detected, or surveys cannot be completed, CDFW recommends that all small mammal burrows and thatched/bunch grasses be avoided by a minimum of 50 feet to avoid unauthorized take and potentially significant impacts. If ground-

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disturbing activities will occur during the overwintering period (October through February), consultation with CDFW is warranted to discuss how to implement Project activities and avoid take. Any detection of CBB prior to or during Project implementation warrants consultation with CDFW to discuss how to avoid take.

Recommended Mitigation Measure 6: CBB Take Authorization

If CBB is identified during surveys, consultation with CDFW is warranted to determine if the Project can avoid take, and if avoidance is not feasible, to acquire an ITP prior to any ground disturbing activities, pursuant to Fish and Game Code section 2081, subdivision (b).

Western Burrowing Owl (BUOW)

The California Fish and Game Commission approved western burrowing owl (BUOW) as a candidate for potential listing as a protected species under CESA on October 10, 2024, and published these findings in the California Regulatory Notice Register (Notice Register) on October 25, 2024. As such, BUOW is now a candidate under CESA and receives the same legal protection afforded to an endangered or threatened species (Fish & G. Code, §§ 2074.2 & 2085).

The MND Table 2 of the Appendix B Biological Evaluation states BUOW are unlikely to occur within the Project site due to the disturbed land, and the species was not observed during the field survey. The MND Appendix B Biological Evaluation, Section 2.2.1, states that small mammal burrows are present at the Project site. BUOW inhabit open grassland containing small mammal burrows, a requisite habitat feature used by BUOW for nesting and cover year-round for their survival and reproduction. Habitat loss and degradation are considered the greatest threats to BUOW in California's Central Valley (Gervais et al. 2008). The Project site is within the known geographic range of BUOW, and as BUOW have the potential to nest and/or forage within the Project site, even after construction activities are completed, CDFW has concerns regarding the potential impacts to BUOW during Project activities.

Recommended Mitigation Measure 7: BUOW Surveys

CDFW recommends that surveys, following the "Burrowing Owl Survey Protocol and Mitigation Guidelines" (CBOC 1993) and CDFW's "Staff Report on Burrowing Owl Mitigation" (CDFG 2012) be conducted the survey season immediately prior to construction.

Recommended Mitigation Measure 8: BUOW Avoidance Buffer

Should a BUOW or known BUOW den (active or inactive) be detected, either during pre-construction surveys or construction activities, CDFW recommends a 500 meter no-disturbance buffer be implemented prior to and during any ground-disturbing activities. CDFW also recommends that this buffer be implemented for both wintering and breeding BUOW.

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Recommended Mitigation Measure 9: BUOW Consultation – Construction:
If BUOW or known BUOW den (active or inactive) is detected and implementing the no-disturbance buffer is not feasible, consultation with the CDFW is warranted to discuss how to avoid take or, if avoidance is not feasible, to acquire an ITP prior to any ground disturbing activities, pursuant to Fish and Game Code section 2081, subdivision (b).

Editorial Comments and/or Suggestions

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).

Habitat within the Project area likely provides nesting habitat for birds. For this reason, CDFW encourages Project implementation occur during the non-nesting bird season. However, if ground-disturbing activities must occur during the breeding season (February through mid-September), the Project applicant is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or relevant Fish and Game Codes as referenced above.

To evaluate Project-related impacts on nesting birds, CDFW recommends that a qualified wildlife biologist conduct pre-activity surveys for active nests no more than 10 days prior to the start of ground 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 work site to identify nests and determine their status. A sufficient area means any area potentially affected by a project. In addition to direct impacts (i.e. nest destruction), noise, vibration, odors, and movement of workers or equipment could also affect nests. Prior to initiation of construction activities, CDFW recommends a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests. Once construction begins, CDFW recommends a qualified biologist continuously monitor nests to detect behavioral changes resulting from the project. If behavioral changes occur, CDFW recommends the work causing that change cease and CDFW 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

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ecological reason to do so, such as when the construction area would be concealed from a nest site by topography. CDFW recommends that a qualified wildlife biologist advise and support any variance from these buffers and notify CDFW in advance of implementing a variance.

Water Rights: The Project description includes the diversion and storage of surface water for groundwater recharge. As stated previously, the capture of unallocated stream flows to artificially recharge groundwater aquifers is subject to appropriation and approval by the SWRCB pursuant to Water Code section 1200 et seq. CDFW recommends that the MND include a detailed description of the water rights and water entitlements that would pertain specifically 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 special-status species and their habitats, it is advised that required consultation with CDFW occur well in advance of the SWRCB water right application process.

Sustainable Groundwater Management Act (SGMA) and Groundwater Dependent Ecosystems: Groundwater Sustainability Plans were prepared for the Kern Subbasin. The Kern Subbasin (Subbasin No. 5-22.14 of the San Joaquin Valley Groundwater Basin) is designated a high priority Subbasin by the Department of Water Resources. SGMA defines sustainable groundwater management as, "management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results (Water Code, § 10721 (v))." CDFW recommends that the MND include an analysis of Project-related activities in relation to the South of Kern River Subbasin Groundwater Sustainability Plan, including analysis of potential undesirable results and adverse impacts to groundwater dependent ecosystems including the biological resources listed above.

CDFW recommends a hydrologic study or other information that identifies and analyzes the impacts to the aquatic ecosystems and fisheries of the Kern River that may result from Project implementation. CDFW recommends that it include specific triggers for evaluating changes to surface and ground water levels and monitoring wetland and riparian habitats that would be affected by these changes.

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 CNDDDB. The CNDDDB field survey form can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting->

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[Data](#). The completed form can be mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

FILING FEES

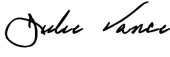
The Project, as proposed, could have an impact on biological resources, and an assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & Game Code, § 711.4; Pub. Resources Code, § 21089).

CONCLUSION

CDFW appreciates the opportunity to comment on the MND to assist AEWS in identifying and mitigating Project impacts on biological resources. A Mitigation and Monitoring Program (MMRP) (Attachment 1) is included below to assist AEWS with incorporating the recommended mitigation measures provided above.

If you have any questions, please contact Jackson Powell, Environmental Scientist, at the address provided on this letterhead by electronic mail at Jackson.Powell@wildlife.ca.gov.

Sincerely,

DocuSigned by:

FA83F09FE08945A...

Julie A. Vance
Regional Manager

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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), 2025. Biogeographic Information and Observation System (BIOS). <https://www.wildlife.ca.gov/Data/BIOS>. Accessed January 13, 2025.
- California Department of Fish and Wildlife. 2023. Survey considerations for California Endangered Species Act candidate bumble bee species. California Department of Fish and Wildlife, Sacramento, California, USA.
- Cypher, B. L., S. E. Phillips, P. A. Kelly, 2013. Quantity and distribution of suitable habitat for endangered San Joaquin kit foxes: conservation implications. *Canid Biology and Conservation* 16(7): 25–31.
- Gervais, J. A., D. K. Rosenberg, and L. A. Comrack, 2008. Burrowing Owl (*Athene cunicularia*) *In* California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California (W. D. Shuford and T. Gardali, editors). *Studies of Western Birds* 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.
- Goulson, D. 2010. Bumblebees: behaviour, ecology, and conservation. Oxford University Press, New York. 317pp.
- Hatfield, R., Jepsen, S., Thorp, R., Richardson, L., Colla, S. & Foltz Jordan, S. 2015. *Bombus occidentalis*. The IUCN Red List of Threatened Species 2015.
- 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.
- 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: North Canal Spreading Works Expansion

STATE CLEARINGHOUSE No.: 2024120994

RECOMMENDED MITIGATION MEASURES	STATUS/DATE/INITIALS
<i>Before Project Activity</i>	
Recommended Mitigation Measure 1: SJKF Habitat Assessment	
Recommended Mitigation Measure 2: SJKF Surveys and Minimization	
Recommended Mitigation Measure 3: SJKF Take Authorization	
Recommended Mitigation Measure 4: CBB Surveys Prior to Construction	
Recommended Mitigation Measure 6: CBB Take Authorization	
Recommended Mitigation Measure 7: BUOW Surveys	
Recommended Mitigation Measure 9: BUOW Consultation	
<i>During Construction</i>	
Recommended Mitigation Measure 5: CBB Avoidance Buffer	
Recommended Mitigation Measure 8: BUOW Avoidance Buffer	