



State of California – Natural Resources Agency
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June 28, 2024

Ian Buck-Macleod
Friant Water Authority
854 North Harvard Avenue
Lindsey, California 93247
fkcpumpback@friantwater.org

Subject: Friant-Kern Canal Pump-Back Project (Project)
Notice of Preparation (NOP)
State Clearinghouse No. 2024051211

Dear Ian Buck-Macleod:

The California Department of Fish and Wildlife (CDFW) received a NOP for an Environmental Impact Report (EIR) from the Friant Water Authority, 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 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 Fish and Game Code.

While the comment period may have ended, CDFW respectfully requests that the Friant Water Authority still consider our comments.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically

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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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.

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 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).

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 to 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 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. Bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*) are fully protected species known to occur in the Project area (CNDDDB 2024) and suitable nesting and foraging habitat for the fully protected white-tailed kite (*Elanus leucurus*) is located within and adjacent to the Project boundary.

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.

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Water Rights: The NOP describes the construction of permanent pump-back facilities with expanded capacity to convey water supplies within the Project location boundary. The capture of unallocated stream flows is subject to appropriation and approval by the State Water Resources Control Board (SWRCB) pursuant to Water Code section 1200 et seq. 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. 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 biological expertise to review and comment on environmental documents and impacts arising from Project activities.

PROJECT DESCRIPTION SUMMARY

Proponent: Friant Water Authority

Description and Objective: The Friant Water Authority seeks to facilitate the recirculation of recaptured Restoration Flows released from Millerton Lake for the San Joaquin River Restoration Program and other waters obtained by Friant Contractors to increase operational flexibility and long-term reliability of the water supplies conveyed through the Friant-Kern Canal. Friant Water Authority proposes to increase operational flexibility and long-term reliability by constructing three new permanent pump-back facilities along the Friant-Kern Canal with a 500-cubic foot per second (cfs) facility at the Shafter-Wasco check structure, a 250-cfs facility at the Lake Woollomes check structure, and a 250-cfs facility at the Deer Creek Check structure.

Timeframe: Unspecified

Location: The Project location includes the Friant-Kern Canal and related water infrastructure near the Shafter-Wasco, Lake Woollomes, and Deer Creek check structures. The Project location also includes other Friant Contractors' facilities and related water conveyance infrastructure, including the Cross Valley Canal, Kern River, and California Aqueduct.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the Friant Water Authority in adequately identifying and/or mitigating the Project's significant or potentially significant direct and indirect impacts on fish and wildlife (biological) resources. Based on a review of aerial imagery, the Project description, and a review of California Natural Diversity Database (CNDDDB) records, several special status species and habitat types could potentially be impacted by Project activities. Project-related construction activities within the Project alignment and surrounding area could impact

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the following special status plant and wildlife species and habitats known to occur: the State threatened and federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*); the State threatened Swainson's hawk (*Buteo swainsoni*); the State threatened and fully protected Bald eagle; the State fully protected golden eagle and white-tailed kite (*Elanus leucurus*); the State candidate for listing Crotch's bumble bee (*Bombus crotchii*); the federally proposed threatened and State species of special concern western spadefoot (*Spea hammondi*) and western pond turtle (*Emys marmorata*); and the State species of special concern American badger (*Taxidea taxus*) and burrowing owl (*Athene cunicularia*).

Vegetation communities and habitats in the Project vicinity includes non-native annual grassland, Great Valley cottonwood forest, Great Valley mesquite scrub, valley oak woodland, irrigated row crops, vineyards, orchards and field crops, ruderal disturbed areas, and barren unvegetated areas including levee roads. Aquatic features in and near the Project area include the Friant-Kern Canal, Lake Woollomes, intermittent streams (i.e., Tule River, Deer Creek, Porter Slough, and White River) and associated riparian and fresh emergent wetlands, groundwater recharge basins, detention basins, agricultural ditches and canals, and agricultural ponds.

San Joaquin Kit Fox: San Joaquin kit fox are known to occur within the Project area and a review of recent aerial imagery shows suitable habitat for San Joaquin kit fox in the Project area (CDFW 2024). Without appropriate avoidance and minimization measures for kit fox, potentially significant Project impacts include habitat loss, den collapse, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of young, and direct mortality of individuals.

CDFW recommends a qualified biologist conduct a habitat assessment for San Joaquin kit fox within Project areas and a 500-foot buffer, for a biological study report to be included in the EIR. In areas of suitable habitat and a 500-foot buffer, CDFW recommends that the EIR prescribe focused field surveys for San Joaquin and any sign, such as potential dens, prior to the start of Project activity. 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. If San Joaquin kit fox is detected, CDFW recommends that the EIR require consultation with CDFW for guidance on how to avoid take or to acquire an Incidental Take Permit, pursuant to Fish and Game Code section 2081, subdivision (b).

Swainson's Hawk and White-tailed Kite: Swainson's hawk and white-tailed kite are known to the Project area and have the potential to nest in riparian habitat and other mature trees. Suitable foraging habitat for these species also exists within the vicinity of the Project site, including annual grassland, alfalfa or grain fields, and livestock pasture. Without appropriate avoidance and minimization measures for Swainson's hawk and white-tailed kite, potential significant impacts may include nest abandonment and

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reduced reproductive success that includes mortality of young, and reduced health and vigor of eggs and/or young. The trees and riparian habitat within the Project area represent some of the only remaining suitable nesting habitats in the local vicinity. Depending on the timing of construction, activities including noise, vibration, and movement of workers or equipment could affect nests and have the potential to result in nest abandonment, significantly impacting local nesting Swainson's hawk. CDFW recommends that a qualified biologist conduct a habitat assessment for nest sites suitable for these species within the Project area and a ½-mile buffer, for a biological study report to be included with the EIR. CDFW recommends that the EIR require protocol-level surveys to be conducted for raptors following the survey methods developed by the Swainson's Hawk Technical Advisory Committee (2000) within the nesting season immediately prior to Project activity in areas of suitable nesting habitat within the Project area and a ½-mile buffer. CDFW recommends maintaining a minimum no-disturbance buffer of ½ mile around active nests 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. If an active Swainson's hawk or white-tailed kite nest is detected during surveys and a ½-mile buffer is not feasible, CDFW recommends that the EIR require consultation with CDFW for guidance on how to implement the Project and avoid take or to obtain an Incidental Take Permit, pursuant to Fish and Game Code section 2081, subdivision (b) for Swainson's hawk and to potentially acquire an Incidental Take Permit pursuant to Fish and Game Code section 2081.15 for white-tailed kite.

CDFW also recommends compensation for the loss of Swainson's hawk foraging habitat as described in the *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks* (CDFG 1994) to reduce impacts to foraging habitat to less than significant. CDFW has the following recommendations to mitigate for habitat loss occurring within a minimum distance of 10 miles from known nest sites:

- For projects within one mile of an active nest tree, a minimum of one acre of habitat management (HM) land for each acre of development is advised.
- For projects within five miles of an active nest but greater than one mile, a minimum of ¾ acre of HM land for each acre of development is advised.
- For projects within 10 miles of an active nest tree but greater than five miles from an active nest tree, a minimum of ½ acre of HM land for each acre of development is advised.

Crotch's Bumble Bee: Crotch's bumble bee has been documented in the vicinity of the Project (CDFW 2024). The species is known to inhabit areas of grasslands and scrub that contain requisite habitat elements for nesting, such as small mammal burrows and bunch or thatched grasses. Based on aerial imagery, the Project appears to contain habitat suitable to support Crotch's bumble bee.

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CDFW recommends that a qualified biologist conduct a habitat assessment for Crotch's bumble bee for a biological study report to be included with the EIR. Foraging resources and potential nesting sites, which include all small mammal burrows, perennial bunch grasses, thatched annual grasses, brush piles, old bird nests, dead trees, and hollow logs are advised to be documented as part of the assessment. In areas of suitable habitat, CDFW recommends that the EIR require a qualified biologist to conduct a bumble bee survey using a protocol developed according to the CDFW (2023) *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 Crotch's bumble bees or a nest are detected, it is recommended that the EIR require consultation with CDFW occur to develop adequate take avoidance measures, including protection for underground overwintering queens if a nest is observed at any time. If avoidance of take is not feasible, CDFW advises take authorization via an Incidental Take Permit, pursuant to Fish and Game Code section 2081, subdivision (b).

Nesting Bald Eagle and Golden Eagle: Bald eagle and golden eagle occurrences have been documented within the vicinity of the Project area (CDFW 2024). Without appropriate survey methods, nesting eagles 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 golden eagle 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.

CDFW recommends that a qualified wildlife biologist conduct a habitat assessment for nesting eagles 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 avian nesting season of February 1 through September 15, CDFW recommends that the EIR require additional pre-construction surveys for active nests be conducted by a qualified biologist no more than 10 days prior to the start of construction.

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

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

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avoid take; or if avoidance is not feasible, to potentially acquire an Incidental Take Permit pursuant to Fish and Game Code section 2081.15 prior to Project activities.

Western Pond Turtle: Western pond turtle occurs in the Project area (CDFW 2024) and a review of aerial imagery of the area shows habitats that western pond turtle utilize for nesting, overwintering, dispersal, and basking, including streams, ponded areas, irrigation canals, and riparian and upland habitats. Western pond turtles 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 western pond turtle populations. Without appropriate avoidance and minimization measures for western pond turtle, 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.

CDFW recommends that a qualified biologist conduct a habitat assessment for western pond turtles for a biological report to be included in the EIR. CDFW also recommends that the EIR require a qualified biologist to conduct focused surveys in suitable habitat for western pond turtles within 10 days prior to Project activity, and that focused surveys for nests occur during the egg-laying season of March through August.

CDFW recommends that the EIR require that any western pond turtle 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 western pond turtle individuals, including neonates at the nest, 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.

Burrowing Owl: Burrowing owls have been documented to occur near the Project alignment (CDFW 2024). Burrowing owls inhabit open grassland or adjacent canal banks, rights-of-way, vacant lots, and other landscape features containing small mammal burrows, a requisite habitat feature for nesting and cover. Burrowing owls rely on burrow habitat year-round for their survival and reproduction. Based on aerial photography, potential habitat occurs both within and bordering the Project alignment.

CDFW recommends that a qualified biologist conduct a habitat assessment for burrowing owls, for a biological study report to be included with the EIR. In areas of suitable habitat, CDFW recommends that the EIR require presence/absence surveying for burrowing owl by a qualified biologist following the California Burrowing Owl Consortium (1993) *Burrowing Owl Survey Protocol and Mitigation Guidelines* and CDFW's *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). If burrowing owls are detected, CDFW recommends no-disturbance buffers during any ground-disturbing activities, as shown in the following table (CDFG 2012).

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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)

In the event that burrowing owls are found within these recommended buffers and avoidance is not possible, CDFW recommends that the EIR analyze the potentially significant impact of excluding owls from a burrow. CDFW recommends that any burrow exclusion 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 surveillance methods. CDFW also recommends replacement of occupied burrows with artificial burrows at a ratio of 1 burrow collapsed to 1 artificial burrow constructed (1:1) as mitigation for evicting owls.

Western Spadefoot: Western spadefoot is known to occur within the Project area, using ephemerally ponded water associated with seasonal flooding and rainfall to breed, as well as the associated upland habitats outside of the breeding season. Spadefoot toads inhabit grassland habitats, breed in seasonal wetlands, and seek refuge in upland habitat where they occupy burrows outside of the breeding season (Thomson et al. 2016). Any depressional features in the Project area footprint may support breeding spadefoot and the adjacent areas may provide upland refugia. CDFW recommends that a qualified biologist conduct a habitat assessment for spadefoot for a biological study report to be included with the EIR. In areas of suitable habitat, CDFW recommends that the EIR require a qualified biologist to conduct focused surveys for western spadefoot and their requisite habitat features prior to each Project. CDFW recommends that the EIR describe how avoidance of occupied burrows or other habitat features will occur.

American Badger: The Project area is within the known geographic range of American badger and suitable habitat may be present (CDFW 2024). CDFW recommends that a qualified biologist conduct a habitat assessment for American Badger, for a biological study report to include with the EIR. If potential habitat is present, CDFW recommends that the EIR direct a qualified biologist to conduct focused surveys for the species and its requisite habitat features to evaluate potential Project impacts, and describe avoidance, minimization, and mitigation as warranted to address potentially significant impacts.

Wetland and Riparian Habitats: The NOP states that construction could affect riparian habitat and federally or State protected wetlands. The Project area contains numerous waterways and riparian and wetland areas within an agricultural landscape that also currently supports undeveloped habitats. Development within the Project area has the

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potential to involve temporary and permanent impacts to these features, including loss of riparian and wetland vegetation and the degradation of wetland and riparian areas through grading, fill, and related development.

Riparian and associated floodplain and wetland areas are valuable for their ecosystem processes such as protecting water quality by filtering pollutants and transforming nutrients; stabilizing stream banks to prevent erosion and sedimentation/siltation; and dissipating flow energy during flood conditions, thereby spreading the volume of surface water, reducing peak flows downstream, and increasing the duration of low flows by slowly releasing stored water into the channel through subsurface flow. Within the San Joaquin Valley, modifications of streams to accommodate human uses has resulted in damming, canalizing, and channelizing of most streams, though some natural stream channels and small wetland or wetted areas remain (Edminster 2002). 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. Construction activities within these features also have the potential to impact downstream waters as a result of Project site impacts leading to erosion, scour, and changes in flow and stream morphology.

CDFW recommends that the EIR include formal stream mapping and wetland delineation conducted by a qualified biologist or hydrologist (as warranted), to determine the baseline location, extent, and condition of streams (including any floodplain) and wetlands within and adjacent to the Project area. Please note that while there is overlap, State and federal definitions of wetlands differ, and complete stream mapping commonly differs from delineations used by the U.S. Army Corps of Engineers specifically to identify the extent of Waters of the U.S. Therefore, it is advised that the delineation identify both State and federal wetlands in the Project area as well as the extent of all streams including floodplains, if present, within the Project area. CDFW recommends that site map(s) depicting the extent of any activities that may affect wetlands, lakes, or streams be included with any Project site evaluations, to clearly identify areas where stream/riparian and wetland habitats could be impacted from Project activities.

CDFW recommends that the potential direct and indirect impacts to stream/riparian and wetland habitat be analyzed according to each Project activity. Based on those potential impacts, CDFW recommends that the EIR include measures to avoid, minimize, and/or mitigate those impacts. CDFW recommends that impacts to riparian habitat (i.e., biotic and abiotic/nonvegetative features) take into account the effects to stream function and hydrology from riparian habitat loss or damage, as well as potential effects from the loss of riparian habitat to special-status species already identified herein. CDFW recommends that losses to stream and wetland habitats be offset with corresponding riparian and wetland habitat restoration incorporating native vegetation to replace the value to fish and wildlife provided by the habitats lost from Project implementation. If on-site restoration to replace habitats is not feasible, CDFW recommends off-site

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mitigation by restoring or enhancing in-kind riparian or wetland habitat and providing for the long-term management and protection of the mitigation area, to ensure its persistence.

EDITORIAL COMMENTS AND/OR SUGGESTIONS

Project Description: The NOP lacks detailed information with regard to the actual footprint of the Project and does not address methods and materials, ground disturbance related to each activity, staging and laydown areas, and other specific Project-related activities that could threaten biological resources and result in potentially significant environmental impacts within the Project area. CDFW anticipates these details to be provided in the EIR, in addition to details such as specific locations of activities relative to private or public property and adjacent roads and special conditions such as the need for any night work.

Water Rights: The NOP describes that the Friant Water Authority seeks to facilitate the recirculation of recaptured Restoration Flows released from Millerton Lake for the San Joaquin River Restoration Program and other waters obtained by Friant Contractors to increase operational flexibility and long-term reliability of the water supplies conveyed through the Friant-Kern Canal. CDFW recommends that the EIR discuss the source of the water, including whether it is currently unallocated stream flow or if the Friant Water Authority or another entity already possesses a water right. CDFW recommends providing a detailed description of all water rights and water entitlements that would pertain to the Project, including any applications or change petitions that may be filed to transfer water. If a new water allocation would occur specifically for transfer to the Friant Water Authority, CDFW recommends that the EIR also include an analysis of the impacts of diverting currently unallocated flows, including such details for the point(s) of diversion as a hydrologic study, water availability analysis, and other information that identifies and analyzes the impacts to aquatic ecosystems and fish and wildlife resources.

As Trustee Agency, CEQA 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 details be disclosed during the CEQA process and that required consultation with CDFW occur well in advance of any SWRCB water right application process.

Sustainable Groundwater Management Act (SGMA) and Groundwater Dependent Ecosystems: The NOP states that construction and operation could result in groundwater water quality impacts, and operation could result in changes to available groundwater supply. Many sensitive ecosystems and public trust resources such as streams, springs, riparian areas, and wetlands are dependent on groundwater and interconnected surface waters. The Project boundary overlaps the boundary for the Tule

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Subbasin (Subbasin No. 5-022.13) and Kern Basin (Subbasin No. 5-022.14), both of which are listed as critically overdrafted and designated as high priority Basins by the Department of Water Resources. Groundwater Sustainability Plans (GSPs) were prepared for the Tule Groundwater Subbasin and the Kern Groundwater Subbasins and were deemed inadequate by the Department of Water Resources on March 22, 2023. Both subbasins are now subject to consideration for probation by the State Water Resources Control Board. CDFW recommends that the EIR detail whether the Project will address and correct overdraft conditions for the groundwater basin and how this will affect groundwater dependent ecosystems and interconnected surface waters.

Lake and Streambed Alteration: CDFW recommends that the EIR include mapping of all stream and associated wetland resources within the Project area as described above and describe the methodology used in determining the extent of all streams in the Project area. Jurisdictional activities are subject to CDFW's authority pursuant to 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, intermittent, or episodic, as well as those that are perennial, regardless of the duration, frequency, or volume of flow.

CDFW is required to comply with CEQA in the issuance of a Lake or Streambed Alteration Agreement; therefore, if the CEQA document approved for the Project does not adequately describe the Project and its impacts to lakes or streams, a subsequent CEQA analysis may be necessary for a Lake or Streambed Alteration Agreement issuance. For information on notification requirements, please refer to CDFW's website (<https://wildlife.ca.gov/Conservation/LSA>) or contact CDFW staff in the Central Region Lake and Streambed Alteration Program at (559) 243-4593 or R4LSA@wildlife.ca.gov.

California Natural Diversity Database (CNDDDB): Please note that the CNDDDB is populated by and records voluntary submissions of species detections. As a result, species may be present in locations not depicted in the CNDDDB but where there is suitable habitat and features capable of supporting species. A lack of an occurrence record in the CNDDDB does not mean that a species is not present. In order to adequately assess any potential Project-related impacts to biological resources, surveys conducted by a qualified biologist during the appropriate survey period(s) and using the appropriate protocol survey methodology are warranted in order to determine whether or not any special status species are present.

Cumulative Impacts: The NOP states the Project will impact riparian, wetland, and other habitats. The Kern River and Deer Creek are within the Project boundary and supports mature riparian woodland habitat and may potentially support several listed

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and other special status species, including those listed above. The Project could result in direct and cumulative adverse impacts to these fish and wildlife and other public trust resources. 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 condition and will be impacted by the Project, even if those impacts are relatively small (i.e., less than significant). CDFW recommends that cumulative impacts be analyzed using an acceptable methodology to evaluate the impacts of past, present, and reasonably foreseeable future projects on resources and be focused specifically on the resource, not the Project. An appropriate resource study area identified and utilized for this analysis is advised. CDFW staff is available for consultation in support of cumulative impacts analyses as a trustee and responsible agency under CEQA.

Federally Listed Species: CDFW recommends consulting with the USFWS on potential impacts to federally listed species, including but not limited to desert tortoise. Take under the 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. Consultation with the USFWS in order to comply with ESA is advised well in advance of any ground-disturbing activities.

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

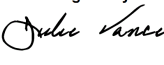
To evaluate Project-related impacts on nesting birds, CDFW recommends that a qualified wildlife biologist conduct pre-activity surveys for active nests no more than 10 days prior to the start of ground or vegetation disturbance to maximize the probability that nests that could potentially be impacted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

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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. CDFW recommends that a qualified wildlife biologist advise and support any variance from these buffers and notify CDFW in advance of implementing a variance.

CDFW appreciates the opportunity to comment on the NOP to assist the Friant Water Authority in identifying and mitigating Project impacts to biological resources. If you have any questions, please contact Annette Tenneboe, Senior Environmental Scientist Specialist, at (559) 580-3202 or by email at Annette.Tenneboe@wildlife.ca.gov.

Sincerely,

DocuSigned by:

FA83F09FE08945A...
Julie A. Vance
Regional Manager

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