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Governor's Office of Planning & Research

JAN 27 2020

STATE CLEARINGHOUSE

Anthea Hansen, General Manager
Del Puerto Water District
17840 Ward Avenue
Patterson, California 95363

**Subject: Del Puerto Canyon Reservoir (Project)
Draft Environmental Impact Report (DEIR)
SCH#: 2019060254**

Dear Ms. Hansen:

The California Department of Fish and Wildlife (CDFW) received a DEIR from the Del Puerto Water District for the above-referenced 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.

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.

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

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

The use of unallocated stream flows is subject to appropriation and approval by the State Water Resources Control Board (SWRCB) pursuant to Water Code section 1225. 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 ecosystems, which in turn are reliant upon adequate flows of water. CDFW, therefore, has a material interest in assuring adequate water flows within streams for the protection, maintenance and proper stewardship of those resources. CDFW provides, as available, biological expertise to review and comment on environmental documents and impacts arising from project activities.

PROJECT DESCRIPTION SUMMARY

Proponent: Del Puerto Water District

Objective: The Project proposes the construction and operation of a new reservoir on Del Puerto Creek to provide approximately 82,000 acre-feet (AF) of additional off-stream storage to the Central Valley Project (CVP). Project components are the reservoir (including the main dam, three saddle dams, and other facilities), conveyance facilities to transport water to/from the Delta-Mendota Canal (DMC) (including a pipeline and pumping plant), electrical facilities, relocation of Del Puerto Canyon Road, and relocation of existing and proposed utilities that are within the Project area.

Location: The Project site is located in the foothills west of the City of Patterson and Interstate-5.

Timeframe: Construction of the proposed Project is expected to take approximately six years.

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist Del Puerto Water District in adequately identifying and/or mitigating the Project's significant, or potentially

significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the CEQA document prepared for this Project.

There are many special-status resources present in and adjacent to the Project area. These resources may need to be evaluated and addressed prior to any approvals that would allow ground-disturbing activities or land use changes. CDFW is concerned regarding potential impacts to special-status species including, but not limited to, the State and federally threatened California tiger salamander (*Ambystoma californiense*), the State threatened Swainson's hawk (*Buteo swainsoni*), the State threatened and federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*), the State candidate-listed as threatened foothill yellow-legged frog (*Rana boylei*), the State and federally endangered least Bell's vireo (*Vireo bellii pusillus*), the State candidate-listed as endangered Crotch bumble bee (*Bombus crotchii*), and the State species of special concern California red-legged frog (*Rana draytonii*), western spadefoot (*Spea hammondi*), the State rare Tracy's eriastrum (*Eriastrum tracyi*) and tule elk (*Cervus canadensis nannodes*). In order to adequately assess any potential impact to biological resources, focused biological surveys should be conducted by a qualified wildlife biologist/botanist during the appropriate survey period(s) in order to determine whether any special-status species may be present within the Project area. Properly conducted biological surveys, and the information assembled from them, are essential to identify any mitigation, minimization, and avoidance measures and/or the need for additional or protocol-level surveys, especially in the areas not in irrigated agriculture, and to identify any Project-related impacts under CESA and other species of concern.

I. Environmental Setting and Related Impact

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

COMMENT 1: California Tiger Salamander (CTS)

Issue: CTS have the potential to occur in the Project site. Aerial imagery shows that the Project site consists of upland habitat and Del Puerto Creek which likely serve as refugia and breeding habitat for CTS that are dispersing from and into the area.

Specific Impacts: Aerial imagery shows that the proposed Project site has upland habitat for refugia and Del Puerto Creek which may function as breeding habitat. Potential ground- and vegetation-disturbing activities associated with Project activities include: water inundation as a result of the proposed new reservoir, collapse of small mammal burrows, inadvertent entrapment, loss of upland refugia,

water quality impacts to breeding sites, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individuals.

Evidence impact would be significant: Up to 75% of historic CTS habitat has been lost to urban and agricultural development (Searcy et al. 2013). Loss, degradation, and fragmentation of habitat are the primary threats to CTS in both the Central and San Joaquin valleys. Contaminants and vehicle strikes are also sources of mortality for the species (CDFW 2015, USFWS 2017a). The Project site is within the range of CTS and has suitable habitat (i.e., grasslands interspersed with burrows and vernal pools). CTS have been determined to be physiologically capable of dispersing up to approximately 1.5 miles from seasonally flooded wetlands (Searcy and Shaffer 2011) and have been documented to occur near the Project site (CDFW 2019). Given the presence of suitable habitat within the Project site, ground-disturbing activities have the potential to significantly impact local populations of CTS.

Recommended Potentially Feasible Mitigation Measure(s)

Because suitable habitat for CTS is present throughout the Project site, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the environmental impact report (EIR) prepared for this Project, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 1: Focused CTS Protocol-level Surveys

CDFW recommends that a qualified biologist conduct protocol-level surveys in accordance with the USFWS "Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander" (USFWS 2003) at the appropriate time of year to determine the existence and extent of CTS breeding and refugia habitat. The protocol-level surveys for CTS require more than one survey season and are dependent upon sufficient rainfall to complete. As a result, consultation with CDFW and the USFWS is recommended well in advance of beginning the surveys and prior to any planned vegetation- or ground-disturbing activities. CDFW advises that the protocol-level survey include a 100-foot buffer around the Project area in all areas of wetland and upland habitat that could support CTS. Please be advised that protocol-level survey results are viable for two years after the results are reviewed by CDFW.

Recommended Mitigation Measure 2: CTS Avoidance

If CTS protocol-level surveys as described in Mitigation Measure 1 are not conducted, CDFW advises that a minimum 50-foot no-disturbance buffer be delineated around all small mammal burrows in suitable upland refugia habitat within

and/or adjacent to the Project site. Further, CDFW recommends potential or known breeding habitat within and/or adjacent to the Project site be delineated with a minimum 250-foot no-disturbance buffer. Both upland burrow and wetland breeding no-disturbance buffers are intended to minimize impacts to CTS habitat and avoid take of individuals. Alternatively, the applicant can assume presence of CTS within the Project site and obtain from CDFW a State Incidental Take Permit (ITP) in accordance with Fish and Game Code section 2081(b).

Recommended Mitigation Measure 3: CTS Take Authorization

If through surveys it is determined that CTS are occupying or have the potential to occupy the Project site, consultation with CDFW is warranted to determine if the Project can avoid take. If take cannot be avoided, take authorization would be warranted prior to initiating ground-disturbing activities to comply with CESA. Take authorization would occur through issuance of an ITP by CDFW, pursuant to Fish and Game Code section 2081(b). As stated above, in the absence of protocol surveys, the applicant can assume presence of CTS within the Project site and obtain an ITP from CDFW.

COMMENT 2: Swainson's Hawk (SWHA)

Issue: SWHA have the potential to nest near the Project site, and forage within the Project site. SWHA have been documented to occur within the Project site (CDFW 2020), and the DEIR indicates that they were observed during wildlife surveys in the Project site.

Specific impacts: Without appropriate avoidance and minimization measures for SWHA, potential significant impacts that may result from Project activities include: nest abandonment, loss of nest trees, loss of foraging habitat that would reduce nesting success (loss or reduced health or vigor of eggs or young), and direct mortality. Any take of SWHA without appropriate incidental take authorization would be a violation of Fish and Game Code.

Evidence impact is potentially significant: SWHA exhibit high nest-site fidelity year after year and lack of suitable nesting habitat in the San Joaquin Valley limits their local distribution and abundance (CDFW 2016). Approval of the Project may lead to subsequent ground-disturbing activities that involve noise, groundwork, and movement of workers that could affect nests and has the potential to result in nest abandonment and loss of foraging habitat, significantly impacting local nesting SWHA.

Recommended Potentially Feasible Mitigation Measure(s)

Because suitable foraging habitat for SWHA is present throughout the Project site, CDFW recommends conducting the following evaluation of the Project site,

incorporating the following mitigation measures into the EIR prepared for this Project, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 4: SWHA Surveys

CDFW agrees with Mitigation Measure BIO-TERR-1L of the DEIR that a qualified wildlife biologist conduct surveys for nesting SWHA following the survey methods developed by the Swainson's Hawk Technical Advisory Committee (SWHA TAC 2000) prior to project implementation. However, the 0.25-mile survey distance from the Project site as indicated in the DEIR is inconsistent with the SWHA TAC; the SWHA TAC recommends a 0.5-mile survey distance from the limits of disturbance. The survey protocol includes early season surveys to assist the project proponent in implementing necessary avoidance and minimization measures, and in identifying active nest sites prior to initiating ground-disturbing activities.

Recommended Mitigation Measure 5: No-disturbance Buffer

If ground-disturbing activities are to take place during the normal bird breeding season (March 1 through September 15), CDFW recommends that additional pre-activity surveys for active nests be conducted by a qualified biologist no more than 10 days prior to the start of Project implementation. Mitigation Measure BIO-TERR-1L of the DEIR states that a minimum no-disturbance buffer of 600 feet shall be established around all active SWHA nests. CDFW recommends a minimum no-disturbance buffer of ½-mile be delineated 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 or parental care for survival.

Recommended Mitigation Measure 6: SWHA Take Authorization

CDFW recommends that in the event an active SWHA nest is detected during surveys, consultation with CDFW is warranted 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(b) is necessary to comply with CESA.

Recommended Mitigation Measure 7: Loss of SWHA Foraging Habitat

CDFW recommends compensation for the loss of SWHA foraging habitat as described in CDFW's "Staff Report Regarding Mitigation for Impacts to Swainson's Hawks" (CDFG 1994) to reduce impacts to foraging habitat to less than significant. The Staff Report recommends that mitigation for habitat loss occur within a minimum distance of 10 miles from known nest sites. CDFW has the following recommendations based on the Staff Report:

- For projects within 1 mile of an active nest tree, a minimum of 1 acre of habitat management (HM) land for each acre of development is advised.
- For projects within 5 miles of an active nest but greater than 1 mile, a minimum of $\frac{3}{4}$ acre of HM land for each acre of development is advised.
- For projects within 10 miles of an active nest tree but greater than 5 miles from an active nest tree, a minimum of $\frac{1}{2}$ acre of HM land for each acre of development is advised.

Recommended Mitigation Measure 8: SWHA Nest Trees

CDFW recommends that the removal of known raptor nest trees, even outside of the nesting season, be replaced with an appropriate native tree species planting at a ratio of 3:1 at or near the Project area or in another area that will be protected in perpetuity to reduce impacts resulting from the loss of nesting habitat.

COMMENT 3: San Joaquin Kit Fox (SJKF)

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

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

Evidence impact is potentially significant: Habitat loss resulting from agricultural, urban, and industrial development is the primary threat to SJKF (Cypher et al. 2013). The Project area is bordered by some of the only remaining undeveloped land in the vicinity. Therefore, subsequent ground-disturbing activities have the potential to significantly impact local SJKF populations.

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Environmental Setting and Related Impact Shortcoming)

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

Recommended Mitigation Measure 9: SJKF Surveys

CDFW agrees with Mitigation Measure BIO-TERR-10 in the DEIR that presence/absence of SJKF be assessed by conducting surveys and implementing den avoidance buffers following the USFWS "Standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance" (2011). Specifically, CDFW advises conducting these surveys in all areas of potentially suitable habitat no less than 14 days and no more than 30 days prior to beginning of ground-disturbing activities.

Recommended Mitigation Measure 10: SJKF Take Authorization

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

COMMENT 4: Foothill Yellow-Legged Frog (FYLF) and California Red-Legged Frog (CRLF)

Issue: FYLF are primarily stream dwelling and requires shallow, flowing water in streams and rivers with at least some cobble-sized substrate; CRLF primarily inhabit ponds but can also be found in other waterways including marshes, streams, and lagoons, and the species will also breed in ephemeral waters (Thomson et al. 2016). FYLF and CRLF have been documented to occur in the vicinity of the Project site (CDFW 2020). The Project site contains habitat that may support both species. Avoidance and minimization measures are necessary to reduce impacts to FYLF and CRLF to a level that is less than significant.

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

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

Recommended Potentially Feasible Mitigation Measure(s)

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

Recommended Mitigation Measure 11: FYLF and CRLF Surveys

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

Recommended Mitigation Measure 12: FYLF and CRLF Avoidance

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

Recommended Mitigation Measure 13: FYLF Take Authorization

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

COMMENT 5: Least Bell's Vireo (LBV)

Issue: LBV are known to occur within the Project site along the Del Puerto Creek (CDFW 2020). Review of aerial imagery indicates the presence of riparian woodland vegetation, suitable to support LBV, both within the Project site and its vicinity. Therefore, the Project has the potential to impact LBV.

Specific impact: Without appropriate avoidance and minimization measures for LBV, potential significant impacts associated with Project development include nest

abandonment, reduced reproductive success, and reduced health and vigor of eggs and/or young.

Evidence impact is potentially significant: LBV were abundant and widespread in the United States until the 1950s (Grinnell and Miller 1944). By the 1960s, they were considered scarce (Monson 1960), and by 1980, there were fewer than 50 pairs remaining (Edwards 1980), although this number had increased to 2,500 by 2004 (Kus and Whitfield 2005). The primary cause of decline for this species has been the loss and alteration of riparian woodland habitats (USFWS 2006). Fragmentation of their preferred habitat has also increased their exposure to brown-headed cowbird (*Molothrus ater*) parasitism (Kus 2002). Current threats to their preferred habitat include colonization by non-native plants and altered hydrology (diversion, channelization, etc.) (USFWS 2006).

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Environmental Setting and Related Impact)

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

Recommended Mitigation Measure 14: LBV Habitat Assessment

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

Recommended Mitigation Measure 15: LBV Avoidance

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

Recommended Mitigation Measure 16: LBV Surveys

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

Additionally, CDFW advises conducting focused pre-construction surveys for LBV in all areas of potentially suitable habitat within 10 days of Project implementation, when initiated during the bird breeding season.

Recommended Mitigation Measure 17: LBV Take Authorization

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

COMMENT 6: Crotch Bumble Bee (CBB)

Issue: On June 28, 2019, the Fish and Game Commission published findings of its decision to advance CBB to candidacy as endangered. Pursuant to Fish and Game Code section 2074.6, CDFW has initiated a status review report to inform the Commission's decision on whether listing of CBB, pursuant to CESA, is warranted. During the candidacy period, consistent with CEQA Guidelines section 15380, the status of the CBB as an endangered candidate species under CESA (Fish & G. Code, § 2050 et seq.) qualifies it as an endangered, rare, or threatened species under CEQA. It is unlawful to import into California, export out of California, or take, possess, purchase, or sell within California, CBB and any part or product thereof, or attempt any of those acts, except as authorized pursuant to CESA. Under Fish and Game Code section 86, take means to hunt, pursue, catch, capture, or kill, or to attempt to hunt pursue, catch, capture, or kill. Consequently, take of CBB during the status review period is prohibited unless authorization pursuant to CESA is obtained.

CBB have been documented to occur within the vicinity of the Project area (CDFW 2020). 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, under 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 under 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.

Specific impact: The DEIR does not address CBB. Without appropriate avoidance and minimization measures for CBB, potentially significant impacts associated with ground- and vegetation-disturbing activities associated with construction of the Project include loss of foraging plants, changes in foraging behavior, burrow

collapse, nest abandonment, reduced nest success, reduced health and vigor of eggs, young and/or queens, in addition to direct mortality in violation of Fish and Game Code.

Evidence impact is potentially significant: CBB was once common throughout most of the central and southern California; however, it now appears to be absent from most of it, especially in the central portion of its historic range within California's Central Valley (Hatfield et al. 2014). Analyses by the Xerces Society et al. (2018) suggest there have been sharp declines in relative abundance by 98% and persistence by 80% over the last ten years.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to CBB associated with the Project, CDFW recommends incorporating the following mitigation measures into the EIR prepared for this Project and implementing the following mitigation measures as a condition of approval for the Project.

Recommended Mitigation Measure 18: CBB Surveys

CDFW recommends that a qualified biologist conduct focused surveys for CBB and their requisite habitat features to evaluate potential impacts resulting from ground- and vegetation-disturbance associated with the Del Puerto Canyon Road and utility relocations, and potential impacts resulting from inundation as a result of the new reservoir.

Recommended Mitigation Measure 19: CBB Take Avoidance

If 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 take and potentially significant impacts. If ground-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 20: CBB Take Authorization

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

COMMENT 7: Western spadefoot

Issue: Western spadefoot 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). Review of aerial imagery indicates that the Project contains these requisite habitat elements.

Specific impact: Without appropriate avoidance and minimization measures for western spadefoot, potentially significant impacts associated with ground disturbance include water inundation as a result of the proposed new reservoir, collapse of small mammal burrows, inadvertent entrapment, loss of upland refugia, water quality impacts to breeding sites, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individuals.

Evidence impact is potentially significant: Habitat loss and fragmentation resulting from agricultural and urban development is the primary threat to western spadefoot (Thomson et al. 2016). The Project area is within the range of western spadefoot and contains suitable upland habitat (i.e., grasslands interspersed with burrows) and breeding habitat (i.e., vernal pools and swales). As a result, ground-disturbing activities associated with development of the Project site have the potential to significantly impact local populations of this species.

Recommended Potentially Feasible Mitigation Measure(s)

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

Recommended Mitigation Measure 21: Western Spadefoot Surveys

CDFW recommends that a qualified biologist conduct focused surveys for western spadefoot and their requisite habitat features to evaluate potential impacts resulting from ground- and vegetation-disturbance.

Recommended Mitigation Measure 22: Western Spadefoot Avoidance

Avoidance whenever possible is encouraged via delineation and observance of a 50-foot no-disturbance buffer around burrows.

COMMENT 8: Tule Elk

Issue: Elk are California's largest land mammal and an important wildlife resource whose population growth in recent decades has been of great interest to the public.

Prior to non-indigenous settlement, it is estimated the elk population in California was more than 500,000 animals. Non-indigenous settlement decimated California's elk populations. By 1872, only a few tule elk remained in the San Joaquin Valley. Conservation organizations and hunters were able to restore elk to the California landscape. Elk population growth since 1970 has been significant and California now supports approximately 5,700 tule elk (CDFW 2018). CDFW regional biologists have confirmed tule elk within and adjacent to the Project site. The Project has the potential to impact this species.

Specific impact: Tule elk are known to utilize the Project site and adjacent areas. During routine population assessment surveys in early November 2019, several groups of tule elk were sighted by CDFW staff west of the Project site; tule elk were also found to regularly utilize the lower flats in the Project site. Potential impacts to tule elk as a result of the Project includes loss of habitat, loss of habitat connectivity to other elk herds, mortality resulting from vehicle collisions, and entanglement with fences and other structures. Without appropriate mitigation measures for tule elk, potentially significant impacts include loss of habitat.

Evidence impact is potentially significant: Habitat loss and fragmentation resulting from development or conversion to other land uses are the primary threat to tule elk. The Project site is within the range of tule elk and is utilized by tule elk based on CDFW population assessment surveys. As a result, ground-disturbing activities associated with development of the Project site have the potential to significantly impact local populations of this species.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to tule elk, CDFW recommends incorporating the following mitigation measures into the EIR prepared for this Project, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 23: Tule Elk habitat

The Project as proposed will result in the loss of tule elk habitat. CDFW recommends that tule elk habitat be conserved at a minimum 1:1 ratio to the loss of habitat within the general vicinity of the Project site.

Recommended Mitigation Measure 24: Fencing

Physical barriers such as fencing, mesh wire, panels, electric fence, and visual barriers (such as landscaping cloth hung between fence poles) have the potential to impact tule elk. CDFW recommends not utilizing physical barriers that may impede tule elk habitat connectivity to other elk herds, access to water, and foraging areas.

COMMENT 9: Tracy's eriastrum, and other California Rare Plant Rank (CRPR) plant species

Issue: Tracy's eriastrum and other CRPR plant species are known to occur in the vicinity of the Project area (CDFW 2020). Tracy's eriastrum occurs in chaparral and Valley and foothill grassland habitat (CNPS 2020).

Specific impact: Without appropriate avoidance and minimization measures potential impacts to special-status plant species include inability to reproduce and direct mortality. Unauthorized take of species listed as threatened, endangered, or rare pursuant to CESA or the Native Plant Protection Act is a violation of Fish and Game Code.

Evidence impact would be significant: Tracy's eriastrum and many of the CRPR-listed plant species above are threatened with habitat loss and habitat fragmentation resulting from development, vehicle and foot traffic, and introduction of non-native plant species (CNPS 2020), all of which may be unintended impacts of the Project. Therefore, impacts of the Project have the potential to significantly impact populations of the species mentioned above.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to special-status plants associated with the Project, CDFW recommends conducting the following evaluation of the Project area and including the following mitigation measures as conditions of Project approval in the Project's CEQA document.

Recommended Mitigation Measure 25: Special-Status Plant Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment well in advance of project implementation, to determine if the Project area or its vicinity contains suitable habitat for special-status plant species.

Recommended Mitigation Measure 26: Focused Surveys

CDFW recommends that the Project area be surveyed for special-status plants by a qualified botanist following the "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (CDFW 2018). This protocol, which is intended to maximize detectability, includes identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period. In the absence of protocol-level surveys being performed, additional surveys may be necessary.

Recommended Mitigation Measure 27: Special-Status Plant Avoidance

CDFW recommends special-status plant species be avoided whenever possible by delineation and observing a no-disturbance buffer of at least 50 feet from the outer edge of the plant population(s) or specific habitat type(s) required by special-status plant species. If buffers cannot be maintained, then consultation with CDFW is warranted to determine appropriate minimization and mitigation measures for impacts to special-status plant species.

Recommended Mitigation Measure 28: Special-Status Plant Take Authorization

If a State-listed plant species is identified during botanical surveys, consultation with CDFW is warranted to determine if the Project can avoid take. However; if take cannot be avoided, take authorization would need to occur through issuance of an ITP by CDFW to comply with Fish and Game Code section 1900 and California Code of Regulations, title 14, section 786.9, subdivision (b).

II. Editorial Comments and/or Suggestions

Riparian impacts

Issue: The proposed Project and associated reservoir effectively inundate and remove the aquatic and riparian habitat and associated species within the Del Puerto Creek and surrounding area of the Project footprint. The DEIR does not include a hydrologic study or other information that identifies and analyzes the impacts of the removal of riparian woodland and aquatic habitats in the Del Puerto Creek or the species supported by these habitats.

Specific Impact: Watershed and habitat protection are vital to the CDFW's management of California's diverse fish, wildlife, and plant resources. The riparian zone of Del Puerto Canyon supports riparian woodland habitat and associated annual grassland, and may potentially support several sensitive species listed as threatened or endangered under CESA and the Federal Endangered Species Act (FESA), as well as several State special-status species including least Bell's vireo, San Joaquin kit fox, Swainson's hawk, California red-legged and foothill yellow-legged frog. CDFW is concerned that the loss of riparian habitat will result in direct and cumulative adverse impacts to these fish and wildlife and other public trust resources supported by the Del Puerto Creek and its associated riparian habitats.

Recommended Analysis

The DEIR does not include a hydrologic study or other information that identifies and analyzes the impacts to the riparian woodland and aquatic habitats in the Del Puerto Creek or the species supported by these habitats.

Study Plan

Where a project could affect the hydrologic regime of a watershed, the necessary elements to successfully maintain the downstream biological diversity and avoid impacts to threatened and endangered species needs to be identified to facilitate sound management decisions. CDFW recommends the Lead Agency develop and implement a site-specific study to evaluate potential Project-related impacts to the Del Puerto Creek and determine appropriate measures to reduce impacts due to the proposed diversion to a less than significant level. CDFW recommends that the MND be amended and recirculated with the results of this study and proposed mitigation and monitoring measures.

At a minimum, the study plan should include the following:

1. Identification of minimum bypass flows necessary to maintain the health and perpetuation of aquatic and riparian resources in the Del Puerto Canyon downstream of the reservoir.
2. A complete updated (within the last two years) assessment of the flora and fauna within, adjacent to, and downstream of the Project footprint with particular emphasis on identifying endangered, threatened, and sensitive species and sensitive habitats. The assessment should be based on the findings of appropriate applicable protocol surveys to determine the presence or absence of special-status species within the Project footprint of Del Puerto Canyon. These surveys should be conducted on the project site, including adjacent habitats and downstream reaches affected by the discharge.
3. A quantification of the loss of biological resources that will occur as a result of the inundation of Del Puerto Canyon and associated tributaries, and an evaluation of the impacts to resources.
4. A mitigation plan to replace lost plant, fish, and/or wildlife resources including, but not limited to the species or habitats described above. This plan must include a survey which quantifies the loss of resources that will occur as a result of this project. It must also specify measures that will be taken to offset impacts to resources and outline specific mitigation and monitoring programs.

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

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

Water Rights: Project-related diversions to storage will impact riparian, wetland, fisheries and terrestrial (upland) wildlife species and their habitats. The Project will capture surface flow from Del Puerto Creek, and additional surface storage would come from existing contracts that the Del Puerto Water District (DPWD) and the San Joaquin River Exchange Contractors (Exchange Contractors) have for Central Valley Project (CVP) water supply delivered through the Delta-Mendota Canal (DMC), which would be diverted and pumped from the DMC to the proposed reservoir.

The Project proponents have applied to the SWRCB Division of Water Rights for the right to store surface flow from Del Puerto Creek. As stated previously, CDFW, as Trustee Agency, is consulted by the SWRCB during the water rights process to provide terms and conditions designed to protect fish and wildlife prior to appropriation of the State's water resources. Given the potential for impacts to sensitive species and their habitats, it is advised that consultation with CDFW occur well in advance of the SWRCB water right application process.

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

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 the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-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

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 in order for the underlying project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

CDFW appreciates the opportunity to comment on the Project to assist Del Puerto Water District in identifying and mitigating the Project's impacts on biological resources.

More information on survey and monitoring protocols for sensitive species can be found at CDFW's website (<https://www.wildlife.ca.gov/Conservation/Survey-Protocols>). If you have any questions, please contact Jim Vang, Environmental Scientist, at the address provided on this letterhead, by telephone at (559) 243-4014, extension 254, or by electronic mail at Jim.Vang@wildlife.ca.gov.

Sincerely,



Julie A. Vance
Regional Manager

cc: See Page Twenty

Anthea Hansen
Del Puerto Water District
January 27, 2020
Page 20

cc: United States Fish and Wildlife Service
2800 Cottage Way, Suite W-2605
Sacramento, California 95825

State Water Resources Control Board
Division of Water Rights
Post Office Box 2000
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United States Army Corps of Engineers
San Joaquin Valley Office
1325 "J" Street, Suite #1350
Sacramento, California 95814-2928

ec: Annette Tenneboe, Bob Stafford, and Cristen Langner; CDFW

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