State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

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Scott L. Rogers
Palmdale Water District
2029 East Avenue Q
Palmdale, CA 93550
srogers@palmdalewater.org

SUBJECT: Mitigated Negative Declaration for the Pure Water Antelope Valley Project, SCH No. 2025100946; Los Angeles County

Dear Scott L. Rogers:

The California Department of Fish and Wildlife (CDFW) has reviewed the Mitigated Negative Declaration (MND) from the Palmdale Water District (PWD) for the Pure Water Antelope Valley Project (Project) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines[1].

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

CDFW ROLE

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

[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.

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[2] of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.) or the Native Plant Protection Act (NPPA; Fish & G. Code, §1900 et seq.), the Project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

Proponent: Palmdale Water District

Objective: The primary objective of the proposed Project is to develop advanced treatment processes to purify tertiary-treated wastewater to produce water that will meet all applicable state and federal drinking water standards. The purified water will be injected into the local groundwater aquifer to supplement the Proponent's existing water supplies. The components of the Project include an Advanced Water Purification Facility (AWPF), conveyance pipelines, groundwater production and injection wells, and brine disposal via evaporation ponds.

Location: The proposed Project's components are within the City of Palmdale and unincorporated areas of Los Angeles County. The AWPF and two groundwater injection wells will be situated on a 20-acre parcel bounded by 25th Street East and 27th Street East (Latitude: 34.59, Longitude: -118.08). Proposed pipelines will be located within the existing roadways rights-of-way and on property owned by Los Angeles World Airports, north of the proposed AWPF. Brine disposal from the AWPF will occur within existing oxidation ponds owned by the Los Angeles County Sanitation District, east of 40th Street East and north of East Avenue P. The Project will also replace a groundwater production well (Well 37) that will be located west of the existing Palmdale Water Reclamation Plant.

Biological Setting: Vegetation communities within the Biological Study Area (BSA) include *Avena* spp. – *Bromus* spp. herbaceous semi-natural alliance (14.31 acres), *Brassica nigra* – *Centaurea* (*solstitalis*, *melitensis*) herbaceous semi-natural alliance (242.50 acres), *Yucca brevifolia* woodland alliance (35.89 acres), and *Ericameria nauseosa* shrubland alliance (21.69 acres) along with one land cover type – disturbed/developed (301.59 acres). The surrounding area is characterized as agricultural fields, open space, and residential/developments.

An aquatic resources/wetland delineation was conducted on May 8, 2024, and the results showed the presence of ephemeral drainage (0.27 acre, 11,945 linear feet), streambed (0.25 acre, 10,964 linear feet), and riparian habitat (0.02 acre, 981 linear feet). In addition, two reconnaissance surveys were conducted (May 8, 2024, and July

[2] "Take" is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

19, 2024), which documented 65 total species of native and non-native plants within the BSA. Plants species include, but is not limited to, natives such as Spanish lotus (*Acmispon americanus*), burro weed (*Ambrosia dumosa*), Devil's lettuce (*Amsinckia tessellata)*, Hoary saltbush (*Atriplex canescens*), big saltbush (*Atriplex lentiformis*), mulefat (*Baccharis salicifolia*), desert mariposa lily (*Calochortus kennedyi*), silver cholla (*Cylindropuntia echinocarpa*), jimsonweed (*Datura wrightii*), creosote bush (*Larrea tridentata*), sagebrush loeflingia (*Loeflingia squarrosa* var. *artemisiarum*), arroyo lupin (*Lupinus succulentus*), California evening primrose (*Oenothera californica*), short joint beavertail (*Opuntia basilaris* var. *brachyclada*), arroyo willow (*Salix lasiolepis*), desert mallow (*Sphaeralcea ambigua*), broadleaf cattail (*Typha latifolia*), western Joshua tree (*Yucca brevifolia*), etc. Non-native plant species included, but are not limited to, tree of heaven (*Ailanthus altissima*), Australian saltbush (*Atriplex semibaccata*), black mustard (*Brassica nigra*), cheatgrass (*Bromus tectorum*), foxtail barley (*Hordeum murinum*), etc.

Wildlife species observed or expected to occur include, but are not limited to, Crotch's bumble bee (*Bombus crotchii*), desert tortoise (*Gopherus agassizii*), burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), Loggerhead shrike (*Lanius ludovicianus*), Le Conte's thrasher (*Toxostoma lecontei*), Mohave ground squirrel (*Xerospermophilus mohavensis*), western toad (*Anaxyrus boreas halophilus*), gopher snake (*Pituophis catenifer*), southern alligator lizard (*Elgaria multicarinata*), western whiptail (*Aspidoscelis tigris*), Mojave rattlesnake (*Crotalus sculatus*), desert horned lizard (*Phrynosoma platyrhinos*), Great horned owl (*Bubo virginianus*), morning dove (*Zenaida macroura*), desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Otospermophilus beecheyi*), etc.

If impacts occur to western Joshua tree, the proponent proposes mitigation at a minimum ratio of 1:1. Additionally, tree relocation or payment of an in-lieu fee to CDFW is proposed.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist PWD in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

COMMENT # 1: Brine Pond Impacts

Issue: The MND may not fully evaluate the impacts of the brine ponds, which are a component of the Project. Because the brine ponds are located near vegetation communities such as Joshua tree woodland, *Ericameria* shrubland, and other desert scrub habitats, as well as mapped ephemeral drainages, a more detailed analysis is warranted.

Specific impact: Impacts to adjacent vegetation communities and wildlife may occur from construction, operation, and maintenance of the brine ponds. These impacts may include degradation of native plant communities, loss of habitat function, or reduced

suitability of adjacent areas for special-status wildlife such as Mohave ground squirrel, burrowing owl, loggerhead shrike, and Le Conte's thrasher.

Why impact would occur: The MND states that there are existing oxidation ponds that will be converted into brine ponds. Although the design of the brine ponds is not fully developed, brine is known to have a high salt concentration that can alter the chemical and physical properties of soils (Meehan 2023). Brine can also impair a plant's ability to take up water and nutrients, which may result in plant mortality. Given the presence of salt-sensitive native vegetation, including western Joshua tree, desert mariposa lily, and multiple Atriplex species, and the proximity of ephemeral drainage features that may facilitate the movement of salts, indirect impacts are reasonably foreseeable.

Evidence impact may be significant: CDFW considers adverse impacts to plants and wildlife, for the purposes of CEQA, to be significant without mitigation or consideration of additional project design features. Native vegetation communities in the Project area, including Joshua tree woodland and *Ericameria* shrubland, are susceptible to soil salinization and associated declines in cover and function. In addition, because special-status wildlife species, such as Mohave ground squirrel, desert tortoise, and burrowing owl may occur in the area, any decline in vegetation or habitat quality near the brine ponds could affect their ability to forage, nest, or move through the area. To ensure the MND provides sufficient basis for evaluating these impacts under CEQA (CEQA Guidelines, §§ 15126.4(a)(4)(B), 15064, and 15065), the MND should specify mitigation that is proportionate to the level of impacts.

Recommended Potentially Feasible Mitigation Measure(s)

To ensure that potential indirect impacts to biological resources from construction, operation, and maintenance of the brine ponds are adequately addressed, the following mitigation measures are provided. These measures are intended to reduce the potentially significant impacts to less-than-significant levels and to ensure consistency with CEQA requirements for feasible and enforceable mitigation.

Recommendation #1: Brine Pond Impact Evaluation

CDFW recommends that the MND be updated to include a comprehensive evaluation of the impacts that may occur from the construction, operation, and maintenance of the brine ponds. The MND may not yet provide a detailed evaluation of the potential for brine ponds to degrade adjacent vegetation communities or indirectly affect wildlife through soil salinization, habitat degradation, or long-term exposure to elevated salt concentrations. Because the design of the brine ponds is not fully developed and the MND lacks a detailed analysis of potential exposure pathways, both avoidance-oriented design features and long-term monitoring should be incorporated to detect and respond to habitat degradation. CEQA Guidelines, sections 15064, 15065, and 15126.4(a)(1)(B) require that potentially significant impacts to biological resources be clearly identified and mitigated through feasible and effective measures. Inclusion of the following mitigation measures would provide substantial evidence that the Lead Agency has

adequately addressed this project component and reduced potential impacts to less-than-significant levels.

Mitigation Measure #1: Brine Pond Impact Analysis

The Project proponent shall evaluate the potential for brine pond construction, operation, and maintenance to result in indirect impacts to adjacent vegetation communities and wildlife habitat. This evaluation shall include an assessment of brine composition, potential exposure pathways, and the sensitivity of surrounding biological resources. Because native habitats near the brine ponds include Joshua tree woodland, *Ericameria* shrubland, and creosote scrub, and because special-status species identified under CEQA Guidelines, section 15380 may use nearby habitat, the evaluation shall consider whether these communities or species could be affected by salinity-related changes or other indirect effects.

Based on this evaluation, the brine pond design shall incorporate features to prevent brine from entering the surrounding environment. These features may include impermeable liners, engineered berms, run-on and runoff controls, covered systems, or other feasible containment features. A vegetated buffer of at least 25 feet shall be maintained between the brine pond and adjacent natural communities to intercept runoff or seepage and protect habitat integrity. If sensitive vegetation (e.g., Joshua tree or other salt-intolerant species) is documented within the 25-foot buffer, the buffer may be adjusted as needed to maintain adequate protection.

As appropriate for site conditions, the evaluation shall consider whether other project-related activities such as dust generation during construction, operational lighting, noise or potential wildlife attraction to ponds could contribute to indirect effects on vegetation or wildlife. If applicable, feasible design features and best management practices shall be incorporated to reduce these effects.

Mitigation Measure #2: Long-Term Monitoring Plan

A long-term monitoring plan shall be developed and implemented to assess potential impacts to native vegetation and habitat function. The plan shall include baseline vegetation mapping and soil salinity testing prior to pond operation, followed by annual monitoring for vegetation health, species composition, and soil chemistry for a minimum of ten years. If brine exposure to the surrounding environment is anticipated, Mitigation Measure BIO-2 (Special-Status Plant Surveys, Avoidance Measures, Mitigation and Monitoring Plan) should be updated to a long-term monitoring plan to identify the impacts from brine exposure to all native vegetation.

The monitoring plan shall include performance standards, such as maintenance of baseline native vegetation cover and habitat function, and adaptive management triggers. If monitoring identifies measurable habitat decline, appropriate corrective actions shall be implemented.

Mitigation Measure #3: Brine Pond Compensatory Mitigation

If impacts to native vegetation or habitat function are identified and cannot be reversed through adaptive management, compensatory mitigation shall be implemented at a minimum ratio of 2:1 (mitigation to impact), in coordination with CDFW. Where feasible, compensatory mitigation shall consider the affected habitat type to ensure the mitigation is biologically appropriate for the species that rely on these habitat communities.

Impacts to Crotch's Bumble Bee

Issue: The Project has the potential to impact suitable nesting habitat and foraging opportunities for Crotch's bumble bee or may result in direct or indirect mortality.

Specific impact: The Project may result in temporary or permanent loss of suitable nesting and foraging habitat for Crotch's bumble bee. Project ground-disturbing activities may cause death or injury of adults, eggs, and larvae; burrow collapse; nest abandonment; and reduced nest success.

Why impact would occur: According to CDFW's Crotch's Bumble Bee Range Dataset (CDFW 2025a), the Project area is within the current range for Crotch's bumble bee. The MND also acknowledges that some suitable habitat for this species occurs within the BSA.

Absent appropriate surveys and avoidance, minimization, and mitigation measures, the Project may result in mortality and/or injury of undetected Crotch's bumble bees that may be present during Project activities. The Project's ground and/or vegetation disturbance activities could result in significant impacts to Crotch's bumble bee, including loss of foraging resources, changes in foraging behavior, burrow collapse, nest abandonment, reduced nest success, reduced health and vigor of eggs, young, and/or queens, and direct mortality.

For reference, Crotch's bumble bees primarily nest from late February through late October and typically nest underground in abandoned small mammal burrows. However, they may also nest under perennial bunch grasses, thatched annual grasses, under-brush piles, in old bird nests, and in dead trees or hollow logs (Hatfield et al. 2012).

Evidence impact may be significant: Crotch's bumble bee is a candidate species protected under CESA, and, as such, is granted full protection under CESA. The California Fish and Game Commission accepted a petition to list the Crotch's bumble bee as endangered under CESA, determining the listing "may be warranted" and advancing the species to the candidacy stage of the CESA listing process. Take of any endangered, threatened, candidate species that results from the Project is prohibited, except as authorized by State law (Fish & G. Code, §§ 86, 2062, 2067, 2068, 2080, 2085; Cal. Code Regs., tit. 14, § 786.9). CDFW considers impacts to species that are candidates for CESA listing to be significant, under CEQA. Crotch's bumble bee meets

the CEQA definition of rare, threatened, or endangered (CEQA Guidelines, § 15380). Therefore, take of Crotch's bumble bee could require a mandatory finding of significance by PWD (CEQA Guidelines, § 15065).

Recommended Potentially Feasible Mitigation Measure(s)

CDFW recommends that the Lead Agency revise the MND to more fully disclose the presence of suitable habitat, analyze potential impacts, and incorporate enforceable mitigation measures for Crotch's bumble bee. Without this information, the environmental document may not provide a sufficient basis for evaluating potential impacts to this CESA candidate species under CEQA.

CDFW requests the following recommendations and mitigation measures are incorporated into the final CEQA document. These measures are intended to address gaps in the environmental analysis and ensure compliance with CEQA, which requires feasible mitigation for significant impacts to biological resources (CEQA Guidelines, §§ 15064, 15126.4).

Recommendation #2: Crotch's Bumble Bee

The MND should be revised to provide a thorough discussion on the Project's potential direct and indirect impacts on Crotch's bumble bee throughout the entire Project area. The discussion should be of a depth and scope that a CESA Incidental Take Permit (ITP) could be issued based on the analysis provided in the final document.

Recommendation #3: CESA and CEQA

CDFW's issuance of an ITP for a Project is subject to CEQA. As a Responsible Agency, CDFW may consider the CEQA document from the Lead Agency/Project proponent for the Project. However, additional documentation may be required as part of an ITP application for the Project in order for CDFW to adequately develop an accurate take analysis and identify measures that would fully mitigate for take of CESA-listed species. To minimize additional requirements by CDFW pursuant to Fish and Game Code, section 2081 and/or under CEQA, the Project's CEQA document should fully identify the potential impacts to Crotch's bumble bee and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the ITP.

Mitigation Measure BIO-7: Crotch's Bumble Bee Avoidance, Minimization, and Compensation Measures

The PWD should revise MM BIO-7 to incorporate the underlined language and omit language in strikethrough.

If Crotch's bumble bee is still considered a California Endangered Species Act (CESA) candidate species or has been listed as threatened or endangered under CESA at the

time construction of proposed Project commences, PWD shall implement the following avoidance, minimization, and compensation measures for this species:

- The Project proponent shall retain a qualified biologist(s) with the appropriate handling permits to conduct focused surveys. A qualified biologist shall conduct a protocol-level presence/absence survey for Crotch's bumble bee in areas of the proposed Project site with suitable habitat during the peak active period for Crotch's bumble bee (highest detection probability) that occurs prior to the start of the proposed Project's initial ground disturbing activities (including, but not limited to, site preparation, staging and mobilization, vegetation clearance/mowing/trimming, grading, and excavation). The peak active period for Crotch's bumble bee in the Project area is anticipated to be April through June given the expected desiccation of Crotch's bumble bee floral resources within the Project area by mid-summer, though this timing could depend on annual climatic factors. Survey methodology shall be based on Section 4.1.1 of CDFW's Survey Considerations for CESA Candidate Bumble Bee Species (CDFW 2023), or the most current CDFW guidance in effect at the time. Inaccessible areas outside of the proposed Project site can be surveyed using binoculars from the proposed Project edge or from public roads. The timing of the presence/absence survey can be phased with proposed Project build-out, if feasible. Survey results, including negative findings, shall be submitted to CDFW prior to implementing Project ground-disturbing and/or vegetation removal activities.

- If construction starts one year or more after the conclusion of the surveys described above, PWD shall consult with CDFW as to whether additional surveys are required and shall retain a qualified biologist to conduct additional surveys if recommended by CDFW.

- If a Crotch's bumble bee nest is observed during surveys or Project activities, the qualified biologist shall identify the location of nests in or adjacent to the proposed Project site to the extent feasible and notify CDFW. Inaccessible land adjacent to the proposed Project site shall be observed using binoculars. If nests are identified within the proposed Project site or immediately adjacent to the site, a qualified biologist shall determine the need to establish a no-disturbance buffer around the nest, where feasible, to reduce the risk of disturbance or accidental take. The buffer shall provide at least 50 feet (15 meters) of clearance around active nest entrances. If proposed Project activities may result in disturbance or potential take, the qualified biologist, in coordination with CDFW, shall expand the buffer zone as necessary to prevent disturbance or take. ~~If establishment of a no-disturbance buffer is feasible,c~~ Construction activities shall not occur within the buffer until a qualified biologist determines the colony is no longer active (i.e., no Crotch's bumble bees are seen flying in or out of the nest for three consecutive days, indicating the colony has completed its nesting season and the next season's queens have dispersed from the colony). Once the nest has been determined to be inactive by the qualified biologist, construction activities within

the no-disturbance buffer(s) shall be allowed to resume. Otherwise, the no-disturbance buffer shall be maintained for the duration of proposed Project construction activities in each work area and shall be removed only after the conclusion of all grading, clearing, and construction activities at each construction site.

- If establishment of a no-disturbance buffer and/or avoidance of the nest is not feasible, the qualified biologist shall consult with CDFW to determine next steps and whether appropriate take authorization from CDFW is necessary (pursuant to Fish & Game Code, § 2080 et seq). ~~regarding potential encroachment into the no disturbance buffer and for proposed Project activities that may result in take of Crotch's bumble bee.~~

- If an individual Crotch's bumble bee is observed within or adjacent to the Project site during Project activities, the individual shall be allowed to move on its own accord and Project activities near the individual shall cease until the individual moves out of the work area.

- If Crotch's bumble bee is determined to be present on the proposed Project site, floral resources associated with the species that will be removed or damaged by proposed Project activities ~~in the areas of the proposed Project site where Crotch's bumble bee is detected and documented~~ shall be at a level sufficient to offset impacts, as determined in consultation with CDFW. Compensatory mitigation is expected to include replacement or enhancement of floral resources, at a minimum ratio of 3:1 (mitigation:impact). ~~replaced at a 1:1 ratio.~~ Planning and implementation of suitable habitat replacement may be integrated into the Habitat Revegetation, Restoration, and Monitoring Program described under Mitigation Measure BIO-16.

COMMENT # 2: Impacts to Western Burrowing Owl (*Athene cunicularia*)

Issue: The Project has the potential to impact nesting and wintering habitat of western burrowing owl.

Specific impact: The Project may result in the temporary and permanent loss of nesting and wintering habitat as well as disturbance to western burrowing owl due to the Project-related activities. Such activities include, but are not limited to, trenching/excavating, vegetation removal, vehicle usage that may lead to crushing or compaction of burrows, and increased human activity.

Why impact would occur: According to CDFW's Western Burrowing Owl Range (CDFW 2025b), the Project area lies within the current range for western burrowing owl. Burrowing owls are well adapted to open, dry annual and perennial grasslands, deserts, and scrublands with low-growing vegetation. They can be found on relatively flat expanses and vacant lots. Burrowing owls are dependent on burrows year-round for

survival and/or reproduction. Loss of access to burrows may result in increased stress could elevate predation risk.

Evidence impact would be significant: On October 10, 2024, the California Fish and Game Commission determined that listing of western burrowing owl as endangered under CESA was warranted as a candidate species. If Project activities could result in take, appropriate CESA authorization, such as an ITP pursuant to Fish and Game Code, section 2081 prior to commencement of Project activities. Take of any endangered, threatened, or candidate species that results from the Project is prohibited, except as authorized by State law (Fish & G. Code, §§ 86, 2062, 2067, 2068, 2080, 2085; Cal. Code Regs., tit. 14, § 786.9). Take of individual burrowing owls and their nests is defined by Fish and Game Code, section 86, and prohibited by sections 3503, 3503.5 and 3513.

Recommended Potentially Feasible Mitigation Measure(s)

Recommendation #4: Western Burrowing Owl Impact Analysis

CDFW recommends that the PWD revise the MND to clearly identify suitable habitat for burrowing owl, analyze potential impacts, and incorporate enforceable mitigation measures. Without this information, the environmental document may not adequately support impact analysis for this CESA candidate species under CEQA. To address these concerns and ensure compliance with CEQA requirements for mitigating significant impacts to biological resources (CEQA Guidelines, §§ 15064, 15126.4), CDFW requests this recommendation and the following recommendations and mitigation measures be included in the final CEQA document.

Mitigation Measure BIO-8 Burrowing Owl ~~Breeding Season~~ Survey and Foraging Habitat Mitigation

The PWD should revise MM BIO-8 to incorporate the underlined language and omit language in strikethrough.

PWD shall retain a qualified biologist and shall be approved by CDFW to conduct focused breeding season surveys for burrowing owls in accordance with the CDFW *Staff Report on Burrowing Owl Mitigation* (CDFG 2012), or the most current CDFW guidance in effect at the time. All biologists surveying and/or monitoring for burrowing owl shall obtain a Memorandum of Understanding[3] issued by CDFW. Early consultation with CDFW is encouraged to ensure all necessary permits are obtained. Surveys shall be conducted during the burrowing owl breeding season ~~immediately~~ and prior to the start of ground-disturbance and vegetation removal ~~proposed~~ Project activities. ~~construction~~. The focused surveys shall be conducted by a qualified biologist in the portions of the proposed Project site with suitable burrowing owl habitat plus a 500-foot

[3] https://wildlife.ca.gov/Conservation/CESA/Permitting#550391512-memorandum-of-understanding-mou--2081-a

buffer (burrowing owl survey area). The surveys shall be conducted in the morning or evening to evaluate the presence/absence of burrowing owl during the nesting season and prior to the start of Project activities. All potential burrowing owls and burrows with burrowing owl sign shall be recorded using a GPS unit capable of submeter accuracy. Observations shall be conducted to determine if individual owls and/or nesting pairs are present and their status/disposition (e.g., late winter migrant, actively nesting, single individual not nesting). Representative photos of the habitat, potential and occupied burrows, and vegetation within the burrowing owl survey area shall be taken and included as an appendix to the survey report. All vertebrate fauna detected in the burrowing owl survey area shall be recorded in field notes. Inaccessible areas of the burrowing owl survey area outside the proposed Project site shall be surveyed using binoculars and/or spotting scopes to determine if owls are present.

A survey report shall be prepared that includes survey methodology, survey results, an analysis of potential proposed Project impacts to actively nesting pairs, and a calculation of the compensatory mitigation for foraging habitat, if impacted to CDFW. Late winter migrants and non-nesting individuals located outside of the proposed Project impact area shall not require habitat mitigation unless passive relocation is necessary. Maps showing burrow locations, a delineation of suitable habitat areas, and burrowing owls observed shall be included in the survey report.

If ~~actively breeding~~ owls are observed within 500 feet of proposed Project activities, PWD shall coordinate with CDFW to determine next steps and whether appropriate take authorization from CDFW is necessary (pursuant to Fish & Game Code, § 2080 et seq).

~~implement compensatory mitigation for impacts to foraging habitat based on the following methodology:~~

- ~~A 500-foot buffer shall be established around each active nest burrow to indicate the primary foraging habitat area for each nesting pair.~~
- ~~Permanent proposed Project disturbance areas shall be overlain onto the foraging buffer zone(s) to calculate the area(s) of habitat loss.~~
- ~~Permanent foraging habitat loss shall be mitigated at a 1:1 ratio.~~

Compensatory mitigation for loss of foraging habitat shall be implemented on- or off-site and may include purchase of Conservation Bank credits, payment of an in-lieu fee to benefit burrowing owl, or permanent conservation and management of burrowing owl habitat through the recordation of a conservation easement, funding of a non-wasting endowment, and/or implementation of a Mitigation Land Management Plan based on the CDFW *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). Mitigation lands shall be identified through coordination with CDFW on, adjacent, or proximate to the impact site where practicable and where habitat is suitable to support burrowing owl.

Mitigation Measure BIO-9: Burrowing Owl Pre-Construction Clearance Survey and Occupied Burrow Avoidance and Minimization Measures

The PWD should revise MM BIO-9 to incorporate the underlined language and omit language in strikethrough.

PWD shall retain a qualified biologist approved by CDFW to conduct a pre-construction burrowing owl clearance survey of areas within the proposed Project site and a 500-foot buffer that contain suitable burrowing owl habitat to confirm presence/absence of burrowing owl individuals no more than 14 days prior to start of construction in each work area. The survey methodology shall be consistent with the methods outlined in the CDFW *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). If no active breeding or wintering owls or evidence of occupied habitat is identified, then proposed Project construction in the work area may begin, and no further action is required.

If active breeding or wintering owls or evidence of occupied habitat is detected in the proposed Project work area or within a 500-foot buffer, PWD shall coordinate with CDFW to determine next steps and whether appropriate take authorization from CDFW is necessary (pursuant to Fish & Game Code, § 2080 et seq).

~~implement the following measures for mitigation of potential burrowing owl presence in the Project area in accordance with the CDFW *Staff Report on Burrowing Owl Mitigation* (CDFW 2012):~~

~~• A qualified biologist shall be present on site during initial ground disturbing activities in potential burrowing owl habitat identified in the habitat assessment.~~

~~• Occupied burrows shall not be disturbed during the nesting season (February 1 to August 31).~~

~~• No ground disturbing activities shall be permitted within a buffer no less than 656 feet (200 meters) from an active burrowing owl burrow during the breeding season, depending on the level of disturbance, unless the qualified biologist determines a reduced buffer would not adversely affect the burrowing owl(s).~~

~~• During the nonbreeding (winter) season (September 1 to January 31), ground disturbing work can proceed near active burrowing owl burrows at the discretion of the qualified biologist as long as the work occurs no closer than 165 feet (50 meters) from the burrow, depending on whether the level of disturbance is low and if the active burrow is not directly affected by the proposed Project activity. A smaller/larger buffer may be established by the qualified biologist following monitoring and assessment of the proposed Project's effects on the burrowing owl(s).~~

~~• If active winter burrows are found that would be directly affected by ground disturbing activities, owls can be excluded from winter burrows according to recommendations in the *Staff Report on Burrowing Owl Mitigation* (CDFW 2012). The qualified biologist shall~~

~~prepare a passive relocation program in accordance with Appendix E (Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans) of the CDFW *Staff Report on Burrowing Owl Mitigation* (CDFW 2012) and submit the passive relocation program to PWD and CDFW for review and approval prior to the commencement of ground disturbance activities. If required, a compensatory mitigation agreement shall be developed in coordination with CDFW prior to passive relocation of owls.~~

~~• Smaller non-disturbance buffers may be permitted in the winter (and sometimes breeding season) for the burrowing owl individuals if a noise and visual barrier, such as hay bale walls, is installed between the occupied burrowing owl burrow and construction activities, as long as the qualified biologist determines the reduced buffer will provide adequate protection.~~

~~· When a qualified biologist determines burrowing owls are no longer occupying the proposed Project site and passive relocation is complete, ground disturbing activities may begin. A final letter shall be prepared by a qualified biologist documenting the results of the passive relocation. The letter shall be submitted to CDFW.~~

COMMENT # 3: **Impacts on California Species of Special Concern (California Legless Lizard, California Glossy Snake, and Coast Horned Lizard)**

Issue: No specific mitigation measures were proposed in the MND for Project activities that may impact Species of Special Concern (SSC), including California legless lizard, California glossy snake, and coast horned lizard.

Specific Impact: Direct impacts to California legless lizard, California glossy snake, and coast horned lizard could result from Project activities. Such activities include, but are not limited to, equipment staging; mobilization; trenching/excavating; grading; trampling or crushing from construction equipment, vehicles, and foot traffic; fugitive dust; and increased human activity.

Why impact would occur: The MND states that California legless lizard, California glossy snake, and coast horned lizard have the potential to occur within the BSA. Project ground-disturbing activities such as vegetation removal and grading would result in habitat destruction, causing the death or injury of adults, juveniles, eggs, or hatchlings. Habitat loss on a local and regional scale is a major cause of population decline for these SSC species. Removal or disturbance of confirmed SSC habitat may constitute a potentially significant impact under CEQA and should be addressed with appropriate mitigation.

Evidence impact would be significant: An SSC is a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

1) If the species is extirpated from the State or, in the case of birds, is extirpated in

its primary season or breeding role;
2) If the species is listed as threatened or endangered under the ESA-, but not under CESA;
3) If the species meets the State definition of threatened or endangered but has not formally been listed;
4) If the species is experiencing, or formerly experienced, serious (non-cyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify the species for State threatened or endangered status; and,
5) Has naturally small populations exhibiting high susceptibility to risk from any factor(s) that, if realized, could lead to declines qualifying it for CESA threatened or endangered status (CDFW 2025c).

CEQA provides protection not only for CESA-listed species, but for any species including but not limited to SSC that can be shown to meet the criteria for State listing. These SSC meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15380). The MND does not provide mitigation for potential impacts on SSC. Without adequate avoidance, minimization, and mitigation measures, the environmental document may not provide sufficient basis for evaluating whether the Project would result in substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species by CDFW.

Recommended Potentially Feasible Mitigation Measure(s)

To ensure compliance with CEQA Guidelines § 15126.4(a)(1)(B), which requires that mitigation measures be feasible, enforceable, and capable of reducing impacts to less-than-significant levels, the following measures are recommended. Adoption of these measures would provide substantial evidence that the Lead Agency has adequately addressed potential impacts to SSC species, including California legless lizard, California glossy snake, and coast horned lizard. These species meet the CEQA definition of rare, threatened, or endangered species under § 15380, and therefore require appropriate mitigation to reduce potentially significant impacts to less-than-significant levels.

Mitigation Measure #4: Pre-Work Biological Surveys

A qualified biologist shall conduct two pre-Project surveys within and adjacent to the proposed work area(s) within a one-week period prior to the start of Project-related activities. Pre-Project surveys shall include:

1) General surveys for botanical and wildlife resources;
2) The identification of any active bird nests, burrows, and/or woodrat nests (if active, they shall be recorded, monitored for species observations, and mapped); and,

3) Work areas with flowing or standing water shall be visibly surveyed for any aquatic species that may be impacted by Project activities.

Mitigation Measure #5: Observation of Species of Special Concern

If SSC species are observed during pre-construction surveys, the qualified biologist shall implement appropriate avoidance and minimization measures, such as relocation by a qualified biologist, establishment of no-disturbance buffers, or phased vegetation removal. All measures shall be developed in coordination with CDFW and implemented prior to the start of ground-disturbing activities.

Mitigation Measure #6: Injured or Dead Wildlife

If any special status wildlife species are found harmed/injured or dead, work in the immediate area shall stop immediately, the qualified biologist shall be notified, and dead or injured wildlife shall be documented immediately. A formal report shall be sent to CDFW within three calendar days of the incident or finding. The report shall include the date, time of the finding or incident (if known), and location of the carcass or injured animal and circumstances of its death or injury (if known). Work in the immediate area may only resume once the proper notifications have been made and additional mitigation measures have been identified to prevent additional injury or death.

COMMENT # 4: Impacts on Bats

Issue: The MND does not discuss potential direct and indirect impacts to bat species from Project activities.

Specific Impact: Project activities include ground disturbance, vegetation trimming and removal, use of mechanized equipment, and increased human activity. These activities may have adverse impacts on bat species within the Project site.

Why impacts would occur: The MND states that Townsend's big-eared bat and Yuma Myotis are not likely to occur within the BSA. However, Appendix B1 of the MND states that suitable habitat is present within the BSA. The MND does not clearly discuss potential Project impacts to bats or provide mitigation measures. Focused bat surveys have not been conducted within the project footprint. Due to lack of focus surveys and discussion, impacts to bats could occur through mortality of individuals, disturbance of breeding or roosting activity, abandonment of roosts and loss of habitat.

Evidence impacts would be significant: Bats are considered nongame mammals and are afforded protection by state law from take and harassment (Fish & G. Code § 4150; Cal. Code of Regs § 251.1). CEQA provides protection not only for CESA-listed species, but for any species including but not limited to SSC that can be shown to meet the criteria for State listing. These SSC meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15380). The MND does not provide mitigation for potential impacts on SSC. Inadequate avoidance, minimization, and

mitigation measures for impacts to sensitive or special status species may result in the Project having substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species by CDFW.

Recommended Potentially Feasible Mitigation Measure(s)

To ensure compliance with CEQA Guidelines § 15126.4(a)(1)(B), which requires that mitigation measures be feasible, enforceable, and capable of reducing impacts to less-than-significant levels, the following measure is recommended. Adoption of this measure would provide substantial evidence that the Lead Agency has adequately addressed potential impacts to special-status bat species.

Mitigation Measure #7: Bat Surveys

The PWD shall retain a qualified biologist to conduct seasonally appropriate daytime and nighttime bat surveys throughout the BSA (plus the 100-foot buffer as access allows). These surveys shall identify potential habitats that could provide daytime or nighttime roost sites, and any maternity roosts, hibernacula, or other sensitive roosts types. Surveys shall be conducted during active bat season (typically April through September) and include a minimum of two consecutive nights of acoustic monitoring using full-spectrum detectors. Acoustic recognition technology shall be utilized during day and night surveys to maximize detection of bats. Survey results, including negative findings, shall be provided to CDFW. If bat species are detected, and activities will cause disturbance or loss of bat habitat, activities shall not commence, and PWD shall develop and implement avoidance and minimization, such as seasonal work windows, buffer zones, or exclusion protocols acceptable to CDFW. If avoidance is not feasible, compensatory mitigation (e.g., installation of bat boxes or habitat enhancement) shall be developed in coordination with CDFW.

ADDITIONAL COMMENTS

Mitigation and Monitoring Reporting Plan. CDFW recommends the environmental document include mitigation measures recommended in this letter. CDFW has provided comments via a mitigation monitoring and reporting plan to assist in the development of feasible, specific, detailed (i.e., responsible party, timing, specific actions, location), and fully enforceable mitigation measures (CEQA Guidelines, § 15097; Pub. Resources Code, § 21081.6). PWD is welcome to coordinate with CDFW to further review and refine the Project's mitigation measures. Per Public Resources Code, section 21081.6(a)(1), CDFW has provided a summary of our suggested mitigation measures and recommendations in the form of an attached Draft Mitigation Monitoring and Reporting Plan (Attachment A).

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 (CNDDB). The CNDDB website[4] provides direction regarding the types of information that should be reported and allows on-line submittal of field survey forms.

In addition, information on special status native plant populations and sensitive natural communities, should be submitted to CDFW's Vegetation Classification and Mapping Program using the Combined Rapid Assessment and Relevé Form[5].PWD should ensure that any data collected for the MND is properly submitted.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document 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 environmental document filing fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

CDFW appreciates the opportunity to comment on the MND to assist PWD in identifying and mitigating Project impacts on biological resources. CDFW requests an opportunity to review and comment on any response that PWD has to our comments and to receive notification of any forthcoming hearing date(s) for the Project (CEQA Guidelines, § 15073(e)).Questions regarding this letter or further coordination should be directed to Mayra Molina, Senior Environmental Scientist (Specialist)[6].

Sincerely,

DocuSigned by:
Heather A. Pert
DF423498814B441...

Heather A. Pert
Environmental Program Manager
South Coast Region

[4] https://wildlife.ca.gov/Data/CNDDB
[5] https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities/Submit
[6] Phone: (562) 723-8734; Email: Mayra.Molina@wildlife.ca.gov

ec: California Department of Fish and Wildlife
Heather Pert, Environmental Program Manager
Baron Barrera, Senior Environmental Scientist (Supervisory)
Mayra Molina, Senior Environmental Scientist (Specialist)

Office of Land Use and Climate Innovation
State.Clearinghouse@lci.ca.gov

ATTACHMENTS

Attachment A: Draft Mitigation, Monitoring, and Reporting Program

REFERENCES

California Department of Fish and Game (CDFG). 2012. Staff Report on Burrowing Owl Mitigation. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843

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

[CDFWa] California Department of Fish and Wildlife. 2025a. Crotch's Bumble Bee Range Dataset 3095. Available at CDFW's Biogeographic Information and Observation System, https://wildlife.ca.gov/Data/BIOS

[CDFWb] California Department of Fish and Wildlife. 2025b. Western Burrowing Owl Range Dataset 907. Available at CDFW's Biogeographic Information and Observation System, https://wildlife.ca.gov/Data/BIOS

[CDFWc] California Department of Fish and Wildlife. 2025c. Threatened and Endangered Species. Available at: https://wildlife.ca.gov/Conservation/CESA

Hatfield, R, S Jepsen, E Mader, S H Black, and M Shepherd. 2012. Conserving Bumble Bees Guidelines for Creating and Managing Habitat for America's Declining Pollinators. Portland, OR: The Xerces Society for Invertebrate Conservation

Meehan, M., DeSutter, T., Sedivec, K., Augustin, C., Peterson, A. 2023. Environmental Impacts of Brine (Produced Water). Available from: https://www.ndsu.edu/agriculture/extension/publications/environmental-impacts-brine-produced-water

ATTACHMENT A: DRAFT MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

CDFW provides the following language to be incorporated into the MMRP for the Project.

Mitigation Measure	Timing	Responsible Party
Recommendation #1: Brine Pond Impact Evaluation CDFW recommends that the MND be updated to include a comprehensive evaluation of the impacts that may occur from the construction, operation, and maintenance of the brine ponds. The MND may not yet provide a detailed evaluation of the potential for brine ponds to degrade adjacent vegetation communities or indirectly affect wildlife through soil salinization, habitat degradation, or long-term exposure to elevated salt concentrations. Because the design of the brine ponds is not fully developed and the MND lacks a detailed analysis of potential exposure pathways, both avoidance-oriented design features and long-term monitoring should be incorporated to detect and respond to habitat degradation. CEQA Guidelines, sections 15064, 15065, and 15126.4(a)(1)(B) require that potentially significant impacts to biological resources be clearly identified and mitigated through feasible and effective measures. Inclusion of the following mitigation measures would provide substantial evidence that the Lead Agency has adequately addressed this project component and reduced potential impacts to less-than-significant levels.	Prior to Project Initiation	Lead Agency
Mitigation Measure #1: Brine Pond Impact Analysis The Project proponent shall evaluate the potential for brine pond construction, operation, and maintenance to result in indirect impacts to adjacent vegetation communities and wildlife habitat. This evaluation shall include an assessment of brine composition, potential exposure pathways, and the sensitivity of	Prior to Project Initiation	Lead Agency

Mitigation Measure	Timing	Responsible Party
surrounding biological resources. Because native habitats near the brine ponds include Joshua tree woodland, *Ericameria* shrubland, and creosote scrub, and because special-status species identified under CEQA Guidelines, section 15380 may use nearby habitat, the evaluation shall consider whether these communities or species could be affected by salinity-related changes or other indirect effects. Based on this evaluation, the brine pond design shall incorporate features to prevent brine from entering the surrounding environment. These features may include impermeable liners, engineered berms, run-on and runoff controls, covered systems, or other feasible containment features. A vegetated buffer of at least 25 feet shall be maintained between the brine pond and adjacent natural communities to intercept runoff or seepage and protect habitat integrity. If sensitive vegetation (e.g., Joshua tree or other salt-intolerant species) is documented within the 25-foot buffer, the buffer may be adjusted as needed to maintain adequate protection. As appropriate for site conditions, the evaluation shall consider whether other project-related activities such as dust generation during construction, operational lighting, noise or potential wildlife attraction to ponds could contribute to indirect effects on vegetation or wildlife. If applicable, feasible design features and best management practices shall be incorporated to reduce these effects.		
Mitigation Measure #2: Long-Term Monitoring Plan A long-term monitoring plan shall be developed and implemented to assess potential impacts to native vegetation and habitat function. The plan shall include baseline vegetation mapping and soil salinity testing prior to pond	Prior to Project Initiation	Lead Agency/Qualified Biologist

Mitigation Measure	Timing	Responsible Party
operation, followed by annual monitoring for vegetation health, species composition, and soil chemistry for a minimum of ten years. If brine exposure to the surrounding environment is anticipated, Mitigation Measure BIO-2 (Special-Status Plant Surveys, Avoidance Measures, Mitigation and Monitoring Plan) should be updated to a long-term monitoring plan to identify the impacts from brine exposure to all native vegetation. The monitoring plan shall include performance standards, such as maintenance of baseline native vegetation cover and habitat function, and adaptive management triggers. If monitoring identifies measurable habitat decline, appropriate corrective actions shall be implemented.		
Mitigation Measure #3: Brine Pond Compensatory Mitigation If impacts to native vegetation or habitat function are identified and cannot be reversed through adaptive management, compensatory mitigation shall be implemented at a minimum ratio of 2:1 (mitigation to impact), in coordination with CDFW. Where feasible, compensatory mitigation shall consider the affected habitat type to ensure the mitigation is biologically appropriate for the species that rely on these habitat communities.	Prior to Project Initiation	Lead Agency
Recommendation #2: Crotch's Bumble Bee The MND should be revised to provide a thorough discussion on the Project's potential direct and indirect impacts on Crotch's bumble bee throughout the entire Project area. The discussion should be of a depth and scope that a CESA Incidental Take Permit (ITP) can be issued based on the analysis provided in the final document.	Prior to Project Initiation	Lead Agency

Mitigation Measure	Timing	Responsible Party
Recommendation #3: CESA and CEQA CDFW's issuance of an ITP for a Project is subject to CEQA. As a Responsible Agency, CDFW may consider the CEQA document from the Lead Agency/Project proponent for the Project. However, additional documentation may be required as part of an ITP application for the Project in order for CDFW to adequately develop an accurate take analysis and identify measures that would fully mitigate for take of CESA-listed species. To minimize additional requirements by CDFW pursuant to Fish and Game Code, section 2081 and/or under CEQA, the Project's CEQA document should fully identify the potential impacts to Crotch's bumble bee and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the ITP.	Prior to Project Initiation	Lead Agency
Mitigation Measure BIO-7: Crotch's Bumble Bee Avoidance, Minimization, and Compensation Measures If Crotch's bumble bee is still considered a California Endangered Species Act (CESA) candidate species or has been listed as threatened or endangered under CESA at the time construction of proposed Project commences, PWD shall implement the following avoidance, minimization, and compensation measures for this species: • The Project proponent shall retain a qualified biologist(s) with the appropriate handling permits to conduct focused surveys. A qualified biologist shall conduct a protocol-level presence/absence survey for Crotch's bumble bee in areas of the proposed Project site with suitable habitat during the peak active period for Crotch's bumble bee (highest detection probability) that occurs prior to the start of the proposed	Prior to Project Initiation/During Project Activities	Lead Agency/Qualified Biologist

Mitigation Measure	Timing	Responsible Party
Project's initial ground disturbing activities (including, but not limited to, site preparation, staging and mobilization, vegetation clearance/mowing/trimming, grading, and excavation). The peak active period for Crotch's bumble bee in the Project area is anticipated to be April through June given the expected desiccation of Crotch's bumble bee floral resources within the Project area by mid-summer, though this timing could depend on annual climatic factors. Survey methodology shall be based on Section 4.1.1 of CDFW's Survey Considerations for CESA Candidate Bumble Bee Species (CDFW 2023), or the most current CDFW guidance in effect at the time. Inaccessible areas outside of the proposed Project site can be surveyed using binoculars from the proposed Project edge or from public roads. The timing of the presence/absence survey can be phased with proposed Project build-out, if feasible. Survey results, including negative findings, shall be submitted to CDFW prior to implementing Project ground-disturbing and/or vegetation removal activities. • If construction starts one year or more after the conclusion of the surveys described above, PWD shall consult with CDFW as to whether additional surveys are required and shall retain a qualified biologist to conduct additional surveys if recommended by CDFW. • If a Crotch's bumble bee nest is observed during surveys or Project activities, the qualified biologist shall identify the location of nests in or adjacent to the proposed Project site to the extent feasible and notify CDFW. Inaccessible land adjacent to the proposed Project site shall be observed using binoculars. If nests are identified within the proposed Project site or immediately adjacent to the site, a qualified biologist shall		

Mitigation Measure	Timing	Responsible Party
determine the need to establish a no-disturbance buffer around the nest, where feasible, to reduce the risk of disturbance or accidental take. The buffer shall provide at least 50 feet (15 meters) of clearance around active nest entrances. If proposed Project activities may result in disturbance or potential take, the qualified biologist, in coordination with CDFW, shall expand the buffer zone as necessary to prevent disturbance or take. ~~If establishment of a no-disturbance buffer is feasible,c~~ Construction activities shall not occur within the buffer until a qualified biologist determines the colony is no longer active (i.e., no Crotch's bumble bees are seen flying in or out of the nest for three consecutive days, indicating the colony has completed its nesting season and the next season's queens have dispersed from the colony). Once the nest has been determined to be inactive <u>by the qualified biologist</u>, construction activities within the no-disturbance buffer(s) shall be allowed to resume. Otherwise, the no-disturbance buffer shall be maintained for the duration of proposed Project construction activities in each work area and shall be removed only after the conclusion of all grading, clearing, and construction activities at each construction site. • If establishment of a no-disturbance buffer and/or avoidance of the nest is not feasible, the qualified biologist shall consult with CDFW <u>to determine next steps and whether appropriate take authorization from CDFW is necessary (pursuant to Fish & Game Code, § 2080 et seq).</u> ~~regarding potential encroachment into the no disturbance buffer and for proposed Project activities that may result in take of Crotch's bumble bee.~~ • <u>If an individual Crotch's bumble bee is observed within or adjacent to the Project site during Project activities, the individual shall be allowed to</u>		

Mitigation Measure	Timing	Responsible Party
move on its own accord and Project activities near the individual shall cease until the individual moves out of the work area. • If Crotch's bumble bee is determined to be present on the proposed Project site, floral resources associated with the species that will be removed or damaged by proposed Project activities ~~in the areas of the proposed Project site where Crotch's bumble bee is detected and documented~~ shall be at a level sufficient to offset impacts, as determined in consultation with CDFW. Compensatory mitigation is expected to include replacement or enhancement of floral resources, at a minimum ratio of 3:1 (mitigation:impact). ~~replaced at a 1:1 ratio.~~ Planning and implementation of suitable habitat replacement may be integrated into the Habitat Revegetation, Restoration, and Monitoring Program described under Mitigation Measure BIO-16.		
Recommendation #4: Western Burrowing Owl Impact Analysis CDFW recommends that the PWD revise the MND to clearly identify suitable habitat for burrowing owl, analyze potential impacts, and incorporate enforceable mitigation measures. Without this information, the environmental document may not adequately support impact analysis for this CESA candidate species under CEQA. To address these concerns and ensure compliance with CEQA requirements for mitigating significant impacts to biological resources (CEQA Guidelines, §§ 15064, 15126.4), CDFW requests this recommendation and the following recommendations and mitigation measures be included in the final CEQA document.	Prior to Project Initiation	Lead Agency

Mitigation Measure	Timing	Responsible Party
Mitigation Measure BIO-8 Burrowing Owl ~~Breeding Season~~ Survey and Foraging Habitat Mitigation The PWD should revise MM BIO-8 to incorporate the underlined language and omit language in strikethrough. PWD shall retain a qualified biologist and shall be approved by CDFW to conduct focused breeding season surveys for burrowing owls in accordance with the CDFW *Staff Report on Burrowing Owl Mitigation* (CDFG 2012), or the most current CDFW guidance in effect at the time. All biologists surveying and/or monitoring for burrowing owl shall obtain a Memorandum of Understanding[3] issued by CDFW. Early consultation with CDFW is encouraged to ensure all necessary permits are obtained. Surveys shall be conducted during the burrowing owl breeding season ~~immediately~~ and prior to the start of ground-disturbance and vegetation removal ~~proposed~~ Project activities. ~~construction.~~ The focused surveys shall be conducted by a qualified biologist in the portions of the proposed Project site with suitable burrowing owl habitat plus a 500-foot buffer (burrowing owl survey area). The surveys shall be conducted in the morning or evening to evaluate the presence/absence of burrowing owl during the nesting season and prior to the start of Project activities. All potential burrowing owls and burrows with burrowing owl sign shall be recorded using a GPS unit capable of submeter accuracy. Observations shall be conducted to determine if individual owls and/or nesting pairs are present and their status/disposition (e.g., late winter migrant, actively nesting, single individual not nesting). Representative photos of the habitat, potential and occupied burrows, and vegetation within the burrowing owl survey area shall be taken and included as an appendix to the survey report. All vertebrate fauna detected in the burrowing owl survey area shall be recorded in field notes. Inaccessible areas of	Prior to Project Initiation/During Project Construction	Lead Agency/Qualified Biologist

Mitigation Measure	**Timing**	**Responsible Party**
the burrowing owl survey area outside the proposed Project site shall be surveyed using binoculars and/or spotting scopes to determine if owls are present. A survey report shall be prepared that includes survey methodology, survey results, an analysis of potential proposed Project impacts to actively nesting pairs, and a calculation of the compensatory mitigation for foraging habitat, if impacted to CDFW. Late winter migrants and non-nesting individuals located outside of the proposed Project impact area shall not require habitat mitigation unless passive relocation is necessary. Maps showing burrow locations, a delineation of suitable habitat areas, and burrowing owls observed shall be included in the survey report. If ~~actively breeding~~ owls are observed within 500 feet of proposed Project activities, PWD shall coordinate with CDFW to determine next steps and whether appropriate take authorization from CDFW is necessary (pursuant to Fish & Game Code, § 2080 et seq). ~~implement compensatory mitigation for impacts to foraging habitat based on the following methodology:~~ • ~~A 500-foot buffer shall be established around each active nest burrow to indicate the primary foraging habitat area for each nesting pair.~~ • ~~Permanent proposed Project disturbance areas shall be overlain onto the foraging buffer zone(s) to calculate the area(s) of habitat loss.~~ • ~~Permanent foraging habitat loss shall be mitigated at a 1:1 ratio.~~		

Mitigation Measure	**Timing**	**Responsible Party**
Compensatory mitigation for loss of foraging habitat shall be implemented on- or off-site and may include purchase of Conservation Bank credits, payment of an in-lieu fee to benefit burrowing owl, or permanent conservation and management of burrowing owl habitat through the recordation of a conservation easement, funding of a non-wasting endowment, and/or implementation of a Mitigation Land Management Plan based on the CDFW *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). Mitigation lands shall be identified through coordination with CDFW on, adjacent, or proximate to the impact site where practicable and where habitat is suitable to support burrowing owl.		
Mitigation Measure BIO-9: Burrowing Owl Pre-Construction Clearance Survey and Occupied Burrow Avoidance and Minimization Measures The PWD should revise MM BIO-9 to incorporate the underlined language and omit language in strikethrough. PWD shall retain a qualified biologist <u>approved by CDFW</u> to conduct a pre-construction burrowing owl clearance survey of areas within the proposed Project site and a 500-foot buffer that contain suitable burrowing owl habitat to confirm presence/absence of burrowing owl individuals no more than 14 days prior to start of construction in each work area. The survey methodology shall be consistent with the methods outlined in the CDFW *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). If no active breeding or wintering owls or evidence of occupied habitat is identified, then proposed Project construction in the work area may begin, and no further action is required.	Prior to Project Initiation	Lead Agency/Qualified Biologist

Mitigation Measure	**Timing**	**Responsible Party**
If active breeding or wintering owls or evidence of occupied habitat is detected in the proposed Project work area or within a 500-foot buffer, PWD shall coordinate with CDFW to determine next steps and whether appropriate take authorization from CDFW is necessary (pursuant to Fish & Game Code, § 2080 et seq). ~~implement the following measures for mitigation of potential burrowing owl presence in the Project area in accordance with the CDFW *Staff Report on Burrowing Owl Mitigation* (CDFW 2012):~~ ~~• A qualified biologist shall be present on site during initial ground disturbing activities in potential burrowing owl habitat identified in the habitat assessment.~~ ~~• Occupied burrows shall not be disturbed during the nesting season (February 1 to August 31).~~ ~~• No ground disturbing activities shall be permitted within a buffer no less than 656 feet (200 meters) from an active burrowing owl burrow during the breeding season, depending on the level of disturbance, unless the qualified biologist determines a reduced buffer would not adversely affect the burrowing owl(s).~~ ~~• During the nonbreeding (winter) season (September 1 to January 31), ground disturbing work can proceed near active burrowing owl burrows at the discretion of the qualified biologist as long as the work occurs no closer than 165 feet (50 meters) from the burrow, depending on whether the level of disturbance is low and if the active burrow is not directly affected by the proposed Project activity. A smaller/larger buffer may be established by the qualified biologist following~~		

Mitigation Measure	Timing	Responsible Party
~~monitoring and assessment of the proposed Project's effects on the burrowing owl(s).~~ ~~• If active winter burrows are found that would be directly affected by ground disturbing activities, owls can be excluded from winter burrows according to recommendations in the *Staff Report on Burrowing Owl Mitigation* (CDFW 2012). The qualified biologist shall prepare a passive relocation program in accordance with Appendix E (Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans) of the CDFW *Staff Report on Burrowing Owl Mitigation* (CDFW 2012) and submit the passive relocation program to PWD and CDFW for review and approval prior to the commencement of ground disturbance activities. If required, a compensatory mitigation agreement shall be developed in coordination with CDFW prior to passive relocation of owls.~~ ~~• Smaller non-disturbance buffers may be permitted in the winter (and sometimes breeding season) for the burrowing owl individuals if a noise and visual barrier, such as hay bale walls, is installed between the occupied burrowing owl burrow and construction activities, as long as the qualified biologist determines the reduced buffer will provide adequate protection.~~ ~~· When a qualified biologist determines burrowing owls are no longer occupying the proposed Project site and passive relocation is complete, ground disturbing activities may begin. A final letter shall be prepared by a qualified biologist documenting the results of the passive relocation. The letter shall be submitted to CDFW.~~		

Mitigation Measure	**Timing**	**Responsible Party**
Mitigation Measure #4: Pre-Work Biological Surveys A qualified biologist shall conduct two pre-Project surveys within and adjacent to the proposed work area(s) within a one-week period prior to the start of Project-related activities. Pre-Project surveys shall include: 1. General surveys for botanical and wildlife resources; 2. The identification of any active bird nests, burrows, and/or woodrat nests (if active, they shall be recorded, monitored for species observations, and mapped); and, **3.** Work areas with flowing or standing water shall be visibly surveyed for any aquatic species that may be impacted by Project activities.	Prior to Project Initiation	Lead Agency/Qualified Biologist
Mitigation Measure #5: Observation of Species of Special Concern If SSC species are observed during pre-construction surveys, the qualified biologist shall implement appropriate avoidance and minimization measures, such as relocation by a qualified biologist, establishment of no-disturbance buffers, or phased vegetation removal. All measures shall be developed in coordination with CDFW and implemented prior to the start of ground-disturbing activities.	During Project Activities	Lead Agency/Qualified Biologist

Mitigation Measure	Timing	Responsible Party
Mitigation Measure #6: Injured or Dead Wildlife If any special status wildlife species are found harmed/injured or dead, work in the immediate area shall stop immediately, the qualified biologist shall be notified, and dead or injured wildlife shall be documented immediately. A formal report shall be sent to CDFW within three calendar days of the incident or finding. The report shall include the date, time of the finding or incident (if known), and location of the carcass or injured animal and circumstances of its death or injury (if known). Work in the immediate area may only resume once the proper notifications have been made and additional mitigation measures have been identified to prevent additional injury or death.	Anytime	Lead Agency/Qualified Biologist
Mitigation Measure #7: Bat Surveys The PWD shall retain a qualified biologist to conduct seasonally appropriate daytime and nighttime bat surveys throughout the BSA (plus the 100-foot buffer as access allows). These surveys shall identify potential habitats that could provide daytime or nighttime roost sites, and any maternity roosts, hibernacula, or other sensitive roosts types. Surveys shall be conducted during active bat season (typically April through September) and include a minimum of two consecutive nights of acoustic monitoring using full-spectrum detectors. Acoustic recognition technology shall be utilized during day and night surveys to maximize detection of bats. Survey results, including negative findings, shall be provided to CDFW. If bat species are detected, and activities will cause disturbance or loss of bat habitat, activities shall not commence, and PWD shall develop and implement avoidance and minimization, such as seasonal work windows, buffer zones, or exclusion protocols acceptable to CDFW. If avoidance	Prior to Project Initiation	Lead Agency/Qualified Biologist

Mitigation Measure	**Timing**	**Responsible Party**
is not feasible, compensatory mitigation (e.g., installation of bat boxes or habitat enhancement) shall be developed in coordination with CDFW.		