



STATE OF CALIFORNIA • NATURAL RESOURCES AGENCY Gavin Newsom, Governor
DEPARTMENT OF FISH AND WILDLIFE Charlton H. Bonham, Director

South Coast Region
3883 Ruffin Road | San Diego, CA 92123
wildlife.ca.gov

September 13, 2023

Governor's Office of Planning & Research

Adam Ly
Palmdale Water District
2029 East Avenue Q
Palmdale, CA 93550
ALy@palmdalewater.org

Sep 13 2023

STATE CLEARINGHOUSE

Subject: Notification of Preparation of a Programmatic Environmental Impact Report for the 2023 Strategic Water Resources Plan Update, SCH #2023080290, Palmdale Water District, Los Angeles County

Dear Adam Ly:

The California Department of Fish and Wildlife (CDFW) has reviewed a Notice of Preparation (NOP) of a Programmatic Environmental Impact Report (PEIR) from the Palmdale Water District (PWD) for the 2023 Strategic Water Resources Plan Update (Project). CDFW appreciates the opportunity to provide comments regarding aspects of the Project that could affect fish and wildlife resources and be subject to CDFW's regulatory authority under the Fish and Game Code.

CDFW's 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, subdivision (a) & 1802; Pub. Resources Code, §21070; California Environmental Quality Act (CEQA) Guidelines, §15386, subdivision (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 State fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Pub. Resources Code, §21069; CEQA Guidelines, §15381). CDFW expects that it may

Adam Ly
Palmdale Water District
September 13, 2023
Page 2 of 21

need to exercise regulatory authority as provided by the Fish and Game Code, including 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.*), or CESA-listed rare plant pursuant to the Native Plant Protection Act (NPPA; Fish & G. Code, § 1900 *et seq.*), CDFW recommends the Project Applicant obtain appropriate authorization under the Fish and Game Code.

Project Description and Summary

Objective: The Project proposes a Plan Update to meet customer demands for water through 2050, maximize local supplies to facilities and increase water storage in the Antelope Valley Groundwater Basin. The proposed actions addressed in the Plan Update are: recharging of imported water, the Upper Amargosa Creek Water Recharge Project (UAP), ground water injection, groundwater extraction, replacement of existing wells, the Pure Water Antelope Valley Project, sediment removal from Littlerock Reservoir, and the Palmdale Ditch Improvement Project.

Imported Water: PWD aims to maximize its existing allocations by recharging imported water that is treated and used to meet potable demands. A maximum of 1,600 acre-feet of imported recharged water would be allocated to the Antelope Valley Groundwater Basin each year. To maximize imported water supplies, existing turnouts, conveyance, recharge, and treatment would be utilized. Imported water beyond PWD's existing contracts would not be purchased.

Upper Amargosa Creek Water Recharge Project: The UAP consists of a recharge facility and recharge basins that would increase recharge of imported water from the California Aqueduct. The 1,600 acre-feet per year (AFY) of imported water recharged into the Antelope Valley Groundwater Basin would be included in the UAP. The UAP was evaluated in a separate EIR that was adopted in 2009. Moreover, a supplemental EIR was adopted in 2018 that evaluated a change in turnout location and pipeline alignment. Streambed Alteration Agreement No. 1600-2015-0253-R5 is associated with the UAP and construction activities for the UAP was completed in 2019.

Groundwater Injection: Recycled water in the Antelope Valley Basin would be stored via an injection method. Approximately 5,000 AFY of recycled water would be injected into the Antelope Valley Groundwater Basin each year. To

Adam Ly
Palmdale Water District
September 13, 2023
Page 3 of 21

achieve this proposed action, five new recycled water injection wells would be required. In addition to new injection wells, additional recycled water conveyance pipelines would be installed between the Palmdale Water Reclamation Facility (WRF) and the new injection wells.

Groundwater Extraction: New wells would be constructed to pump the banked water and connect to an existing distribution system. Additionally, PWD would purchase 1,000 AFY of groundwater production rights from other pumpers in the Antelope Valley Groundwater Basin. A total of seven new wells, constructed within existing roadways, would be drilled and equipped to extract the purchased groundwater rights and recharged water. Conveyance pipelines will also need to be installed to implement extraction activities.

Existing Wells Rehabilitation and/or Replacement: Under this action, PWD would rehabilitate and/or replace the existing PWD wells. PWD would proceed with the rehabilitation and replacement of five existing wells as recommended in the 2020 Well Rehabilitation Prioritization Program to maintain current pumping capacity.

Pure Water Antelope Valley Project: PWD would construct an advanced water treatment plant to maximize use of recycled water. The Pure Water Antelope Valley Project has not yet undergone CEQA analysis.

Littlerock Reservoir Sediment Removal Project: The Project would implement sedimental removal of Littlerock Reservoir. This Project was evaluated as a separate project and the EIR was adopted by PWD in 2017. An LSA was obtained in 2018 (1600-2018-0077-R5) and in 2022 (LAN-20081-R5) for the individual project.

Palmdale Ditch Improvement Project: Under the proposed Project, PWD would enclose the now- open Palmdale Ditch by constructing one to two miles of pipe within the ditch to reduce evaporation and seepage, as well as increase local water supply.

Location: The Project area is located throughout PWD's 47-square mile service area in the Antelope Valley of Los Angeles County. For the Palmdale Ditch Improvement Project, a portion of the Palmdale Ditch component extends south of the PWD service area. Additionally, a portion of the conveyance facilities related to the Upper Amargosa Creek Water Recharge Project extend north of the PWD service area into unincorporated Los Angeles County,

Adam Ly
Palmdale Water District
September 13, 2023
Page 4 of 21

Comments and Recommendations

CDFW offers comments and recommendations below to assist the PWD in adequately identifying, avoiding, and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources. The PEIR should provide adequate and complete disclosure of the Project's potential impacts on biological resources [Pub. Resources Code, §21061; CEQA Guidelines, §§15003(i), 15151]. CDFW looks forward to commenting on the PEIR when it is available.

Specific Comments:

- 1) Individual Projects. The NOP lists the UAP and Littlerock Reservoir Sediment Removal Project as proposed actions in the PEIR. Both Projects have been previously evaluated under CEQA and have been approved by PWD. Additionally, discretionary permits have already been obtained from CDFW for these Projects. The PEIR should distinguish between Projects, or actions associated with these Projects, which are being analyzed in the PEIR, and actions which have been analyzed previously and will not be further discussed. If there is no further analysis warranted under the PEIR, these Projects should be omitted from the document.
- 2) Groundwater Dependent Ecosystems. CDFW has a vested interest in the sustainable management of groundwater, as many sensitive ecosystems and public trust resources are dependent on groundwater. According to the Department of Water Resources (DWR)'s [Natural Communities Commonly Associated with Groundwater - Vegetation](#) Dataset, groundwater dependent ecosystems (GDEs) occur within and adjacent to the Project area (DWR 2023). Specifically, GDEs have been identified to occur in the southern portion of the Project area, near Lake Palmdale and Littlerock Dam Reservoir. Additionally, the Little Rock Wash, immediately east of the Project area supports GDEs. Phreatophytic vegetation associated with GDEs is a critical contributor to nesting and foraging habitat for a wide range of species and can be affected by depth to groundwater (Naumburg et al. 2005, Froend and Sommer 2010). Actions under the proposed Project could result in significant adverse impacts for phreatophytic vegetation due to their sensitivity to groundwater level thresholds. Fluctuations in groundwater elevation has the potential to stress phreatophytes depending on the plant species and the groundwater elevation and duration (e.g., short-term wetness/dryness versus prolonged wetness/dryness).

Adam Ly
Palmdale Water District
September 13, 2023
Page 5 of 21

The PEIR should verify the existence of GDEs that could be affected by the Project and identify vegetation communities (e.g., species compositions, structural diversity, and integrity) and associated rooting depths/optimal groundwater table elevations. Upon confirmation of GDEs, PWD should: 1) determine which proposed phase or alternative is most likely to impact GDEs based on basin hydrology; 2) deploy representative groundwater monitoring stations within GDEs to track groundwater levels and vegetation responses over time; and 3) establish thresholds/triggers for adaptive management to respond to stressed vegetation as needed. If the proposed Project is expected to result in habitat benefits to GDEs, monitoring should be utilized to track and confirm positive and negative outcomes. Moreover, the PEIR should also discuss and analyze how each proposed action would impact GDEs.

- 3) Groundwater Impact Analysis. The Project proposes to maximize recycled and imported water recharge into the Antelope Valley Groundwater Basin via groundwater injection. Additionally, seven new wells will be developed and equipped for groundwater extraction activities. Increased groundwater extraction during dry water years can lower groundwater tables to a level that may induce increased stress on groundwater-dependent biological resources. Conversely, groundwater recharged with treated water may also raise local groundwater table elevations. As increased recharge raises the groundwater table, biological resources may be significantly impacted due to fully saturated soil zones. Groundwater activities such as pumping, treating, extracting, and recharging within a short period of time may contribute to possible subsidence.

The PEIR should address how groundwater activities (i.e., pumping, treatment, extracting, and recharging) would impact biological resources. The PEIR should disclose groundwater recharge and extraction thresholds and how PWD will ensure groundwater activities do not exceed these thresholds. Effective/reliable methods to monitor and manage groundwater activities should be outlined within the PEIR.

- 4) Stream Delineation and Impact Assessment. The proposed Project intends to install and maintain new conveyance pipelines and construct new wells for groundwater injection activities. Additionally, the Palmdale Ditch Improvement Project facilitated by the proposed Project will enclose portions of a 7.2-mile open ditch. These Project activities may impact streams water courses within and/or adjacent to the Project area.

Adam Ly
Palmdale Water District
September 13, 2023
Page 6 of 21

- a) Analysis and Disclosure. In preparation of the PEIR, CDFW recommends the PEIR include a stream delineation and evaluation of impacts on any river or stream. The delineation should be conducted pursuant to the United States Fish and Wildlife Service (USFWS) wetland definition adopted by CDFW (Cowardin et al. 1979). A discussion of impacts to these resources should be discussed in the PEIR and, may include channelizing or diverting streams, impairing a watercourse, and removing or degrading vegetation through habitat modification (e.g., loss of water source, loss of substrate, encroachment, and edge effects leading to introduction of non-native plants).
- b) Avoidance and Setbacks. CDFW recommends the Project avoid impacts on streams and associated natural communities. Herbaceous vegetation adjacent to streams protects the physical and ecological integrity of these water features and maintains the natural sedimentation process. The Project should be designed within effective setbacks from streams and associated natural communities. If the Project would occur near streams, but would avoid impacts on streams, the PEIR should provide a justification as to why a proposed setback distance would be effective to avoid impacts on the stream and associated vegetation.
- c) Mitigation. If avoidance is not feasible, the PEIR should include measures to fully compensate for impacts on streams and loss of associated natural communities. Higher mitigation should be provided to compensate for impacts on streams supporting rare, sensitive, or special status fish, wildlife, and natural communities.
- d) Fish and Game Code Section 1602. CDFW exercises its regulatory authority as provided by Fish and Game Code section 1600 et seq. to conserve fish and wildlife resources which includes rivers, streams, or lakes and associated natural communities. As a Responsible Agency under CEQA, CDFW has authority over activities in streams and/or lakes that will divert or obstruct the natural flow, or change the bed, channel, or bank (including vegetation associated with the stream or lake) of a river or stream or use material from a streambed. For any such activities, the project applicant (or "entity") must notify CDFW. Accordingly, if the Project would impact streams, the PEIR should include measures to notify CDFW pursuant to Fish and Game Code section 1602 prior to starting activities that may impact streams. Please visit CDFW's [Lake and Streambed Alteration Program](#) webpage for more information (CDFW 2023a).

Adam Ly
Palmdale Water District
September 13, 2023
Page 7 of 21

- 5) Mohave Ground Squirrel (*Xerospermophilus mohavensis*). Mohave ground squirrels have been documented historically within the Antelope Valley region. According to the [California Natural Diversity Database](#) (CNDDDB), there are several recorded observations of Mohave ground squirrel within the Project area (CDFW 2023b). Habitat supporting Mohave ground squirrel may be impacted through development of new wells and installment of conveyance pipelines.
- a) Protection Status. Mohave ground squirrel is designated as a threatened species under CESA. CDFW considers adverse impacts to a species protected by CESA to be significant without mitigation under CEQA. 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).
- b) Disclosure and Surveys. CDFW recommends the PEIR provide a discussion of habitat suitability for Mohave ground squirrel within the Project area. Potential direct and indirect impacts on Mohave ground squirrel should be discussed in the PEIR. For areas within the Project area that support Mohave ground squirrel, CDFW recommends PWD retain a qualified biologist to conduct a focused survey during the appropriate period and adhering to CDFW's [Mohave Ground Squirrel Survey Guidelines](#) (CDFW 2010). Findings from the focused survey should be included in the PEIR for complete public disclosure and review.
- c) Mitigation. If the Project would impact Mohave ground squirrel, the PEIR should provide measures to avoid, minimize, and/or mitigate potential impacts to Mohave ground squirrel as well as habitat supporting the species. For unavoidable impacts, appropriate mitigation may include consultation with CDFW and obtaining appropriate take authorization under CESA.
- d) CESA ITP. An appropriate take authorization from CDFW under CESA may include an Incidental Take Permit (ITP) or a Consistency Determination in certain circumstances, among other options [Fish & Game Code, §§ 2080.1, 2081, subds. (b) and (c)]. Early consultation is encouraged, as significant modification to the project and mitigation measures may be required to obtain an ITP. Revisions to the Fish and Game Code, effective January 1998, may require that CDFW issue a separate CEQA document for the issuance of an ITP for the Project unless the Project's CEQA document addresses all the Project's impact on CESA endangered,

Adam Ly
Palmdale Water District
September 13, 2023
Page 8 of 21

threatened, and/or candidate species. The Project's CEQA document should also specify a mitigation monitoring and reporting program that will meet the requirements of an ITP. It is important that the take proposed to be authorized by CDFW's ITP be described in detail in the Project's CEQA document. Also, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for an ITP. However, it is worth noting that mitigation for the Project's impact on a CESA endangered, threatened, and/or candidate species proposed in the Project's CEQA document may not necessarily satisfy mitigation required to obtain an ITP. Please visit CDFW's [California Endangered Species Act \(CESA\) Permits](#) webpage for more information (CDFW 2023c).

- 6) Crotch's bumble bee (*Bombus crotchii*). The Project area may support habitat (e.g., grasslands and scrub) and provide floral resources for Crotch's bumble bee. A search of CNDDDB indicates a historical observation of Crotch's bumble bee within the Project area. If Crotch's bumble bee is present, construction activities required to implement the Project may grade and/or develop habitat supporting Crotch's bumble bee. The Project may result in temporal or permanent loss of suitable nesting and foraging habitat. In addition, Project ground-disturbing activities may cause death or injury of adults, eggs, and larva, burrow collapse, nest abandonment, and reduced nest success.
 - a) Protection Status. The California Fish and Game Commission accepted a petition to list the Crotch 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. Crotch bumble bee is granted full protection as a threatened species under CESA. In addition, Crotch bumble bee has a State ranking of S1/S2. This means that the Crotch bumble bee is considered critically imperiled or imperiled and is extremely rare (often five or fewer populations). Crotch bumble bee is also listed as an invertebrate of conservation priority under the [Terrestrial and Vernal Pool Invertebrates of Conservation Priority](#) (CDFW 2017).
 - b) Disclosure and Surveys. The PEIR should provide full disclosure of the presence of Crotch's bumble bee within the Project area. The PEIR should analyze the Project's impact on floral resources, nesting habitat, and overwintering habitat for Crotch's bumble bee. Conclusions made in regard to habitat quality and suitability should be substantiated by scientific and factual data, which may include maps, diagrams, and similar relevant information sufficient to permit full assessment of significant

Adam Ly
Palmdale Water District
September 13, 2023
Page 9 of 21

impacts by reviewing agencies. Potential direct and indirect impacts on Crotch's bumble bee should be discussed in the PEIR. Additionally, CDFW recommends PWD to retain a qualified entomologist familiar with the species to survey Project area for Crotch's bumble bee and suitable habitat. Surveys for Crotch's bumble bee should adhere to the [Survey Considerations for California Endangered Species Act \(CESA\) Candidate Bumble Bee Species](#) (CDFW 2023d).

- c) Mitigation. The PEIR should include measures to first avoid impacts on If Crotch's bumble bee is present, a qualified entomologist should identify the location of all nests in or adjacent to the Project area. If nests are identified, 15-meter no-disturbance buffer zones should be established around nests to reduce the risk of disturbance or accidental take. If the Project cannot avoid impacts, PWD should consult CDFW to determine if an ITP is required. In addition, PWD should provide compensatory mitigation for removal or damage to any floral resource associated with Crotch's bumble bee. Floral resources should be replaced as close to their original location as is feasible.
- 7) Arroyo Toad (*Anaxyrus californicus*). According to the [USFWS Critical Habitat Threatened and Endangered Species](#) Dataset, critical habitat for arroyo toad is located south of Littlerock Reservoir (USFWS 2023). Activities proposed by the Project near and within Littlerock Reservoir may impact arroyo toad through direct mortality and/or injury as well as removal or habitat modification of critical habitat.
- a) Protection Status. Consistent with CEQA Guidelines, Section 15380, the status of the Arroyo toad as an endangered species pursuant to the federal Endangered Species Act (16 U.S.C. § 1531 *et seq.*) qualifies it as an endangered, rare, or threatened species under CEQA.
- b) Disclosure and Surveys. The PEIR should disclose areas within and adjacent to the Project area that may support arroyo toad. Potential direct and indirect impacts on arroyo toad should be analyzed and discussed in the PEIR. For areas within the Project area that support arroyo toad, CDFW recommends PWD retain a qualified biologist to conduct a focused survey in accordance with USFWS's [Survey Protocol For the Arroyo Toad](#) (USFWS 1999). Findings from the focused survey should be included in the PEIR for complete public disclosure and review.

Adam Ly
Palmdale Water District
September 13, 2023
Page 10 of 21

- c) Mitigation. If the Project would impact arroyo toad, the PEIR should provide measures to avoid, minimize, and/or mitigate potential impacts to arroyo toad as well as habitat supporting the species. If impacts are unavoidable, PWD should consult with USFWS, in order to comply with ESA, well in advance of any ground-disturbing activities and/or vegetation removal that may impact federally listed species.
- 8) Burrowing Owl (*Athene cunicularia*). According to CNDDDB, there are observations from 2006 of burrowing owls within the Project area. Project activities may result in removal of supporting habitat. Additionally, elevated levels of noise, human activity, ground vibrations may flush burrowing owls out of potential wintering or breeding sites, thus resulting in nest abandonment and/or reduced reproductive capacity.
- a) Protection Status. Burrowing owls are designated as a Species of Special Concern (SSC). Although burrowing owls are not a CESA-listed species, CEQA provides protection for any species including but not limited to SSC, which can be shown to meet the criteria for State listing. Therefore, take of SSC could require a mandatory finding of significance (CEQA Guidelines, § 15065).
- b) Disclosure. The PEIR should provide full disclosure of the presence or absence of burrowing owls within the Project area, so CDFW may assist PWD in identifying and mitigating potential impacts on burrowing owls. Adequate disclosure is recommended so CDFW may review data pertaining to burrowing owls and provide comments and recommendations specific to the Project's potential alternatives, mitigation measures, and any potential significant effects. An impact assessment for burrowing owls should evaluate impacts resulting from Project construction and activities as well as habitat loss.
- c) Surveys. CDFW recommends PWD retain a qualified biologist to conduct a focused survey for burrowing owls prior to the preparation of the Project's environmental document. A qualified biologist should survey for burrowing owls adhering to survey methods described in CDFW's March 7, 2012, [Staff Report on Burrowing Owl Mitigation](#) (CDFW 2012). A focused burrowing owl survey should be conducted no more than one year from the date of the Project's environmental document. The survey area should include the Project site and 150 meters from the Project site where suitable habitat is present. All survey efforts should be conducted by a qualified biologist. Survey protocol for breeding season owl surveys states to conduct four

Adam Ly
Palmdale Water District
September 13, 2023
Page 11 of 21

survey visits: 1) at least one site visit between February 15 and April 15, and 2) a minimum of three survey visits, at least three weeks apart, between April 15 and July 15, with at least one visit after June 15. Findings from the focused surveys should be included in the PEIR for complete public disclosure and review.

- d) Mitigation. If presence of burrowing owls within the Project area is confirmed, the PEIR provide measures to avoid, minimize, and mitigate potential impacts on burrowing owls. CDFW recommends mitigation methods described in the Staff Report on Burrowing Owl Mitigation. Inadequate avoidance and mitigation measures will result in the Project having substantial adverse direct and cumulative effect, either directly or through habitat modifications, on an SSC.
- 9) Species of Special Concern – Reptiles. A search of CNDDDB indicated northern California legless lizard (*Anniella pulchra*), California glossy snake (*Arizona elegans occidentalis*), and coast horned lizard (*Phrynosoma blainvillii*) may be present within and adjacent to the Project area.
- a) Protection Status. All of the reptile species listed above are designated as a SSC. CDFW considers impacts to SSC a significant direct and cumulative adverse effect without implementing appropriate avoidance and/or mitigation measures [CEQA Guidelines, §§ 15064, 15065, 15125(c), and 15380].
- b) Disclosure and Surveys. CDFW recommends the PEIR fully disclose potential species-specific impacts and provide measures to fully avoid impacts to wildlife and habitat during the construction and operational phase of the Project. Additionally, species, season, and time of day field surveys should be conducted in preparation of the PEIR. Survey protocols and guidelines for select special status plants and wildlife may be found on CDFW's [Survey and Monitoring Protocols and Guidelines](#) webpage (CDFW 2023e). Surveys should not deviate from established protocols and guidelines except with documented approval specific to this Project. Findings from the focused surveys should be disclosed in the PEIR and appropriate avoidance, minimization and/or mitigation measures should be proposed.
- 10) Nesting Birds and Raptors. The Project area provides potential nesting habitat for nesting birds and raptors. The proposed Project may impact nesting birds through construction activities, installation activities, elevated-related noise,

Adam Ly
Palmdale Water District
September 13, 2023
Page 12 of 21

and vegetation removal. Furthermore, Project activities occurring during the nesting bird season, especially in areas providing suitable nesting habitat, could result in the incidental loss of fertile eggs or nestlings, or nest abandonment of special status birds, including least bell's vireo (*Vireo bellii pusillus*) and Swainson's hawk (*Buteo swainsoni*).

- a) Protection Status. Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (Code of Federal Regulations, Title 50, § 10.13). Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the Federal MBTA). It is unlawful to take, possess, or needlessly destroy the nest or eggs of any raptor.
- b) Disclosure and Analysis. The PEIR should discuss the Project's potential impact on nesting birds and raptors within the Project area. A discussion of potential impacts should include impacts that may occur during ground-disturbing activities and vegetation removal. The PEIR should analyze and discuss the Project's impact on bird and raptor nesting and breeding habitat.
- c) Avoidance. CDFW recommends the PEIR include a measure to fully avoid impacts to nesting birds and raptors. To the extent feasible, no construction, ground-disturbing activities (e.g., mobilizing, staging, and excavating), and vegetation removal during the avian breeding season which generally runs from February 15 through September 15 (as early as January 1 for some raptors) to avoid take of birds, raptors, or their eggs.
- d) Minimizing Potential Impacts. If impacts to nesting birds and raptors cannot be avoided, CDFW recommends the PEIR include measures to minimize impacts on nesting birds and raptors. Prior to starting ground-disturbing activities and vegetation removal, a qualified biologist should conduct nesting bird and raptor surveys to identify nests. The qualified biologist should establish no-disturbance buffers to minimize impacts on those nests. CDFW recommends a minimum 300-foot no disturbance buffer around active bird nests. For raptors, the no disturbance buffer should be expanded to 500 feet and 0.5 mile for special status species, if feasible. Personnel working on the Project, including all contractors working on site, should be instructed on the presence of nesting birds, area sensitivity, and adherence to no-disturbance buffers. Reductions in the buffer distance may be appropriate depending on the avian species

Adam Ly
Palmdale Water District
September 13, 2023
Page 13 of 21

involved, ambient levels of human activity, screening vegetation, or possibly other factors determined by a qualified biologist.

11) Significant Ecological Area (SEA). Portions of the Project area is located within and adjacent to Significant Ecological Areas (SEA). Lake Palmdale and its surrounding area is located in the San Andreas SEA. Additionally, the Antelope Valley SEA is just east of the Project area. [Los Angeles County Significant Ecological Areas](#) are officially designated areas within Los Angeles County identified as having irreplaceable biological resources (LACDRP 2023). These areas represent the wide-ranging biodiversity of Los Angeles County and contain some of Los Angeles County's most important biological resources. The PEIR should discuss the Project's impact on the San Andreas and Antelope Valley SEA. If the Project will impact areas where the SEA Ordinance applies, the PEIR also provide measures that are concurrent to the SEA Ordinance.

General Comments

1. Biological Baseline Assessment. The CEQA document should provide an adequate biological resources assessment, including a complete assessment and impact analysis of the flora and fauna within and adjacent to the Project site and where the Project may result in ground disturbance. The assessment and analysis should place emphasis upon identifying endangered, threatened, sensitive, regionally, and locally unique species, and sensitive habitats. Impact analysis will aid in determining any direct, indirect, and cumulative biological impacts, as well as specific mitigation or avoidance measures necessary to offset those impacts. CDFW recommends avoiding any sensitive natural communities found on or adjacent to the Project site. CDFW also considers impacts to SSC a significant direct and cumulative adverse effect without implementing appropriate avoidance and/or mitigation measures. An environmental document should include the following information:
 - a) Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region [CEQA Guidelines, § 15125(c)]. The CEQA document should include measures to fully avoid and otherwise protect Sensitive Natural Communities from Project-related impacts. CDFW considers these communities as threatened habitats having both regional and local significance. Plant communities, alliances, and associations with a state-wide ranking of S1, S2, and S3 should be considered sensitive and

Adam Ly
Palmdale Water District
September 13, 2023
Page 14 of 21

declining at the local and regional level. These ranks can be obtained by visiting the [Vegetation Classification and Mapping Program - Natural Communities](#) webpage (CDFW 2023f);

- b) A thorough, recent, floristic-based assessment of special status plants and natural communities following CDFW's [Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities](#) (CDFW 2018). Adjoining habitat areas should be included where Project construction and activities could lead to direct or indirect impacts off site;
- c) Floristic, alliance- and/or association-based mapping and vegetation impact assessments conducted at a Project site and within the neighboring vicinity. The [Manual of California Vegetation Online](#) should also be used to inform this mapping and assessment (CNPS 2023). Adjoining habitat areas should be included in this assessment if the Project could lead to direct or indirect impacts off site. Habitat mapping at the alliance level will help establish baseline vegetation conditions;
- d) A complete, recent, assessment of the biological resources associated with each habitat type on site and within adjacent areas that could also be affected by a Project. California Natural Diversity Database in Sacramento should be contacted to obtain current information on any previously reported sensitive species and habitat. An assessment should include a nine-quadrangle search of the CNDDDB to determine a list of species potentially present at a Project site. A lack of records in the CNDDDB does not mean that rare, threatened, or endangered plants and wildlife do not occur on the Project site. Field verification for the presence or absence of sensitive species is necessary to provide a complete biological assessment for adequate CEQA review [CEQA Guidelines, § 15003(i)];
- e) A complete, recent, assessment of rare, threatened, and endangered, and other sensitive species on site and within the area of potential effect, including California Species of Special Concern and California Fully Protected Species (Fish & G. Code, §§ 3511, 4700, 5050, and 5515). Species to be addressed should include all those which meet the CEQA definition of endangered, rare, or threatened species (CEQA Guidelines, § 15380). Seasonal variations in use of a project site should also be addressed such as wintering, roosting, nesting, and foraging habitat. Focused species-specific surveys, conducted at the appropriate time of

Adam Ly
Palmdale Water District
September 13, 2023
Page 15 of 21

year and time of day when the sensitive species are active or otherwise identifiable, may be required if suitable habitat is present. See CDFW's [Survey and Monitoring Protocols and Guidelines](#) for established survey protocol for select species. Acceptable species-specific survey procedures may be developed in consultation with CDFW and the USFWS; and,

- f) A recent wildlife and rare plant survey. CDFW generally considers biological field assessments for wildlife to be valid for a 1-year period, and assessments for rare plants may be considered valid for a period of up to 3 years. Some aspects of a proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if build out could occur over a protracted time frame or in phases.
2. Scientific Collecting Permit. A scientific collecting permit will be necessary for many of the species' surveys outlined above. Pursuant to the California Code of Regulations, title 14, section 650, qualified biologist(s) must obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project-related activities. CDFW has the authority to issue permits for the take or possession of wildlife, including mammals; birds, nests, and eggs; reptiles, amphibians, fish, plants; and invertebrates (Fish & G. Code, §§ 1002, 1002.5, 1003). Effective October 1, 2018, a Scientific Collecting Permit is required to monitor project impacts on wildlife resources, as required by environmental documents, permits, or other legal authorizations; and, to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with otherwise lawful activities (Cal. Code Regs., tit. 14, § 650). Please visit CDFW's [Scientific Collection Permits](#) webpage for information (CDFW 2023g).
 3. Disclosure. The CEQA document should provide an adequate, complete, and detailed disclosure about the effect which a proposed Project is likely to have on the environment (Pub. Resources Code, § 20161; CEQA Guidelines, §15151). Adequate disclosure is necessary so CDFW may provide comments on the adequacy of proposed avoidance, minimization, or mitigation measures, as well as to assess the significance of the specific impact relative to plant and wildlife species impacted (e.g., current range, distribution, population trends, and connectivity).
 4. Mitigation Measures. Public agencies have a duty under CEQA to prevent significant, avoidable damage to the environment by requiring changes in projects through the use of feasible alternatives or mitigation measures

Adam Ly
Palmdale Water District
September 13, 2023
Page 16 of 21

[CEQA Guidelines, §§ 15002(a)(3), 15021]. Pursuant to CEQA Guidelines section 15126.4, an environmental document “shall describe feasible measures which could mitigate for impacts below a significant level under CEQA.”

- a) Level of Detail. Mitigation measures must be feasible, effective, implemented, and fully enforceable/imposed by the Lead Agency through permit conditions, agreements, or other legally binding instruments (Pub. Resources Code, § 21081.6(b); CEQA Guidelines, § 15126.4). A public agency “shall provide the measures that are fully enforceable through permit conditions, agreements, or other measures” (Pub. Resources Code, § 21081.6). CDFW recommends PWD provide mitigation measures that are specific, detailed (i.e., responsible party, timing, specific actions, location), and clear in order for a measure to be fully enforceable and implemented successfully via a mitigation monitoring and/or reporting program (Pub. Resources Code, § 21081.6; CEQA Guidelines, § 15097). Adequate disclosure is necessary so CDFW may provide comments on the adequacy and feasibility of proposed mitigation measures.
 - b) Disclosure of Impacts. If a proposed mitigation measure would cause one or more significant effects, in addition to impacts caused by the Project as proposed, the CEQA document should include a discussion of the effects of proposed mitigation measures [CEQA Guidelines, § 15126.4(a)(1)]. In that regard, the CEQA document should provide an adequate, complete, and detailed disclosure about the Project's proposed mitigation measure(s). Adequate disclosure is necessary so CDFW may assess the potential impacts of proposed mitigation measures.
5. Data. CEQA requires that information developed in environmental impact reports 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 by completing and submitting [CNDDDB Field Survey Forms](#) (CDFW 2023h). To submit information on special status native plant populations and sensitive natural communities, the [Combined Rapid Assessment and Relevé Form](#) should be completed and submitted to CDFW's Vegetation Classification and Mapping Program (CDFW 2023i). PWD should ensure data collected for the preparation of the CEQA document be properly submitted, with all data fields applicable filled out. The data entry should also list pending development as a threat and

Adam Ly
Palmdale Water District
September 13, 2023
Page 17 of 21

then update this occurrence after impacts have occurred.

6. Biological Direct, Indirect, and Cumulative Impacts. CDFW recommends providing a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts. The CEQA document should address the following:
 - a) A discussion regarding Project-related indirect impacts on biological resources, including resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands [e.g., preserve lands associated with a Natural Community Conservation Plan (Fish & G. Code, § 2800 et. seq.)]. Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in adjacent areas, should be fully evaluated in the CEQA document;
 - b) A discussion of both the short-term and long-term effects to species population distribution and concentration and alterations of the ecosystem supporting the species impacted [CEQA Guidelines, § 15126.2(a)];
 - c) A discussion of potential adverse impacts from lighting, noise, temporary and permanent human activity, and exotic species, and identification of any mitigation measures;
 - d) A discussion of Project-related changes on drainage patterns; the volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-Project fate of runoff from the Project site. The discussion should also address the potential water extraction activities and the potential resulting impacts on the habitat (if any) supported by the groundwater. Mitigation measures proposed to alleviate such Project impacts should be included;
 - e) An analysis of impacts from proposed changes to land use designations and zoning, and existing land use designation and zoning located nearby or adjacent to natural areas that may inadvertently contribute to wildlife-human interactions. A discussion of possible conflicts and mitigation measures to reduce these conflicts should be included in the CEQA document; and,

Adam Ly
Palmdale Water District
September 13, 2023
Page 18 of 21

- f) A cumulative effects analysis, as described under CEQA Guidelines section 15130. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant and wildlife species, habitat, and vegetation communities. If PWD determines that the Project would not have a cumulative impact, the CEQA document should indicate why the cumulative impact is not significant. PWD's conclusion should be supported by facts and analyses [CEQA Guidelines, § 15130(a)(2)].
7. Compensatory Mitigation. The CEQA document should include mitigation measures for adverse Project-related direct or indirect impacts to sensitive plants, animals, and habitats. Mitigation measures should emphasize avoidance and reduction of Project-related impacts. For unavoidable impacts, on-site habitat restoration or enhancement should be discussed in detail. If on-site mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, off-site mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed. Areas proposed as mitigation lands should be protected in perpetuity with a conservation easement, financial assurance and dedicated to a qualified entity for long-term management and monitoring. Under Government Code, section 65967, the Lead Agency must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves.
8. Long-term Management of Mitigation Lands. For proposed preservation and/or restoration, a CEQA document should include measures to protect the targeted habitat values from direct and indirect negative impacts in perpetuity. The objective should be to offset the Project-induced qualitative and quantitative losses of wildlife habitat values. Issues that should be addressed include (but are not limited to) restrictions on access, proposed land dedications, monitoring and management programs, control of illegal dumping, water pollution, and increased human intrusion. An appropriate non-wasting endowment should be set aside to provide for long-term management of mitigation lands.

Conclusion

We appreciate the opportunity to comment on the NOP for the 2023 Strategic Water Resources Plan Update to assist PWD in identifying and mitigating Project

Adam Ly
Palmdale Water District
September 13, 2023
Page 19 of 21

impacts on biological resources. If you have any questions or comments regarding this letter, please contact Julisa Portugal, Environmental Scientist, at Julisa.Portugal@wildlife.ca.gov or (562) 330-7563.

Sincerely,

DocuSigned by:
Jennifer Turner
C3D449ECB7C14DE...

Jennifer Turner signing for

David Mayer
Environmental Program Manager
South Coast Region

ec: CDFW
Jennifer Turner, San Diego – Jennifer.Turner@wildlife.ca.gov
Felicia Silva, Seal Beach – Felicia.Silva@wildlife.ca.gov
Cindy Hailey, San Diego – Cindy.Hailey@wildlife.ca.gov
CEQA Program Coordinator, Sacramento

OPR
State Clearinghouse – State.Clearinghouse@opr.ca.gov

References:

- [CDFW] California Department of Fish and Wildlife. 2010. California Department of Fish and Game Mohave Ground Squirrel Survey Guidelines. Available at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83975&inline>
- [CDFW] California Department of Fish and Wildlife. 2012. Staff Report on Burrowing Owl Mitigation. Available at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline>
- [CDFW] California Department of Fish and Wildlife. 2017. California Terrestrial and Vernal Pool Invertebrates of Conservation Priority. Available from: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=157415&inline>
- [CDFW] California Department of Fish and Wildlife. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. Available at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>

Adam Ly
Palmdale Water District
September 13, 2023
Page 20 of 21

- [CDFW] California Department of Fish and Wildlife. 2023a. Lake and Streambed Alteration Program. Available at:
<https://wildlife.ca.gov/Conservation/Environmental-Review/LSA>
- [CDFW] California Department of Fish and Wildlife. 2023b. California Natural Diversity Database. Available at: <https://wildlife.ca.gov/Data/CNDDDB>
- [CDFW] California Department of Fish and Wildlife. 2023c. California Endangered Species Act Permits. Available at:
<https://wildlife.ca.gov/Conservation/CESA/Permitting>
- [CDFW] California Department of Fish and Wildlife. 2023d. Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species. Accessed at:
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline>
- [CDFW] California Department of Fish and Wildlife. 2023e. Survey and Monitoring Protocols and Guidelines. Available at:
<https://wildlife.ca.gov/conservation/survey-protocols>
- [CDFW] California Department of Fish and Wildlife. 2023f. Natural Communities. Available at: <https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities>
- [CDFW] California Department of Fish and Wildlife. 2023g. Scientific Collecting Permits. Available at: <https://wildlife.ca.gov/Licensing/Scientific-Collecting#53949678>
- [CDFW] California Department of Fish and Wildlife. 2023h. Submitting Data to the CNDDDB. Available at: <https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>
- [CDFW] California Department of Fish and Wildlife. 2023i. Combined Rapid Assessment and Releve Form. Available at:
<https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities/Submit>
- [CNPS] California Native Plant Society. 2023. A Manual of California Vegetation Online. Available at: <https://vegetation.cnps.org/>
- [Cowardin et.al] Cowardin Luis, Carter Virginia, Golet Francis, and LaRoe Edward. 1979. Classification of Wetlands and Deepwater Habitats of the United States. Available at:
<https://www.fws.gov/wetlands/documents/classification-of-wetlands-and-deepwater-habitats-of-the-united-states.pdf>
- [DWR] Department of Water Resources. 2023. Natural Communities Commonly Associated with Groundwater. Available at:
<https://data.cnra.ca.gov/dataset/natural-communities-commonly-associated-with-groundwater>
- Froend, R., and B. Sommer. 2010. Phreatophytic vegetation response to climatic and abstraction-induced groundwater drawdown: Examples of long-term

Adam Ly
Palmdale Water District
September 13, 2023
Page 21 of 21

spatial and temporal variability in community response. *Ecological Engineering*, 36:1191:1200.

[LADRP] Los Angeles Department of Regional Planning. 2023. Significant Ecological Areas Program. Available at:
<https://planning.lacounty.gov/site/sea/>

Naumburg E., Mata-Gonzalez R., Hunter R.G., McLendon T., Martin D.W. 2005. Phreatophytic vegetation and groundwater fluctuations: a review of current research and application of ecosystem response modeling with an emphasis on great basin vegetation. *Environmental Management*. 35(6):726-40

[USFWS] United States Fish and Wildlife Service. 1999. Survey Protocol For The Arroyo Toad. Available at:
<https://www.fws.gov/sites/default/files/documents/survey-protocol-for-arroyo-toad.pdf>

[USFWS] United States Fish and Wildlife Service. 2023. Critical Habitat for Threatened & Endangered Species. Available at:
<https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77>