State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
3602 Inland Empire Blvd., Suite C-220
Ontario, CA 91764
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

ATE OF CALIFO

February 15, 2023 Sent via e-mail

Evan Langan Principal Planner County of Riverside Planning Department 4080 Lemon Street, 12th Floor. Riverside, CA 92507



Dear Mr. Langan:

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent to Adopt an MND from the County of Riverside Planning Department for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under 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. (*Id.*, § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

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

PROJECT DESCRIPTION SUMMARY

Proponent: Global Water Farms

Objective: The objective of the Project is to construct a 13,484 square-foot pilot water desalination facility on approximately 2.78 acres of vacant, undeveloped land. This pilot project is intended to demonstrate feasibility of water desalination for various uses. The pilot facility could operate for up to five years while the feasibility of a full-scale desalination facility on the same site is determined.

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.

The pilot facility will include a one-story 13,484 square-foot building, a walled and covered salt storage area, ground-mounted solar panels, a surface parking area for four vehicles, a minor concrete pad for a portable restroom, building access, stormwater collection/conveyance, a retention basin, and two underground water lines. The Project will also make use of an existing private well to pump and deliver water to the desalination building. The Project proposes storing salt produced by the desalination process on-site in a "2,500±-square-foot area with 3.5-foot masonry block retaining walls on three sides and tarp cover on top." The salt would be hauled off-site by truck every two months.

Primary Project activities will occur in four phases: site preparation, grading, building construction, and architectural coating. Equipment used in these four phases will include crawler tractors, rubber-tired dozers, excavators, graders, cranes, generator sets, welders, and air compressors.

Location: The Project is in unincorporated Riverside County on Assessor's Parcel No. 731-170-001, east of the Salton Sea and southwest of Coachella Canal. The nearest cross street is Coachella Canal Road. The approximate coordinates are: 33.43945, -115.698. The Project site is within the boundary of the Dos Palmas Conservation Area, as defined by the Coachella Valley Multiple Species Habitat Conservation Plan, and is southwest of the Chocolate Mountain Aerial Gunnery Range.

Timeframe: Construction is expected to take four-months. The finished facility will be in operation from 8 am to 5 pm daily.

COMMENTS AND RECOMMENDATIONS

CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (i.e., biological resources). The MND has not adequately identified and disclosed the Project's impacts (i.e., direct, indirect, and cumulative) to biological resources and whether those impacts are less than significant. CDFW offers the following comments and recommendations to assist the County of Riverside Planning Department in adequately identifying and mitigating the Project's potentially significant impacts to biological resources. CDFW's comments apply to the scope of this MND, which is the approximately 2.78-acre pilot phase of the project only. The MND (p. 1) indicates that "any full-scale desalination facility would be considered a separate project and will be required to submit comprehensive plans and CEQA compliance documentation to the County for review and approval." In addition to the sections below, CDFW has the following concerns and comments.

Environmental Setting

Compliance with CEQA is predicated on a complete and accurate description of the environmental setting that may be affected by the proposed Project. CDFW is concerned that the assessment of the existing environmental setting has not been adequately analyzed in the MND. CDFW is concerned that without a complete and accurate description of the existing environmental setting, the MND likely provides an incomplete or inaccurate analysis of Project-related environmental impacts and whether those impacts have been mitigated to a level that is less than significant.

The MND bases its analysis of impacts to biological resources on a report by Wood Environment and Infrastructure Solutions, Inc., which conducted a field assessment on February 24, 2022. The field assessment involved detecting "suitable habitat based on the presence or absence of habitat components (e.g., soils, vegetation, and topography) characteristic of special status biological resources which were determined by the literature review to be potentially present" (Appendix B, p. 11). Additionally, all flora and fauna observed were documented. The MND (Appendix B, p. 15) acknowledges that "short-term biological studies of this nature are limited by the seasonality of plants and the timing of field visits" (p. 15) and that "short-term biological studies of this nature are limited by seasonality (for example migratory birds and "hibernating" mammals and reptiles), the

fossorial and nocturnal habits of many mammals and reptiles, and the timing of field surveys" (p. 18).

CDFW is concerned that the field assessment was not conducted at the appropriate time of year and was not specific enough in scope to determine the presence of special status species on the Project site. The field assessment included no focused surveys for special status species, such as special status plants, burrowing owl, and desert tortoise. Focused surveys, as discussed below, usually involve multiple visits to the Project area during appropriate seasons and weather conditions to properly assess whether special status species are present on the Project site. CDFW is concerned that without a complete and accurate description of the existing environmental setting, the MND likely provides an inadequate analysis of impacts to biological resources and whether those impacts have been mitigated to a level less than significant.

Project-Related Environmental Impacts

The MND indicates that salt produced by the desalinization process will be stored on-site in a "short-walled area covered by a tarp north of the facility" (p. 52) that will "provide protection during storms, to prevent the salt from dissolving and infiltrating into the ground" (p. 53). However, the MND does not analyze impacts of storing salt in an area that is not fully enclosed. Covering the storage area with only a tarp may be insufficient to shield it from wind, to prevent salt transport to ephemeral streams via wind or water, and to prevent wildlife from accessing the area. CDFW recommends that a revised MND include an analysis of the impacts of the proposed salt storage structure on biological resources. CDFW also recommends that the storage area for salt include a permanent roof and walls.

Mitigation Measures

The MND's Biological Resources Assessment identifies 23 special-status biological resources that were either observed during the field assessment or were determined to have the potential to occur in the Project area via literature review.

Plants—Salton milk-vetch (*Astragalus crotalariae*, CNPS Rank 4.3), sand evening primrose (*Chylismia arenaria*, CNPS Rank 2B.2), las animas colubrina (*Colubrina californica*, CNPS Rank 2B.3), narrow-leaf sandpaper plant (*Petalonyx linearis*, CNPS Rank 2B.3), Orocopia sage (*Salvia greatae*, CNPS Rank 1B.3)

Vegetation community—Desert Dry Wash Woodland

Birds—Burrowing owl (*Athene cunicularia*, CDFW SSC), Costa's hummingbird (*Calypte costae*), prairie falcon (*Falco mexicanus*, CDFW Watch List), loggerhead shrike (*Lanius Iudovicianus*, CDFW SSC), California black rail (*Laterallus jamaicensis coturniculus*, CESA Threatened, CDFW Fully Protected), black-tailed gnatcatcher (*Polioptila melanura*, CDFW Watch List), Yuma Ridgway's rail (*Rallus obsoletus yumanensis*, ESA Threatened, CESA Threatened, CDFW Fully Protected), LeConte's thrasher (*Taxostoma lecontei*, CDFW SSC)

Fish—Desert pupfish (*Cyprinodon macularius*, ESA and CESA Endangered), razorback sucker (*Xyrauchen texanus*, ESA and CESA Endangered, CDFW Fully Protected)

Reptiles—Flat-tailed horned lizard (*Phrynosoma mcallii*, CDFW SSC)

Mammals—Pallid bat (*Antrozonus pallidus*, CDFW SSC), western yellow bat (*Lasiurus xanthinus*, CDFW SSC), desert bighorn sheep (*Ovis canadensis nelsoni*, CDFW Fully Protected), Palm Springs pocket mouse (*Perognathus longimembris bangsi*, CDFW SSC), Palm Springs round-tailed ground squirrel (*Xerospermophilus tereticaudus chlorus*, CDFW SSC)

CDFW is concerned about the potential for impacts to special status species, including those not covered under the CVMSHCP, to occur on the Project site. Even species covered by the CVMSHCP may require avoidance, minimization, and mitigation measures (see desert tortoise section below). Mitigation measures BIO-1 to BIO-3 are not sufficient in timing and scope to protect special status species. CDFW recommends revising mitigation measures BIO-1 to BIO-3 and including additional species-specific mitigation measures as discussed in the sections below.

I. Shortcomings in the Environmental Setting and Related Impacts

COMMENT 1: CDFW Lake and Streambed Alteration (LSA) and Episodic Stream Delineation

Issue: Based on preliminary review of aerial imagery, there appear to be indicators of stream habitat within the footprint of the Project. The MND does not analyze CDFW jurisdictional waters on the Project site and potential Project impacts to those waters.

Specific impact: In the dryland regions of California, episodic streams that only flow periodically predominate. These streams are often underreported in projects due to their periodic activity. Given the high biodiversity that dryland stream corridors support, it is important that the Project adequately identify any CDFW jurisdictional waters (Fish and Game Code §1602) on the Project site. Impacts to stream resources could include but are not limited to compaction of streambed soil via grading, vehicle movement, and construction worker activity; the release of contaminants from construction (dust, dirt, oil, or other vehicle pollutants); and the removal of vegetation. Discharges of water or other by-products of the Project released into the environment may also impact streams and fish and wildlife resources. Additionally, if salt is stored improperly or the storage system fails, salt runoff has the potential to impact the water chemistry of adjacent features.

Why impact would occur: If not properly identified, ephemeral and other stream features can be negatively impacted by Project activities as noted above. Based on Google Earth imagery as well as LandVision Auditor's Parcel maps, multiple streams exist on the parcel where the Project will occur. The pilot project site area should be surveyed for any unmapped stream features that may be subject to Fish and Game Code § 1602 (see below).

Evidence impact would be significant: Ephemeral and episodic streams are dry through most of the year, and dryland stream corridors have higher biodiversity and habitat values than in the adjacent uplands. Episodic stream systems transport and deliver water, provide linear habitat connectivity and refuge, and concentrate seeds, organic matter, and sediment (Energy Research and Development Division 2014). Thus, proper identification of ephemeral and episodic streams is vital to determining the Project's impacts and whether those impacts have been mitigated to a level less than significant.

Fish and Game Code Section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: substantially divert or obstruct the natural flow of any river, stream, or lake; substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or deposit debris, waste or other materials that could pass into any river, stream or lake. Please note that "any river, stream or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year-round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. Upon receipt of a complete notification, CDFW determines if the proposed project activities may substantially adversely affect existing fish and wildlife resources and whether a Lake and Streambed Alteration (LSA) Agreement is required. An LSA Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify the Project that would eliminate or reduce harmful impacts to fish and wildlife resources.

Recommended Potentially Feasible Mitigation Measure(s)

MM BIO-[A]: CDFW Lake and Streambed Alteration (LSA) Program

To reduce impacts to less than significant: Prior to construction and issuance of any grading permit, the Project Proponent shall obtain written

correspondence from the California Department of Fish and Wildlife (CDFW) stating that notification under section 1602 of the Fish and Game Code is not required for the Project, or the Project Sponsor should obtain a CDFW-executed Lake and Streambed Alteration Agreement, authorizing impacts to Fish and Game Code Section 1602 resources associated with the Project.

II. Shortcomings in Proposed Mitigation Measures and Related Impacts

COMMENT 1: Burrowing Owl (Athene cunicularia) and Existing MM BIO-1

Location in MND: Biological Resources, Page 29-30

Issue: CDFW is concerned that Mitigation Measure BIO-1 is not sufficient to ensure that potential impacts to burrowing owl are mitigated to a level less than significant.

Specific impact: Impacts to burrowing owl from the Project could include take of burrowing owls, their nests or eggs, or destroying nesting or foraging habitat; impacting burrowing owl populations through changes in vegetation via the destruction, conversion, or degradation of burrowing owl habitat.

Why impact would occur: CDFW Biogeographic Information and Observation System (BIOS) data indicates that the Project site is ranked as highly suitable for burrowing owl habitat. Burrowing owls prefer habitat typified by "short, sparse vegetation with few shrubs...grassland, shrub, steppe, and desert are naturally occurring habitat" (CDFG, 2012, p. 30). Thus, the Project site is potentially suitable for burrowing owl. The Staff Report on Burrowing Owl Mitigation recommends that full focused surveys for burrowing owl shall take place when suitable habitat exists. This is also noted in the MND's Biological Resource Assessment (p. 30). However, only an initial general field assessment has been conducted for the Project.

Impacts to burrowing owls can result from grading, earthmoving, burrow blockage, heavy equipment compaction and crushing of burrows, and other activities. Changes in vegetation can result from the destruction, conversion, or degradation of nesting, foraging, or over-wintering habitats; destruction of natural burrows; and general project disturbance that has the potential to harass owls at occupied burrows. Additionally, the Project will involve a ground disturbance depth of about 15 feet for the building and 3 feet for underground pipelines (MND, p. 2). If burrowing owl burrows are not properly detected, below-ground disturbance could destroy habitat and result in take of burrowing owl.

Evidence impact would be significant: 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. Take is defined in Fish and Game Code section 86 as "hunt, pursue, capture or kill, or attempt to hunt, pursue, catch, capture, or kill." Without appropriate focused surveys prior to Project operations including, but not limited to, ground and vegetation disturbing activities, adverse impacts to burrowing owl may occur. In addition, burrowing owl qualifies for enhanced consideration afforded to species under CEQA which can be shown to meet the criteria for listing as endangered, rare, or threatened (CEQA Guidelines, Section 15380(d)).

Recommended Potentially Feasible Mitigation Measure(s)

CDFW recommends revising MM BIO-1 as follows (additions are shown in **bold**; deletions are shown with strikethrough):

MM BIO-1: Burrowing Owl Surveys

To reduce impacts to less than significant: Suitable burrowing owl habitat has been confirmed on the site; therefore, focused burrowing owl surveys shall be conducted by a qualified biologist according to the Staff Report on

> Burrowing Owl Mitigation. If burrowing owls are detected during the focused surveys, the qualified biologist and Project Applicant shall prepare a Burrowing Owl Plan that shall be submitted to CDFW for review and approval prior to commencing Project activities. The Burrowing Owl Plan shall describe proposed avoidance, monitoring, relocation, and minimization. The Burrowing Owl Plan shall include the number and location of occupied burrow sites, acres of burrowing owl habitat that will be impacted, details of site monitoring, and details on proposed buffers and other avoidance measures if avoidance is proposed. If impacts to occupied burrowing owl habitat or burrow cannot be avoided, the Burrowing Owl Plan shall also describe the avoidance and minimization actions that will be implemented. Proposed implementation of burrow exclusion and closure should only be considered as a last resort, after all other options have been evaluated as exclusion is not in itself an avoidance, minimization, or mitigation method and has the possibility to result in take. If impacts to occupied burrows cannot be avoided, information shall be provided regarding adjacent or nearby suitable habitat available to owls along with proposed relocation actions. If no suitable habitat is available nearby, details regarding the creation and funding of artificial burrows (numbers, location, and type of burrows) and management activities for relocated owls shall also be included in the Burrowing Owl Plan. The Permittee shall implement the Burrowing Owl Plan following CDFW review and approval.

Preconstruction burrowing owl surveys shall be conducted no less than 14 days prior to the start of Project-related activities and within 24 hours prior to ground disturbance, in accordance with the Staff Report on Burrowing Owl Mitigation (2012 or most recent version). Preconstruction surveys should be performed by a qualified biologist following the recommendations and guidelines provided in the Staff Report on Burrowing Owl Mitigation. If the preconstruction surveys confirm occupied burrowing owl habitat, Project activities shall be immediately halted. The qualified biologist shall coordinate with CDFW and prepare a Burrowing Owl Plan that shall be submitted to CDFW for review and approval prior to commencing Project activities.

To mitigate potential impacts to burrowing owl, two pre-construction surveys shall be conducted in accordance with CDFW protocol, as detailed in the "Staff Report on Burrowing Owl Mitigation," dated March 7, 2012. In addition, consistent with CVMSHCP requirements, the construction area and adjacent areas within 500 feet of the Development site, or to the edge of the property if less than 500 feet, will be surveyed by an Acceptable Biologist for burrows that could be used by burrowing owl. If a burrow is located, the biologist will determine if an owl is present in the burrow. If the burrow is determined to be occupied, the burrow will be flagged and a 160-foot buffer during the non-breeding season and a 250-foot buffer during the breeding season, or a buffer to the edge of the property boundary if less than 500 feet, will be established around the burrow. The buffer will be staked and flagged. No Development or O&M activities will be permitted within the buffer until the young are no longer dependent on the burrow. Should the biologist determine that relocation of adult bird(s) is necessary, the biologist shall consult with the CDFW and prepare for their approval a relocation plan consistent with the Department's requirements prior to any relocation activities.

The first survey shall occur between 14 and 30 days prior to ground disturbance, and the second shall occur within 24 hours of the initiation of ground disturbance activities. If no owls are detected during those surveys, ground disturbance may proceed without further consideration of this species, assuming there is no lapse between the surveys and construction, because as the protocol states "time lapses between Project activities trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance."

Location in MND: Biological Resources Section, p. 31

Issue: CDFW is concerned that Mitigation Measure BIO-2 is not sufficient in timing and scope to prevent impacts to nesting birds.

Specific impact: According to CDFW BIOS data, the Project has the potential to impact nesting birds that nest and forage in the region including, but not limited to LeConte's thrasher (*Taxostoma lecontei*), Costa's hummingbird (*Calypte costae*), loggerhead shrike (*Lanius ludovicianus*), black-tailed gnatcatcher (*Polioptila melanura*), and prairie falcon (*Falco mexicanus*). The MND acknowledges that each of these species has the potential to occur on the Project site. CDFW is concerned about the impacts to nesting birds including loss of nesting/foraging habitat and potential take from ground-disturbing activities and construction.

Why impact would occur: CDFW is concerned about the impacts to ground nesting birds including loss of nesting/foraging habitat and potential take from ground disturbing activities and construction. Additionally, the timing of the nesting season varies greatly depending on several factors, such as bird species, weather conditions in any given year, and long-term climate changes (e.g., drought, warming, etc.). CDFW staff have observed that climate change conditions may result in the nesting bird season occurring earlier and later in the year than historical nesting season dates. CDFW recommends the completion of nesting bird surveys regardless of time of year to ensure compliance with all applicable laws pertaining to nesting.

Although the MND includes Mitigation Measure BIO-2 for nesting birds, the timing and scope are insufficient to protect nesting birds. CDFW recommends including the revised MM BIO-2 below, with more specific information regarding nesting bird surveys.

Evidence impact would be significant: It is the Project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Fish and Game Code sections 3503, 3503.5, and 3513 afford protective measures as follows: section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by Fish and Game Code or any regulation made pursuant thereto. Fish and Game Code section 3503.5 makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by Fish and Game Code or any regulation adopted pursuant thereto. Fish and Game Code section 3513 makes it unlawful to take or possess any migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. § 703 et seq.).

Recommended Potentially Feasible Mitigation Measure(s)

CDFW recommends revising MM BIO-2 as follows (additions are shown in **bold**; deletions are shown with strikethrough):

MM BIO-2: Nesting Bird Surveys

To reduce impacts to less than significant: Regardless of the time of year, nesting bird surveys shall be performed by a qualified avian biologist no more than three (3) days prior to vegetation removal or ground-disturbing activities. Pre-construction surveys shall focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior. The qualified biologist will make every effort to avoid potential nest predation as a result of survey and monitoring efforts. For any grading or other site disturbance or tree or vegetation removal occurring during the nesting season between January 15 and August 31, a qualified biologist shall conduct at least one nesting bird survey, and more if deemed necessary by the consulting biologist, immediately prior to initiation of Project-related ground disturbing activities. If an active nest is detected, a buffer would be established around it and no work would be permitted in that area near the

nest until young have fledged. If active nests are found during the preconstruction nesting bird surveys, a qualified biologist shall establish an appropriate nest buffer to be marked on the ground. Nest buffers are species specific and should be at least 300 feet for passerines and 500 feet for raptors and birds-of-prey. Active nests and adequacy of the established buffer distance shall be monitored daily by the qualified biologist until the qualified biologist has determined the young has fledged or the Project has been completed. The qualified biologist has the authority to stop work if nesting pairs exhibit signs of disturbance. While there is no established protocol for nest avoidance, when consulted, the CDFW generally recommends avoidance buffers of about 500 feet for birds-of prey and listed species, and 300 feet for unlisted songbirds. If ground disturbance occurs outside the nesting season, this requirement shall be waived.

Specifically relating to Le Conte's thrasher, consistent with the requirements of the CVMSHCP, the survey shall be performed using CVMSHCP survey protocols (CVCC's Biological Monitoring Protocol for Le Conte's Thrasher, 2013) on the construction site and within 500 feet of the construction, or to the property boundary if less than 500 feet. If nesting Le Conte's thrasher are found, a 500-foot buffer, or to the property boundary if less than 500 feet, will be established around the nest site. The buffer will be staked and flagged. No construction will be permitted within the buffer during the breeding season of January 15-June 15 or until the young have fledged.

COMMENT 3: Special Status Plant Surveys and Existing MM BIO-3

Location in MND: Biological Resources Section, Page 31

Issue: Plants not covered by the CVMSHCP have potential to occur on the Project site and have been identified in Appendix B (Table 1) of the MND. CDFW is concerned that the habitat assessment was not conducted at the appropriate time of year to detect these special status plants on the Project site, and thus existing Mitigation Measure BIO-3 is insufficient in mitigating potential impacts to special status plant species to a level less than significant.

Specific impact: The MND indicates that no special-status plants were observed during the habitat assessment conducted on February 24, 2022. CDFW is concerned that the habitat assessment was not conducted at the appropriate time of year to detect special status plants on the Project site.

Why impact would occur: If the presence of special-status plant species is not determined through floristic-based surveys, unauthorized take or disturbance of special-status plant species not covered by the CVMSHCP could occur. CDFW recommends a thorough, floristic-based assessment of special status plants at the appropriate time(s) of year be conducted, as described below.

Evidence impact would be significant: The California Rare Plant Rank 1B indicates plants that are rare, threatened, or endangered in California and elsewhere, and California Rare Plant Rank 2B indicates plants that are rare, threatened, or endangered in California but more common elsewhere. Impacts to these species must be analyzed during preparation of environmental documents relating to CEQA because they meet the definition of rare or endangered under CEQA Guidelines §15125 (c) and/or §15380.

Recommended Potentially Feasible Mitigation Measure(s)

CDFW recommends revising MM BIO-3 as follows (additions are shown in **bold**; deletions are shown with strikethrough):

MM BIO-3: Special Status Plant Surveys

> To reduce impacts to less than significant: Prior to ground disturbance, surveys for Salton milk-vetch (Astragalus crotalariae), sand evening-primrose (Chylismia arenaria), Las Animas colubrina (Colubrina californica), narrow-leaved sandpaper plant (Petalonyx linearis) shall be completed by a qualified biologist following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2018 or most recent version) prior to commencing Project activities. Field surveys shall be conducted at the time of year when plants will be both evident and identifiable. Usually this is during the flowering or fruiting season. Should any state-listed plant species be present in the Project area, the Project proponent shall obtain an Incidental Take Permit, if required by law, for those species not covered under the CVMSHCP prior to the start of Project activities. The results of the surveys shall be provided in a report to the County Planning Department prior to the issuance of any ground disturbing permit on the property. Should other special-status plants or natural communities be present in the Project area, an appropriate buffer (i.e., fencing or flagging) shall be established for avoidance. If complete avoidance is not feasible, the County shall mitigate the loss of the plant(s) through the purchase of mitigation credits from a CDFW-approved bank or land acquisition and conservation at a minimum 3:1 (replacement to impact) ratio. Note that a higher ratio may be warranted if the proposed mitigation lands are located far away from the Project site (i.e., within a separate watershed) or is not occupied by or available to special-status species.

COMMENT 4: Desert Tortoise (Gopherus agassizii)

Issue: The MND does not analyze potential impacts to desert tortoise.

Specific impact: Construction and grading on construction sites may crush tortoise burrows, an important refuge for tortoises from the desert heat and from predation (Zeiner et al. 1990). This could lead to increased mortality. In addition, vegetation removal can decrease habitat availability and increase the spread of invasive plants.

Why impact would occur: According to the MND, no desert tortoises were detected during the initial habitat assessment conducted on February 24, 2022. Chapter 4 of the Desert Tortoise (Mojave Population) Field Manual indicates that "surveys should be conducted during the desert tortoise's most active periods (April through May or September through October)" (USFWS, 2009, p. 4-8). CDFW is concerned that the timing and scope of the initial field assessment are insufficient to determine the presence of desert tortoise on the Project site. According to CDFW BIOS data, desert tortoises have been observed within 10 miles of the Project area and at nearby sites of similar topography and habitat to the Project site. Additionally, BIOS data indicates that the Project site has the potential to serve as yearlong habitat for desert tortoise and is highly suitable for desert tortoise. If presence of desert tortoise is not adequately determined, potentially significant impacts to desert tortoise could occur.

Evidence impact would be significant: Consistent with CEQA Guidelines, Section 15380, the status of the desert tortoise as a threatened species pursuant to the federal Endangered Species Act (16 U.S.C. § 1531 *et seq.*) and the California Endangered Species Act (Fish & G. Code, § 2050 *et seq.*) qualifies it as an endangered, rare, or threatened species under CEQA.

Desert tortoise populations have declined significantly in recent decades as a result of human activities in their native habitat including land development, off-road vehicle use, overgrazing, agricultural development, military activities, predation, and the spread of invasive plant species (USFWS, 2011). The desert tortoise population in the western Mojave Desert has declined by 90% since the 1980s. Desert tortoises can take up to 20 years to reach sexual maturity, which limits their ability to recover from even small losses in population numbers (USFWS, 2011).

Recommended Potentially Feasible Mitigation Measure(s)

MM BIO-[B]: Desert Tortoise Surveys

To reduce impacts to less than significant: Prior to commencing Project activities, focused surveys for desert tortoise should be conducted by a qualified biologist, according to protocols in chapter 4 of the *Desert Tortoise (Mojave Population) Field Manual* (USFWS 2009 or most recent version), during the species' most active periods (April through May or September through October). CDFW recommends working with USFWS and CDFW concurrently to ensure a consistent and adequate approach to planning survey work and that biologists retained to complete desert tortoise protocollevel surveys submit their qualifications to CDFW and USFWS prior to initiation of surveys for review and approval.

No more than 14 calendar days prior to start of Project activities, a qualified biologist shall conduct pre-construction surveys for desert tortoise as described in the USFWS Desert Tortoise (Mojave Population) Field Manual (USFWS 2009 or most recent version). Pre-construction surveys shall be completed using perpendicular survey routes within the Project area and 50-foot buffer zone. Pre-construction surveys cannot be combined with other surveys conducted for other species while using the same personnel. Project activities cannot start until two negative results from consecutive surveys using perpendicular survey routes for desert tortoise are documented. Should desert tortoise presence be confirmed during the survey, the qualified biologist shall immediately notify CDFW and USFWS to determine appropriate avoidance, minimization, and mitigation measures.

COMMENT 5: Desert Kit Fox (Vulpes macrotis arsipus)

Issue: The MND does not analyze impacts to desert kit fox.

Specific impact: Site development could result in kit foxes being trapped in trenches, pipes, and other construction materials. Noise impacts from generators or other construction equipment during construction or operation of the desalination facility could decrease the hunting ability of kit foxes by limiting their ability to hear their prey or decreasing the activity of their prey (Francis and Barber 2013).

Why impact would occur: According to BIOS data layers, the Project site falls within suitable predicted habitat for desert kit fox. However, no focused survey including assessment of burrows was conducted for the Project.

Evidence impact would be significant: Desert kit fox is protected as a fur-bearing mammal under Title 14 of the California Code of Regulations (Chap. 5, §460) and may not be taken at any time. Because desert kit fox has high fidelity to natal dens, it is crucial to adequately assess whether desert kit fox is present on the Project site well in advance of commencing Project activities. If desert kit fox is found on-site during breeding season, it could delay Project activities until appropriate vegetation and construction buffers can be established on the Project site.

Recommended Potentially Feasible Mitigation Measure(s)

MM BIO-[C]: Desert Kit Fox Surveys

To reduce impacts to less than significant: Prior to commencing Project activities, a qualified biologist shall conduct a focused survey for desert kit fox, including assessment of all burrows in the Project area. If potential burrows are located, they should be monitored by the qualified biologist. If a burrow is determined to be active, the qualified biologist shall immediately notify CDFW and USFWS to determine appropriate avoidance, minimization, and mitigation measures.

No more than 14 days prior to the beginning of ground disturbance and/or Project activities, a qualified biologist shall construct pre-construction surveys to determine if potential desert kit fox burrows/dens are present in the Project area. Pre-construction surveys should include 100-percent visual coverage of the Project area and cannot be combined with other surveys conducted for other species while using the same personnel. If the pre-construction surveys confirm occupied desert kit fox habitat, Project activities shall immediately be halted, and the qualified biologist shall notify CDFW and USFWS to develop avoidance, minimization, and mitigation measures. No disturbance of active dens shall take place when juvenile desert kit fox may be present and depend on parental care.

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 CNNDB field survey form can be filled out and submitted online at the following link: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

ENVIRONMENTAL DOCUMENT 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 County of Riverside Planning Department in identifying and mitigating Project impacts on biological resources. CDFW concludes that the MND does not adequately identify or mitigate the Project's significant, or potentially significant impacts on biological resources. CDFW recommends that prior to adoption of the MND, the County of Riverside Planning Department revise the document to include a more complete assessment of the Project's potential impacts on biological resources as well as appropriate avoidance, minimization, and mitigation measures to reduce impacts to a level less than significant.

CDFW personnel are available for consultation regarding biological resources and strategies to minimize impacts. Questions regarding this letter or further coordination should be directed to Claire Sullivan, Environmental Scientist, at Claire.sullivan@wildlife.ca.gov.

Sincerely,

Eum Fredwy 84F92FFEEFD24C8... Kim Freeburn Environmental Program Manager

Attachment 1, MMRP for CDFW-Proposed Mitigation Measures

ec: Heather Brashear, Senior Environmental Scientist (Supervisor), CDFW Heather.Brashear@wildlife.ca.gov

Office of Planning and Research, State Clearinghouse, Sacramento State.clearinghouse@opr.ca.gov

Rollie White, U.S. Fish and Wildlife Service rollie white@fws.gov

Vincent James, U.S. Fish and Wildlife Service vincent james@fws.gov

REFERENCES

- California Department of Fish and Game (CDFG). (2012). Staff Report on Burrowing Owl Mitigation. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843
- Energy Research and Development Division. (2014). Methods to Describe and Delineate Episodic Stream Processes on Arid Landscapes for Permitting Utility-Scale Solar Power Plants: With the MESA Field Guide. https://www.energy.ca.gov/sites/default/files/2021-06/CEC-500-2014-013.pdf
- Francis, C. D., and J. R. Barber. (2013). A framework for understanding noise impacts on wildlife: An urgent conservation priority. Frontiers in Ecology and the Environment 11:305–313.
- U.S. Fish and Wildlife Service (USFWS). (2009). Desert Tortoise (Mojave Population) Field Manual. https://www.fws.gov/sites/default/files/documents/Desert-Tortoise-Field-Manual.pdf
- U.S. Fish and Wildlife Service (USFWS). (2011). Revised recovery plan for the Mojave population of the desert tortoise (Gopherus agassizii). https://www.fws.gov/sites/default/files/documents/USFWS.2011.RRP%20for%20the%20Mojave%20Desert%20Tortoise.pdf.
- Zeiner, D. C., W. F. Laudenslayer, Jr, K. E. Mayer, and M. White.(1990). California's Wildlife Volume I-III. California Department of Fish and Game, editor. Sacramento, CA, USA.

ATTACHMENT 1: MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

Biological Resources (BIO)		
Mitigation Measure (MM) Description	Implementation Schedule	Responsible Party
MM BIO-[A]: CDFW Lake and Streambed Alteration (LSA) Program Prior to construction and issuance of any grading permit, the Project Proponent shall obtain written correspondence from the California Department of Fish and Wildlife (CDFW) stating that notification under section 1602 of the Fish and Game Code is not required for the Project, or the Project Sponsor should obtain a CDFW-executed Lake and Streambed Alteration Agreement, authorizing impacts to Fish and Game Code Section 1602 resources associated with the Project.	Prior to construction and issuance of any grading permit	County of Riverside Planning Department
MM BIO-1: Burrowing Owl Surveys Suitable burrowing owl habitat has been confirmed on the site; therefore, focused burrowing owl surveys shall be conducted by a qualified biologist according to the Staff Report on Burrowing Owl Mitigation. If burrowing owls are detected during the focused surveys, the qualified biologist and Project Applicant shall prepare a Burrowing Owl Plan that shall be submitted to CDFW for review and approval prior to commencing Project activities. The Burrowing Owl Plan shall describe proposed	Focused surveys: Prior to commencing Project-related activities. Pre-construction surveys: No less than (14) days prior to start of Project-related	County of Riverside Planning Department

avoidance, monitoring, relocation, and minimization. The Burrowing Owl Plan shall include the number and location of occupied burrow sites, acres of burrowing owl habitat that will be impacted, details of site monitoring, and details on proposed buffers and other avoidance measures if avoidance is proposed. If impacts to occupied burrowing owl habitat or burrow cannot be avoided, the Burrowing Owl Plan shall also describe the avoidance and minimization actions that will be implemented. Proposed implementation of burrow exclusion and closure should only be considered as a last resort, after all other options have been evaluated as exclusion is not in itself an avoidance, minimization, or mitigation method and has the possibility to result in take. If impacts to occupied burrows cannot be avoided, information shall be provided regarding adjacent or nearby suitable habitat available to owls along with proposed relocation actions. If no suitable habitat is available nearby, details regarding the creation and funding of artificial burrows (numbers, location, and type of burrows) and management activities for relocated owls shall also be included in the Burrowing Owl Plan. The Permittee shall implement the Burrowing Owl Plan following CDFW review and approval.

Preconstruction burrowing owl surveys shall be conducted no less than 14 days prior to the start of Project-related activities and within 24 hours prior to ground disturbance, in accordance with the Staff Report on Burrowing Owl Mitigation (2012 or most recent version). Preconstruction surveys should be performed by a qualified biologist following the recommendations and guidelines provided in the Staff Report on Burrowing Owl Mitigation. If the preconstruction surveys confirm occupied burrowing owl habitat, Project activities shall be immediately halted. The qualified biologist shall coordinate with CDFW and prepare a Burrowing Owl Plan that shall be submitted to CDFW for review and approval prior to commencing Project activities.

activities and within 24 hours prior to ground disturbance.

MM BIO-2: Nesting Bird Surveys

Regardless of the time of year, nesting bird surveys shall be performed by a qualified avian biologist no more than three (3) days prior to vegetation removal or ground-disturbing activities. Pre-construction surveys shall focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior. The qualified biologist will make every effort to avoid potential nest predation as a result of survey and monitoring efforts. If active nests are found during the pre-construction nesting bird surveys, a qualified biologist shall establish an appropriate nest buffer to be marked on the ground.. Nest buffers are species specific and should be at least 300 feet for passerines and 500 feet for raptors and birds-of-prey. Active nests and adequacy of the established buffer distance shall be monitored daily by the qualified biologist until the qualified biologist has determined the young has fledged or the Project has been completed. The qualified biologist has the authority to stop work if nesting pairs exhibit signs of disturbance.

No more than 3 days prior to vegetation removal or ground disturbing activities

County of Riverside Planning Department

USFWS and CDFW concurrently to ensure a

Specifically relating to Le Conte's thrasher, consistent with the requirements of the CVMSHCP, the survey shall be performed using CVMSHCP survey protocols (CVCC's Biological Monitoring Protocol for Le Conte's Thrasher, 2013) on the construction site and within 500 feet of the construction, or to the property boundary if less than 500 feet. If nesting Le Conte's thrasher are found, a 500-foot buffer, or to the property boundary if less than 500 feet, will be established around the nest site. The buffer will be staked and flagged. No construction will be permitted within the buffer during the breeding season of January 15-June 15 or until the young have fledged. MM BIO-3: Special Status Plant Surveys Prior to ground County of Riverside Prior to ground disturbance, surveys for Salton disturbance and at Planning milk-vetch (Astragalus crotalariae), sand the appropriate Department evening-primrose (Chylismia arenaria), Las time of year when Animas colubrina (Colubrina californica), plants will be both narrow-leaved sandpaper plant (Petalonyx evident and linearis) shall be completed by a qualified identifiable biologist following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2018 or most recent version) prior to commencing Project activities. Field surveys shall be conducted at the time of year when plants will be both evident and identifiable. Usually this is during the flowering or fruiting season. Should any state-listed plant species be present in the Project area, the Project proponent shall obtain an Incidental Take Permit, if required by law, for those species not covered under the CVMSHCP prior to the start of Project activities. The results of the surveys shall be provided in a report to the County Planning Department prior to the issuance of any ground disturbing permit on the property. Should other special-status plants or natural communities be present in the Project area, an appropriate buffer (i.e., fencing or flagging) shall be established for avoidance. If complete avoidance is not feasible, the County shall mitigate the loss of the plant(s) through the purchase of mitigation credits from a CDFWapproved bank or land acquisition and conservation at a minimum 3:1 (replacement to impact) ratio. Note that a higher ratio may be warranted if the proposed mitigation lands are located far away from the Project site (i.e., within a separate watershed) or is not occupied by or available to special-status species. MM BIO-[B]: Desert Tortoise Surveys Focused County of Riverside Prior to commencing Project activities, focused surveys: Prior to Planning surveys for desert tortoise should be conducted by commencing Department Project-related a qualified biologist, according to protocols in chapter 4 of the Desert Tortoise (Mojave activities. Population) Field Manual (USFWS 2009 or most recent version), during the species' most active **Pre-construction:** periods (April through May or September through No more than 14 October). CDFW recommends working with

days prior to start

consistent and adequate approach to planning survey work and that biologists retained to complete desert tortoise protocol-level surveys submit their qualifications to CDFW and USFWS prior to initiation of surveys for review and approval.

No more than 14 calendar days prior to start of Project activities, a qualified biologist shall conduct pre-construction surveys for desert tortoise as

pre-construction surveys for desert tortoise as described in the USFWS Desert Tortoise (Mojave Population) Field Manual (USFWS 2009 or most recent version). Pre-construction surveys shall be completed using perpendicular survey routes within the Project area and 50-foot buffer zone. Preconstruction surveys cannot be combined with other surveys conducted for other species while using the same personnel. Project activities cannot start until two negative results from consecutive surveys using perpendicular survey routes for desert tortoise are documented. Should desert tortoise presence be confirmed during the survey, the qualified biologist shall immediately notify CDFW and USFWS to determine appropriate avoidance, minimization, and mitigation measures.

of Project-related activities.

MM BIO-[C]: Desert Kit Fox Surveys

Prior to commencing Project activities, a qualified biologist shall conduct a focused survey for desert kit fox, including assessment of all burrows in the Project area. If potential burrows are located, they should be monitored by the qualified biologist. If a burrow is determined to be active, the qualified biologist shall immediately notify CDFW and USFWS to determine appropriate avoidance, minimization, and mitigation measures.

No more than 14 days prior to the beginning of ground disturbance and/or Project activities, a qualified biologist shall construct pre-construction surveys to determine if potential desert kit fox burrows/dens are present in the Project area. Preconstruction surveys should include 100-percent visual coverage of the Project area and cannot be combined with other surveys conducted for other species while using the same personnel. If the preconstruction surveys confirm occupied desert kit fox habitat, Project activities shall immediately be halted, and the qualified biologist shall notify CDFW and USFWS to develop avoidance, minimization, and mitigation measures. No disturbance of active dens shall take place when juvenile desert kit fox may be present and depend on parental care.

Focused surveys: Prior to commencing Project-related activities.

Pre-construction: No more than 14 days prior to start of Project-related activities. County of Riverside Planning Department