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GAVIN NEWSOM, Governor
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Sent via e-mail

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EHL RESERVOIR AND INTAKE CHANNEL PROJECT (PROJECT)
DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR)
SCH#: 2023100140

Dear Justina Gamboa-Arce:

The California Department of Fish and Wildlife (CDFW) received a Notice of Availability of a DEIR from the Imperial Irrigation District (IID), for the EHL Reservoir and Intake Channel Project (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: Imperial Irrigation District

Objective: The purpose of the Project is to augment IID's current levels of water management and operational flexibility to assist in meeting system and on-farm conservation program goals. The Project proposes the construction of a single basin reservoir facility with a water storage capacity of 2,100 acre-feet, covering approximately 440 acres within a 591-acre Project footprint, which would manage up to 365,000 acre-feet of water annually. A proposed intake structure off the east side of the All-American Canal

[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.

(AAC) Reach would direct Colorado River flows along an intake channel to the operational reservoir via gravity flow. Water temporarily stored in the reservoir would be delivered via gravity flow through an automated gate outlet into the East Highline Canal (EHC) for delivery downstream. The intake channel would branch off the east side of the AAC Reach via a culvert system to convey the operational water flows from the AAC Reach through federally owned land via culverts, which will then transition into an open channel canal that connects to the proposed reservoir at a flow rate of up to 1,500 cubic feet per second (cfs). Stored water would be delivered through an automated gate outlet and structure with a gravity flow capacity of approximately 1,000 cfs for delivery into the EHC and downstream users. The intake channel would have a new proposed right-of-way (ROW), approximately two miles in length, to convey the operational water flows from the AAC Reach through culverts, an open channel, and to the proposed reservoir. Two potential staging areas are anticipated in the northwest and northeast portions of the proposed Project site within 35 acres of IID owned land. A third staging area may occur along the southern section of the intake channel.

Approximately 63 acres of the proposed intake channel would be constructed on agricultural land, and approximately three acres would cross BLM-owned land. The proposed intake channel would consist of an open channel approximately 70 feet wide and 10 to 15 feet deep from the top of the embankments. Both the embankment of the proposed reservoir and the intake channel would not exceed 10 feet above existing grade. The cut bank and flow gate would alter approximately 150 feet of the bank.

Location: The proposed Project site consists of a combined total of approximately 591 acres of primarily agricultural land located within the County of Imperial, approximately 8 miles southeast of Holtville, California, and approximately 11 miles east of Calexico, California. The Project is located north of the AAC, east of the EHC, and west of BLM land (32.726939, -115.272460). The proposed reservoir basin would be located directly north of Verde School Road. The Project area is surrounded by agricultural fields to the north, west, and south, and open desert to the north and east. The Project encompasses Accessor's Parcel Numbers (APN) 055-310-007, 055-310-008, 005-250-020, and 059-310-005.

Timeframe: Construction activities would take approximately 15 months to complete and would involve six construction phases that may overlap or be implemented concurrently. Phase 1 consisting of reservoir construction is anticipated to take approximately 15 months. Phase 2 consisting of constructing the Bornt Road and Holdridge Road detours is anticipated to take approximately 2 months. Phase 3 consisting of sedimentation basin/channel construction is anticipated to take approximately 3 months. Phase 4 consisting of intake channel and measurement flume construction is anticipated to take approximately 3 months. Phase 5 consisting of canal tie-ins is anticipated to take approximately 3 months. Lastly, Phase 6 consisting of construction of the remaining structures is anticipated to take approximately 3 months.

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

I. Environmental Setting and Related Impact Shortcoming

COMMENT #1: Assessment of Biological Resources

DEIR document, Pages #4.2-1 to -50, Appendix D

Issue: The DEIR does not adequately identify the Project's significant, or potentially significant, impacts to biological resources, including special-status plants.

Specific impact: The DEIR bases its analysis of impacts to biological resources on a general biological survey conducted by Dudek in January 2018, two special-status plant focused surveys by Rincon in April 2020 and September 2022, and a focused survey for flat-tailed horned lizard by Rincon in May 2020. CDFW generally considers field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. In addition, CDFW is concerned about the potential for special-status species to occur on or near the Project site, for which focused surveys have not been conducted. Based on the 2018 biological survey, the DEIR (Table 4.2-3) identifies wildlife species with moderate to high potential to occur in the Project area, including desert tortoise, burrowing owl, Southern California rufous-crowned sparrow, ferruginous hawk, northern harrier, southwestern willow flycatcher, prairie falcon, loggerhead shrike, California black rail, Yuma Ridgway's rail, Yuma hispid cotton rat, and American badger. According to the DEIR (p. 4.2-7 and Table 4.2-3), five of these species were observed during the 2018 biological survey: burrowing owl, Southern California rufous-crowned sparrow, northern harrier, prairie falcon, and loggerhead shrike.

Page 4.2-11 of the DEIR appears to contain an error, indicating no burrowing owls were detected in the 2018 biological survey, which is contradicted on p. 4.2-7 and in Table 4.2-3. There also appears to be contradictory information in Table 4.2-3 and on p. 4.2-30 compared with p. 4.2-11 with respect to flat-tailed horned lizard and Colorado Desert fringe-toed lizard. Table 4.2-3 and p. 4.2-30 indicate no suitable habitat for these species in the Project area, whereas text on 4.2-11 indicates habitat potential for these species. The DEIR should correct discrepancies in the species information provided.

The Project is surrounded by agricultural and vacant land and there is potential for special-status species to be impacted either directly or indirectly by Project activities. The DIER (p. 4.2-4 and 4.2-5) states that disturbed lands and agricultural lands are "not considered a sensitive biological resource under CEQA (CDFW 2022)"; however, wildlife that are adapted to disturbance, such as burrowing owl, may use both disturbed and agricultural land (see Burrowing Owl section below), and impacts to species using those lands should be analyzed under CEQA. In addition, the DEIR states that because open water does not support vegetation, it is "not considered a sensitive biological resource under CEQA (CDFW 2022)." However, wildlife may utilize open water habitat, and impacts to those species should be analyzed under CEQA. The DIER should also provide a full reference describing the document being referred to with the citation "CDFW 2022."

The California Natural Diversity Database (CNDDB) and Biogeographic Information and Observation System (BIOS) indicate that occurrences of ESA-listed, CESA-listed, Fully Protected, and other special-status species have been reported near the Project area including, but not limited to, the following:

Birds: burrowing owl (*Athene cunicularia*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), ferruginous hawk (*Buteo regalis*), northern harrier (*Circus hudsonius*), prairie falcon (*Falco mexicanus*), loggerhead shrike (*Lanius ludovicianus*), southwestern willow flycatcher (*Empidonax traillii extimus*), California black rail (*Laterallus jamaicensis coturniculus*), Yuma Ridgway's rail (*Rallus obsoletus yumanensis*),

Reptiles: desert tortoise (*Gopherus agassizii*), Sonoran mud turtle (*Kinosternon sonoriense*), flat-tailed horned lizard (*Phrynosoma mcallii*), Colorado Desert fringed-toed lizard (*Uma notata*),

Plants: gravel milk-vetch (*Astragalus sabulomum*), Abram's spurge (*Euphorbia abramsiana*), California satintail (*Imperata brevifolia*), sand food (*Pholisma sonorae*),

Mammals: Yuma hispid cottonrat (*Sigmodon hispidus eremicus*), and American badger (*Taxidea taxus*).

Recent surveys during the appropriate times of the year are needed to identify potential impacts to biological resources; inform appropriate avoidance, minimization, and mitigation measures; and determine whether impacts to biological resources have been mitigated to a level that is less than significant.

Evidence impact would be significant: 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 with respect to biological resources has not been adequately analyzed in the DEIR. CDFW is concerned that without a complete and accurate description of the existing environmental setting, the DEIR 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. Section 15125(c) of the CEQA Guidelines states that knowledge of the regional setting of a project is critical to the assessment of environmental impacts, that special emphasis should be placed on environmental resources that are rare or unique to the region, and that significant environmental impacts of the proposed Project are adequately investigated and discussed.

Recommended Potentially Feasible Mitigation Measure:

To establish the existing environmental setting with respect to biological resources, CDFW recommends that a revised DEIR include the results of *recent* biological surveys as described in the following mitigation measure, as well as any necessary mitigation measures:

MM BIO-[A]: Assessment of Biological Resources

Prior to Project construction activities, a complete and recent inventory of rare, threatened, endangered, and other sensitive species located within the Project footprint and within offsite areas with the potential to be affected, including California Species of Special Concern (CSSC) and California Fully Protected Species (Fish and Game Code § 3511), will be completed. Species to be addressed should include all those which meet the CEQA definition (CEQA Guidelines § 15380). The inventory should address seasonal variations in use of the Project area and should not be limited to resident species. Focused species-specific surveys, completed by a qualified biologist and conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable are required. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the U.S. Fish and Wildlife Service, where necessary. Note that CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if the Project is proposed to occur over a protracted time frame, or in phases, or if surveys are completed during periods of drought.

Pursuant to the CEQA Guidelines, section 15097(f), CDFW has prepared a draft mitigation monitoring and reporting program (MMRP) for revised BIO-3 through -6 and CDFW-recommended MM-BIO [A] through [H] (see Attachment 1).

II. Mitigation Measure or Alternative and Related Impact Shortcoming

COMMENT #2: Special-Status Plants

DEIR document, Pages #4.2-1 to -50, Appendix D

Issue: The DEIR indicates that focused surveys for special-status plants were conducted in April 2020 and September 2022. CDFW generally considers field assessments for rare plants to be valid for a period of up to three years. Because the surveys are partially outdated, a pre-construction survey for special-status plants should be included in the mitigation measures to ensure that impacts to special-status plants are reduced to less than significant.

Recommended Potentially Feasible Mitigation Measure:

CDFW recommends IID include the following mitigation measure in a revised DEIR:

MM BIO-[B]: Pre-construction Surveys for Special-Status Plants

Prior to Project construction activities, a pre-construction survey for special-status plants and natural communities shall be performed by a qualified biologist. The qualified biologist shall visually survey the entirety of the project site and access route to identify any special-status plants or natural communities. Should any state-listed plant species be present in the Project area, the Project proponent shall obtain appropriate CESA authorization for those species prior to the start of Project activities. Should other special-status plants or natural communities be present in the Project area, on-site or off-site habitat restoration (whichever is applicable) and/or enhancement and preservation should be evaluated and discussed in detail. Where habitat preservation is not available on-site, off-site land acquisition, management, and preservation should be evaluated.

COMMENT #3: Restoration of Riparian and Wetland Communities

Draft Environmental Impact Report (DEIR) document, Page #4.2-33, MM BIO-8

Issue: The DEIR proposes restoration and enhancement to compensate for permanent impacts to riparian and wetland communities, but the proposed mitigation measure lacks sufficient detail to ensure impacts are reduced to less than significant.

Specific impact: The DEIR states (p. 4.2-33) “long-term direct impacts to loss of vegetation communities and jurisdictional water/wetlands would be mitigated through MM-BIO-8, to implement restoration and enhancement within nearby disturbed areas,” but no further details are provided on the proposed restoration or enhancement activities or the timing of restoration and enhancement. In addition, the 1:1 mitigation ratio is insufficient to compensate for impacts to riparian and wetland communities, which support many wildlife species.

Prior to restoration and enhancement efforts, CDFW encourages IID to identify the alliances in the proposed revegetation areas and list the species with corresponding relative cover that are found in each alliance in the surrounding area. In this way, IID can use the species cover information as a success criterion to identify in detail which components of the communities they are trying to restore. CDFW strongly encourages that any seeds that may be used are from local populations free of invasive species because using non-local seeds introduces plants that are not locally adapted to the area. CDFW also recommends that IID detail any proposed enhancement activities in a revised DEIR.

In regard to restoring, enhancing, and mitigating jurisdictional waters/wetlands, IID should refer to the “CDFW’s Lake and Streambed (LSA) Program” section further below.

Evidence impact would be significant: Restoration projects that use species that are non-local often do not restore natural communities as intended but bring in non-local materials (i.e., genes, pathogens, outbreeding depression, etc.) (Mijnsbrugge et al. 2010) and distribute plants in unnatural groupings. Additionally, revegetation seed mixes that do not identify the variety or subspecies could be detrimental to revegetation efforts. For example, California buckwheat (*Eriogonum fasciculatum*) has four recognized varieties (var. *foliolosum*, var. *polifolium*, var. *fasciculatum*, and var. *flavoviride*) that commonly grow in California, although in opposing regions. It is important to use the correct variety or subspecies for the location because they are most likely to establish, persist, and reproduce on the site (Stevens 2004).

Recommended Potentially Feasible Mitigation Measure:

CDFW appreciates the inclusion of MM BIO-8; however, the measure is insufficient to compensate for impacts to riparian and wetland communities. CDFW recommends IID revise MM-BIO-8 in a revised DEIR to include specific restoration and enhancement activities, the location and timing of these activities, and a 3:1 mitigation ratio for habitat loss. In addition, CDFW recommends the following mitigation measure be included in a revised DEIR as follows:

MM BIO-[C]: Revegetation Plan

Within 12 months prior to the initiation of Project activities, and during the appropriate periods (e.g., seasons, weather conditions, times of day) to identify species potentially occurring onsite, the Project Proponent shall conduct general and, if necessary, focused biological surveys to identify alliances that occur on the Project site. The Project proponent shall list the species with corresponding relative cover that are found in each alliance in the surrounding area to provide a baseline for vegetation selection. Once the appropriate species are identified that are deemed appropriate to use in the vegetation restoration, the project proponent shall also identify the correct variety or subspecies appropriate for the borrow site locations. If the Project proponent intends to use a commercial vendor to obtain seed mixes, they should ensure that the vendor is using local seeds in their mix with the appropriate variety and subspecies. The seed mixes shall not include invasive species.

COMMENT #4: Burrowing Owl

DEIR document, Page #4.2-25, BIO-3

Issue: CDFW is concerned that the DEIR does not sufficiently identify Project impacts to burrowing owl (*Athene cunicularia*) or ensure that impacts are mitigated to a level less than significant.

Specific impact: CDFW notes that in California, preferred habitat for burrowing owl is generally typified by short, sparse vegetation with few shrubs (Haug et al. 1993), and that burrowing owls may occur in ruderal grassy fields, vacant lots, and pastures if the vegetation structure is suitable and there are useable burrows and foraging habitat proximity (Gervais et al. 2003). In addition, burrowing owls frequently move into disturbed areas prior to and during construction activities since they are adapted to highly modified habitats (Chipman et al. 2008; Coulombe 1971). The Project site contains suitable habitat for burrowing owl.

DEIR (p. 4.2-25) states “one burrowing owl was observed during the January 29, 2018, site visit and suitable habitat occurs in the Proposed Project study area.” Further, “burrowing owls are presumed to be present. Absent the recommended mitigation measures, potential construction-related direct impacts to burrowing owl could result.” Additionally, CNDDB/BIOS report occurrences of several burrowing owl pairs and burrow complexes just north of the Project site.

Occupied burrowing owl habitat has been confirmed on-site and there is a high potential for future suitable burrows that would likely support the species at any time during construction. Impacts to burrowing owl from the Project could include take of burrowing owls, their nests, or eggs or destroying nesting, foraging, or over-wintering habitat, thus impacting burrowing owl populations. Impacts can result from grading, earthmoving, burrow blockage, heavy equipment compaction and crushing of burrows, general Project disturbance that has the potential to harass owls at occupied burrows, and other activities.

Evidence impact would be significant: Burrowing owl is a California Species of Special Concern. 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, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill." 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:

CDFW appreciates the inclusion of MM BIO-3; however, the measure is insufficient in scope and timing to reduce impacts to burrowing owl to a level less than significant. CDFW recommends focused surveys for burrowing owl be conducted for the entirety of the Project site by a qualified biologist in accordance with the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012 or most recent version) and that results be included in a revised DEIR. Deferring focused surveys until the time of construction may result in significant Project delays should burrowing owls be detected on-site. CDFW recommends that IID begin coordination with CDFW and USFWS immediately if burrowing owls are detected on-site. CDFW recommends IID include replace Mitigation Measure BIO-3 in a revised DEIR as follows:

MM BIO-3: Focused and Pre-Construction Burrowing Owl Surveys and Avoidance~~/Relocation~~

> **Suitable burrowing owl habitat has been confirmed on the site; therefore, focused burrowing owl surveys shall be conducted in accordance with the *Staff Report on Burrowing Owl Mitigation* (2012 or most recent version) prior to vegetation removal or ground-disturbing activities. If burrowing owls are detected during the focused surveys, the qualified biologist and Project proponent 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, minimization, and/or mitigation actions. 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 minimization and compensatory mitigation 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. The Burrowing Owl Plan shall identify compensatory mitigation for the temporary or permanent loss of occupied burrow(s) and habitat consistent with the "Mitigation Impacts" section of the 2012 Staff Report and shall implement CDFW-approved mitigation prior to initiation of Project activities. If impacts to occupied burrows cannot be avoided, information shall be provided regarding adjacent or nearby suitable habitat available to owls. 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 Project proponent shall implement the Burrowing Owl Plan following CDFW and USFWS review and approval.

For each phase of construction, 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 and USFWS for review and approval prior to commencing Project activities.

COMMENT #5: Nesting Birds

DEIR document, Pages #4.2-25 to -27, BIO-4

Issue: CDFW is concerned that the DEIR does not sufficiently identify Project impacts to nesting birds or ensure that impacts are mitigated to a level less than significant.

Specific impact: The DEIR (Table 4.2-3) indicates that the site supports nesting and foraging habitat for many nesting birds including, but not limited to: Southern California rufous-crowned sparrow, ferruginous hawk, northern harrier, southern willow flycatcher, prairie falcon, loggerhead shrike, California black rail, and Yuma Ridgway's rail. CDFW is concerned about the impacts to nesting birds including loss of nesting/foraging habitat and potential take from ground-disturbing activities and construction. Conducting work outside the peak breeding season is an important avoidance and minimization measure. CDFW also recommends the completion of nesting bird surveys *regardless* of the time of year to ensure that impacts to nesting birds are avoided. 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.). In response to warming, birds have been reported to breed earlier, thereby reducing temperatures that nests are exposed to during breeding and tracking shifts in availability of resources (Socolar et al., 2017). CDFW staff have observed that climate change conditions may result in nesting bird season occurring earlier and later in the year than historical nesting season dates. CDFW recommends that disturbance of occupied nests of migratory birds and raptors within the Project site and surrounding area be avoided any time birds are nesting on-site. CDFW therefore recommends the completion of nesting bird surveys *regardless of the time of year* to ensure compliance with all applicable laws pertaining to nesting and migratory birds.

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: Fish and Game Code 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:

CDFW appreciates the inclusion of MM BIO-4; however, the measure is insufficient in scope and timing to reduce impacts to nesting birds to a level less than significant. In addition, page ES-12 of the DEIR, MM BIO-4 conflates surveys for southwestern willow flycatcher with general nesting bird surveys. CDFW recommends separate mitigation measures as given below.

Project-specific avoidance and minimization measures for nesting birds may include, but are not limited to, Project phasing and timing, monitoring of Project-related noise (where applicable), sound walls, and buffers, where appropriate. CDFW recommends that disturbance of occupied nests of migratory birds and raptors within the Project site be avoided **any time birds are nesting on-site.** Preconstruction nesting bird surveys shall be performed within 3 days prior to Project activities to determine the presence and location of nesting birds. CDFW recommends IID revise Mitigation Measure BIO-4 as follows:

MM BIO-4: Nesting Bird Pre-construction Surveys and Avoidance Plan

Regardless of the time of year, nesting bird surveys shall be performed by a qualified avian biologist no more than 3 days prior to vegetation removal or ground-disturbing activities for each phase of construction. Pre-construction surveys shall focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior. The qualified avian 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 shall be at least 300 feet for passerines and 500 feet for raptors. A smaller or larger buffer may be determined by the qualified biologist familiar with the nesting phenology of the nesting species and based on nest and buffer monitoring results. Construction activities may not occur inside the established buffers, which shall remain on site until a qualified biologist determines the young have fledged or the nest is no longer active. 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 have fledged or the Project has been completed. The qualified biologist has the authority to stop work if nesting pairs exhibit signs of disturbance.
~~The project biologist shall conduct pre-construction surveys no earlier than 7 days prior to any on-site grading and construction activities within each construction area and a 500-foot buffer. That occurs during the nesting/breeding season of special-status bird species potentially nesting on the site, with the exception of burrowing owl, which is addressed in MM-BIO-3. The pre-construction surveys shall be conducted between March and September, or as determined by the project biologist.~~

~~The purpose of the pre-construction surveys will be to determine whether occupied nests are present in the construction zone or within 500 feet of the construction zone boundary. If occupied nests are found, then limits of construction to avoid occupied nests shall be established by the project biologist in the field with flagging, fencing, or other appropriate barriers (e.g., 250 feet around active passerine nests to 500 feet around active non-listed raptor nests), and construction personnel shall be instructed on the sensitivity of nest areas. The project biologist shall serve as a construction monitor during those periods when construction activities are to occur~~

~~near active nest areas to avoid inadvertent impacts to these nests. The project biologist may adjust the 250-foot or 500-foot setback at his or her discretion depending on the species and the location of the nest (e.g., if the nest is well protected in an area buffered by dense vegetation). Once a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival, construction may proceed in the setback areas.~~

CDFW also recommends that IID include in a revised DEIR a separate mitigation measure for southwestern willow flycatcher as follows:

MM BIO-[D] Southwestern Willow Flycatcher Nesting Surveys

If project activities will be completed during the southwestern willow flycatcher nesting season (approximately May 1 to August 15), the Permittee shall designate a CDFW-approved southwestern willow flycatcher biologist (Designated Biologist) that is knowledgeable about the species natural history, habitat requirements, seasonal movements, and range to survey and monitor for southwestern willow flycatcher prior to Project activities. The Designated Biologist shall complete necessary surveys, impact assessments, and associated reports within all locations subject to Project site activities following the protocols provided within A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher (USGS 2010) to ensure avoidance of impacts. Survey results shall be submitted in writing to CDFW for review prior to the start of Project activities. If full avoidance cannot be accomplished, Permittee shall obtain appropriate CESA authorization prior to commencement of Project activities. This may include an incidental take permit (ITP) or a consistency determination.

COMMENT #6: Desert Tortoise

DEIR document, Page #4.2-28, MM BIO-5

Issue: CDFW is concerned that the DEIR does not sufficiently identify Project impacts to desert tortoise (*Gopherus agassizii*) or ensure that impacts are mitigated to a level less than significant.

Specific impact: The DEIR (p. 4.2-28) states “the project area does occur in the Desert Tortoise range” and the Project site is located directly next to open desert landscape that would be favorable to the species. A review of CNDDB/BIOS indicates the Project site is designated within the “high” probability of desert tortoise predicted habitat. The Project may have a significant impact on desert tortoise, both during Project construction and as a result of habitat loss. Take of desert tortoise may occur as a result of Project-related activities such as grading, ground disturbance, and vegetation clearing and may result in the crushing of desert tortoises and occupied burrows from construction equipment, vehicles, and foot traffic.

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 threatened and is proposed for up-listing to endangered. 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 Potential Feasible Mitigation Measure:

CDFW appreciates the inclusion of MM BIO-5; however, the measure is insufficient in scope and timing to reduce impacts to desert tortoise a level less than significant. CDFW recommends that prior to commencing Project activities, both focused and preconstruction surveys for desert tortoise be conducted by a qualified biologist. CDFW recommends IID include a revised Mitigation Measure BIO-5 in a revised DEIR as follows, with additions in **bold** and removals in ~~strikethrough~~:

MM BIO-5: Desert Tortoise Surveys and Avoidance Plan

The proposed Project occurs within the range of desert tortoise. ~~Although the site is highly disturbed with little habitat value,~~ IID will complete protocol level surveys over all areas proposed to be directly or indirectly affected by the Project ~~out of an abundance of caution,~~ using appropriately qualified biologists, according to protocols in *Preparing for Any Action that May Occur within the Range of the Mojave Desert Tortoise* (USFWS 2019). **Surveys shall be conducted during the species' most active periods (April through May or September through October).** IID will work with CDFW and USFWS concurrently **to ensure a 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. If desert tortoise is found to be present, the qualified biologist shall immediately notify CDFW and USFWS to determine appropriate avoidance, minimization, and mitigation measures.**

**No more than 14 calendar days prior to start of Project activities and after any pause in Project activities lasting 30 days or more, for each phase of construction, a qualified biologist shall conduct pre-construction surveys for desert tortoise as described in the USFWS 2019 desert tortoise survey methodology *(Preparing for Any Action that May Occur within the Range of the Mojave Desert Tortoise*;
https://www.fws.gov/sites/default/files/documents/Mojave%20Desert%20Tortoise_Pre-project%20Survey%20Protocol_2019.pdf). Pre-construction surveys shall be completed using perpendicular survey routes and 100-percent visual coverage for desert tortoise and their sign within the Project area and 50-foot buffer zone. Pre-activity 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. Results of the surveys shall be submitted to CDFW prior to construction start. If the pre-construction surveys confirm desert tortoise absence, the qualified biologist shall ensure desert tortoise do not enter the Project area. 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 #7: Flat-tailed Horned Lizard and Colorado Desert Fringe-toed Lizard

DEIR document, Page# 4.2.11 and 4.2-28, MM BIO-6

Issue: CDFW is concerned that the DEIR does not sufficiently identify Project impacts to flat-tailed horned lizard (*Phrynosoma mcallii*) or Colorado Desert Fringe-toed lizard (*Uma notata*) or ensure that impacts are mitigated to a level less than significant.

Specific impact: The DEIR (p. 4.2-28) states "FTHL have been found within two miles of the Project site." Page 4.2-11 of the DEIR indicates "low to moderately suitable" habitat for flat-tailed horned lizard and that the "study area falls within the known habitat" of Colorado Desert fringe-toed lizard. CNDDB/BIOS data layers indicate that the Project site is located just south of an abundant (20+), resident flat-tailed horned lizard population. Additionally, layers indicate the Project site falls within "highly likely" predicted habitat for flat-tailed horned lizard and "moderately likely" predicted habitat for Colorado Desert fringe-toed lizard. CDFW is concerned that the focused survey

conducted in May 2020 is outdated and not sufficient to assess whether flat-tailed horned lizard and Colorado Desert fringe-toed lizard are present on the Project site.

Evidence impact would be significant: Flat-tailed horned lizard and Colorado Desert fringe-toed lizard are both California Species of Special Concern (SSC). Both lizards burrow in sand to deposit eggs, thermoregulate, and/or to avoid predators at various times throughout the year. It is crucial to adequately assess whether these reptiles or signs of their presence are present on the Project site well in advance of commencing Project activities. If any special-status reptiles are found onsite, it could delay Project activities.

Recommended Potentially Feasible Mitigation Measure:

CDFW appreciates the inclusion of MM BIO-6; however, the measure is insufficient in scope and timing to reduce impacts to a level less than significant. CDFW recommends that prior to Project activities, both focused and preconstruction surveys for flat-tailed horned lizard and Colorado Desert fringe-toed lizard be conducted by a qualified biologist. CDFW recommends IID include a revised Mitigation Measure BIO-6 in a revised DEIR as follows, with additions in **bold** and removals in ~~strikethrough~~:

MM BIO-6: Flat-tailed horned lizard and Colorado Desert fringe-toed lizard Avoidance and Minimization Measures

~~The FTHL was not present during any of the focused surveys. Focused surveys were not conducted for the CDFTL, but they were not observed during the FTHL focused surveys. Although the Project Area does not contain suitable habitat for the FTHL and CDFTL, protocol surveys will be implemented out of an abundance of caution and, removal in consultation with wildlife agencies will occur as follows:~~

1. ~~Pre-Construction Survey and Monitoring~~**Protocol-level Surveys: Prior to commencement of Project activities, protocol-level surveys for flat-tailed horned lizard and Colorado Desert fringe-toed lizard should be conducted by a qualified biologist, in accordance with the Flat-tailed Horned Lizard Rangewide Management Strategy(Flat-tailed Horned Lizard Interagency Coordinating Committee 2003), to determine if the species are present within the Project site and surrounding buffer. According to the Management Strategy, survey protocol for a project site of this magnitude (440+ acres), requires a minimum of ten, one-hour presence/absence surveys by qualified surveyors. All roads within and near the survey area shall be driven twice to allow for detection of flat-tailed horned lizard and Colorado Desert fringe-toed lizard. If flat-tailed horned lizard and/or Colorado Desert fringe-toed lizard are present, the qualified biologist shall immediately notify CDFW to determine appropriate avoidance, minimization, and mitigation measures.** ~~A qualified biological monitor will survey for FTHL and CDFTL prior to ground disturbing work within suitable habitats (identified as creosote bush scrub, creosote bush-white bursage, and white bursage scrub vegetation communities) To the extent feasible, methods to find both species will be designed to identify achieve a maximal capture rate and will include, but not be limited to, using strip transects, tracking, and raking around shrubs. Prior to construction, the minimum pre-construction survey effort will be 30 minutes per 0.40 hectare (1 acre).~~

   Pre-construction Surveys: Pre-construction surveys shall also be conducted no less than 14 days prior to the start of Project-related activities for each phase of construction. Pre-construction surveys should be performed by a qualified biologist following the recommendations and guidelines provided in the *Flat-tailed Horned Lizard Rangewide Management Strategy* (Flat-tailed Horned Lizard Interagency Coordinating Committee 2003). If the preconstruction surveys confirm presence of flat-tailed horned lizard and/or Colorado Desert fringe-toed lizard, Project activities shall be immediately halted. The qualified biologist shall

coordinate with CDFW to determine appropriate avoidance, minimization, and mitigation measures.

Moving Out of Harm's Way: To avoid impacts to flat-tailed horned lizard and/or Colorado Desert fringe-toed lizard, a qualified biologist shall be on-site prior to and during all ground- and habitat-disturbing activities to inspect the Project area prior to any Project activities. Individuals found shall not be harassed and shall be allowed to leave the Project area unharmed. **Movement of wildlife out of harm's way should be limited to only those individuals that would otherwise by injured or killed, and individuals should be moved only as far a necessary to ensure their safety. Measures shall be taken to prevent wildlife from re-entering the Project site. Only biologists with appropriate authorization by CDFW shall move CESA-listed or other special-status species.** ~~If any FTHL or CDFTL is observed during construction activities, Individuals will be relocated adjacent to the Project area in accordance with the Fencing and Removal Survey Protocols (Appendix 7 of the Flat-tailed Horned Lizard Interagency Coordinating Committee). Biologists that handle lizards will first obtain all necessary permits and authorization from the CDFW~~

a. ~~Accurate records maintained by the biological monitor(s) for each relocated lizard including sex, snout-vent length, weight, air temperature, location, date, time of capture and release, a close-up photo of the lizard, and a photo of the habitat where it was first encountered. To the extent feasible, a sample of the lizard scat will be collected. A Horned Lizard Observation Data Sheet and a Project Reporting Form, from Appendix 8 of the Flat-tailed Horned Lizard Rangewide Management Strategy (Flat-tailed Horned Lizard Interagency Coordinating Committee 2003) will be completed. During construction, quarterly reports describing lizard removal activity will be submitted to the IID and CDFW.~~
b. ~~The removal of lizard(s) out of harm's way, including those found on access or maintenance roads, will include their relocation to nearby suitable burrowing habitat away from proposed Project components and roads. Any relocated FTHL or CDFTL will be placed in the shade of a large shrub in undisturbed habitat. The Project Biologist or biological monitor will be allowed some judgment and discretion when relocating lizards to maximize survival of lizards found on the proposed project site.~~

COMMENT #8: American Badger

DEIR document, Page# 4.2-27 to -28

Issue: CDFW is concerned that the DEIR does not sufficiently identify Project impacts to American badger (*Taxidea taxus*) or ensure that impacts are mitigated to a level less than significant.

Specific impact: The DEIR (p. 4.2-27) states "there are some historical occurrences in the El Centro area west of the project site," and (Table 4.2-3) "there is some potential suitable habitat present in the study area." CNDDB/BIOS data layers showing predicted habitat indicate that the Project site falls within "highly likely," core foraging habitat for American badgers. Surveys were conducted during the day, which would limit the observance of nocturnal species, and outside of appropriate seasonal observation periods. Additionally, American badgers dig dens/burrows, which could result in significant impacts if disrupted during Project activities.

Evidence impact would be significant: American badgers are listed as a California Species of Special Concern (SSC). American badgers are nocturnal, and it is crucial to adequately assess whether they are present on the Project site well in advance of commencing Project activities. If American badgers are found on-site during breeding season, it could delay Project activities for the length of the breeding season. CDFW is concerned that the timing and scope of the field assessments were not sufficient to assess whether American badger are present on the Project site.

Recommended Potentially Feasible Mitigation Measure:

Due to the likelihood for American badger to den or forage on the Project site, CDFW recommends that prior to commencing Project activities, pre-construction surveys for American badger be conducted by a qualified biologist. As a result, CDFW recommends the following mitigation measure be included in the DEIR:

MM BIO-[E]: American Badger Surveys

No more than 30 days prior to the beginning of ground disturbance and/or construction activities, a qualified biologist shall conduct a survey to determine if potential American badger burrows are present in the Project area. If potential burrows are located, they shall be monitored by the qualified biologist to determine whether they are active. If the burrow is determined to be active, the qualified biologist shall flag and create a 50-foot buffer around the den. No disturbance of active dens shall take place when juvenile American badgers may be present and dependent on parental care. A qualified biologist shall determine appropriate buffers and maintain connectivity to adjacent habitat should natal burrows be present. Any relocation of American badgers shall require consultation with and approval of CDFW.

COMMENT #9: CDFW Lake and Streambed Alteration (LSA) Program

DEIR document, Pages# 4.2-5 to -6, MM BIO-7

Issue: The DEIR acknowledges that the Project will result in alterations to “waters of the State” and streambeds of the State of California.

Specific impact: The DEIR indicates (Table 4.2-2) approximately 0.66 acres of jurisdictional resources subject to notification under Fish and Game Code 1602 have been located on the proposed Project site. Additionally, CDFW review of aerial imagery confirms the location of several aquatic features transversing the Project area. Thus, impacts to resources subject to Fish and Game Code section 1602 are likely to occur. Depending on how the Project is designed and constructed, it is likely that potential direct and indirect impacts to streams and to associated fish and wildlife resources, such as burrowing owl and nesting birds, would result from Project construction.

Evidence impact would be 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. 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. It may also apply to work undertaken within the flood plain of a body of water. 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. CDFW’s issuance of an LSA Agreement is a “project” subject to CEQA (see Pub. Resources Code § 21065). Early consultation with CDFW is recommended since modification of the proposed Project may be required to avoid or reduce impacts to fish and wildlife resources. To submit a Lake or Streambed Alteration notification, visit: https://wildlife.ca.gov/Conservation/Environmental-Review/LSA.

Recommended Potentially Feasible Mitigation Measure

CDFW appreciates the inclusion of MM BIO-7; however, the measure is insufficient to reduce impacts to less than significant. CDFW recommends the addition of the following mitigation measure in a revised DEIR:

MM BIO-[F]: CDFW Lake and Streambed Alteration Program

Prior to construction and issuance of any grading permit, the Project Sponsor 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.

COMMENT #10: Construction Noise

DEIR document, Section 5.8

Issue: The DEIR does not include an assessment of impacts to biological resources resulting from construction noise or mitigation measures to avoid or reduce impacts to a level less than significant.

Specific impact: The DEIR (p. 5-23) states "construction noise is estimated to be in the range of 63 to 64 dBA Leq," but includes no noise impact assessment or an analysis of the impacts of construction noise on biological resources. Noise levels are expected to exceed exposure levels that may adversely affect wildlife species at 55 to 60 dBA.

Evidence impact would be significant: Construction may result in substantial noise through road use, equipment, and other Project-related activities. This may adversely affect wildlife species in several ways as wildlife responses to noise can occur at exposure levels of only 55 to 60 dB (Barber et al. 2009). Anthropogenic noise can disrupt the communication of many wildlife species including frogs, birds, and bats (Sun and Narins 2005, Patricelli and Blickley 2006, Gillam and McCracken 2007, Slabbekoorn and Ripmeester 2008). Noise can also affect predator-prey relationships as many nocturnal animals such as bats and owls primarily use auditory cures (i.e., hearing) to hunt. Additionally, many prey species increase their vigilance behavior when exposed to noise because they need to rely more on visual detection of predators when auditory cues may be masked by noise (Rabin et al. 2006, Quinn et al. 2017). Noise has also been shown to reduce the density of nesting birds (Francis et al. 2009) and cause increased stress that results in decreased immune responses (Kight and Swaddle 2011).

Recommended Potentially Feasible Mitigation Measure:

Because of the potential for construction noise to negatively impact wildlife, CDFW recommends a revised DEIR include a noise impact assessment and an analysis of impacts to biological resources accompanied by specific avoidance and minimization measures to ensure that impacts to wildlife are avoided or reduced to less than significant. CDFW recommends adding the following mitigation measure to a revised DEIR:

MM BIO-[G]: Construction Noise Impacts to Biological Resources

During all Project construction, the IID shall restrict use of equipment to hours least likely to disrupt wildlife (e.g., not at night or in early morning) and restrict use of generators except for temporary use in emergencies. Power to sites can be provided by solar PV (photovoltaic) systems, cogeneration systems (natural gas generator), small micro-hydroelectric systems, or small wind turbine systems. The IID shall ensure the use of noise suppression

devices such as mufflers or enclosures for generators. Sounds generated from any means must be below the 55-60 dB range within 50-feet from the source.

COMMENT #11: Artificial Nighttime Light

DEIR document, Section 5.1

Issue: The DEIR does not analyze impacts to biological resources from artificial nighttime lighting and includes no mitigation measures to avoid or reduce impacts to biological resources to a level less than significant.

Specific impact: The DEIR (p. 5-15) states "operational and construction lighting would be used for safety and security purposes during nighttime hours." The DEIR also states that "all lighting will be directed downward or at a narrow beam angle in order to focus all light only on the desired area," which is an important design feature to minimize impacts. However, no further details are provided, impacts to biological resources resulting from the use of artificial nighttime lighting during construction and operation of the Project are not analyzed, and no mitigation measures are proposed. Designs for lighting to be used during operation of the Project should be included in a revised DEIR, along with details of artificial nighttime lighting to be used during construction. The direct and indirect impacts of artificial nighttime lighting on biological resources including migratory birds that fly at night, bats, and other nocturnal and crepuscular wildlife should be analyzed, and appropriate avoidance and minimization measures to reduce impacts to less than significant should be included in a revised DEIR.

Evidence impact would be significant: Artificial nighttime lighting often results in light pollution, which has the potential to significantly and adversely affect fish and wildlife. Artificial lighting alters ecological processes including, but not limited to, the temporal niches of species; the repair and recovery of physiological function; the measurement of time through interference with the detection of circadian and lunar and seasonal cycles; the detection of resources and natural enemies; and navigation (Gatson et al. 2013). Many species use photoperiod cues for communication (e.g., bird song; Miller 2006), determining when to begin foraging (Stone et al. 2009), behavior thermoregulation (Beiswenger 1977), and migration (Longcore and Rich 2004). Phototaxis, a phenomenon which results in attraction and movement towards light, can disorient, entrap, and temporarily blind wildlife species that experience it (Longcore and Rich 2004).

Recommended Potentially Feasible Mitigation Measure:

Because of the potential for artificial nighttime light to negatively impact wildlife, CDFW recommends a revised DEIR include details of the use of artificial nighttime lighting proposed for construction and operation of the Project and an analysis of impacts to biological resources, as well as specific avoidance and minimization measures to ensure that impacts to wildlife are reduced to less than significant. CDFW recommends IID include the following mitigation measure in a revised DEIR:

MM BIO-[H]: Artificial Nighttime Light

During Project construction and operation, IID shall eliminate all nonessential lighting throughout the Project area and avoid or limit the use of artificial light during the hours of dawn and dusk when many wildlife species are most active. IID shall ensure that lighting for Project activities is shielded, cast downward, and does not spill over onto other properties or upward into the night sky (see the International Dark-Sky Association standards at http://darksky.org/). IID shall ensure use of LED lighting with a correlated color temperature of 3,000 Kelvins or less, proper disposal of hazardous waste, and recycling of lighting that contains toxic compounds with a qualified recycler.

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 DEIR to assist the Imperial Irrigation District in identifying and mitigating Project impacts on biological resources. CDFW concludes that the DEIR does not adequately identify or mitigate the Project's significant, or potentially significant impacts on biological resources. The CEQA Guidelines indicate that recirculation is required when insufficient information in the DEIR precludes a meaningful review (§ 15088.5) or when a new significant effect is identified, and additional mitigation measures are necessary (§ 15073.5). CDFW recommends that a revised DEIR, including a complete description of the existing environmental setting, be recirculated for public comment. CDFW also recommends that the revised DEIR include an analysis of impacts to biological resources from construction noise and artificial nighttime lighting, as well as mitigation measures described in this letter for assessment of biological resources, special-status plants, burrowing owl, nesting birds, desert tortoise, flat-tailed horned lizard and Colorado Desert fringe-toed lizard, American badger, construction noise, and artificial nighttime light.

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 Alyssa Hockaday, Senior Environmental Scientist (Specialist) at (760) 920-8252 or Alyssa.Hockaday@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Kim Freeburn
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
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ATTACHMENT 1: MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

Biological Resources (BIO)		
Mitigation Measure (MM) Description	**Implementation Schedule**	**Responsible Parties**
MM BIO-[A]: Assessment of Biological Resources Prior to Project construction activities, a complete and recent inventory of rare, threatened, endangered, and other sensitive species located within the Project footprint and within offsite areas with the potential to be affected, including California Species of Special Concern (CSSC) and California Fully Protected Species (Fish and Game Code § 3511), will be completed. Species to be addressed should include all those which meet the CEQA definition (CEQA Guidelines § 15380). The inventory should address seasonal variations in use of the Project area and should not be limited to resident species. Focused	Prior to Project construction activities.	IID

species-specific surveys, completed by a qualified biologist and conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable are required. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the U.S. Fish and Wildlife Service, where necessary. Note that CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if the Project is proposed to occur over a protracted time frame, or in phases, or if surveys are completed during periods of drought.		
MM BIO-[B]: Pre-construction Surveys for Special-Status Plants Prior to Project construction activities, a pre-construction survey for special-status plants and natural communities shall be performed by a qualified biologist. The qualified biologist shall visually survey the entirety of the project site and access route to identify any special-status plants or natural communities. Should any state-listed plant species be present in the Project area, the Project proponent shall obtain appropriate CESA authorization for those species prior to the start of Project activities. Should other special-status plants or natural communities be present in the Project area, on-site or off-site habitat restoration (whichever is applicable) and/or enhancement and preservation should be evaluated and discussed in detail. Where habitat preservation is not available on-site, off-site land acquisition, management, and preservation should be evaluated.	Prior to Project construction activities.	IID
MM BIO-[C]: Revegetation Plan Within 12 months prior to the initiation of Project activities, and during the appropriate periods (e.g., seasons, weather conditions, times of day) to identify species potentially occurring onsite, the Project Proponent shall conduct general and, if necessary, focused biological surveys to identify alliances that occur on the Project site. The Project proponent shall list the species with corresponding relative cover that are found in each alliance in the surrounding area to provide a baseline for vegetation selection. Once the appropriate species are identified that are deemed appropriate to use in the vegetation restoration, the project proponent shall also identify the correct variety or subspecies appropriate for the borrow site locations. If the Project proponent intends to use a commercial vendor to obtain seed mixes, they should ensure that the vendor is using local seeds in their mix with the appropriate variety and subspecies. The seed mixes shall not include invasive species.	Within 12 months prior to the initiation of Project activities.	IID
MM BIO-3: Focused and Pre-Construction Burrowing Owl Surveys and Avoidance Suitable burrowing owl habitat has been confirmed on the site; therefore, focused burrowing owl surveys shall be conducted in accordance with the *Staff Report on Burrowing Owl Mitigation* (2012 or most recent version) prior to vegetation removal or ground-disturbing activities. If burrowing owls are detected during the focused surveys, the qualified biologist and Project proponent 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, minimization, and/or	**Focused surveys:** Prior to the start of Project-related activities. **Pre-construction surveys:** No less than 14 days prior to start of Project-related activities and within 24 hours prior to	IID

mitigation actions. 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 minimization and compensatory mitigation 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. The Burrowing Owl Plan shall identify compensatory mitigation for the temporary or permanent loss of occupied burrow(s) and habitat consistent with the "Mitigation Impacts" section of the 2012 Staff Report and shall implement CDFW-approved mitigation prior to initiation of Project activities. If impacts to occupied burrows cannot be avoided, information shall be provided regarding adjacent or nearby suitable habitat available to owls. 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 Project proponent shall implement the Burrowing Owl Plan following CDFW and USFWS review and approval. For each phase of construction, 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 and USFWS for review and approval prior to commencing Project activities.	ground disturbance for each phase of construction.	
MM BIO-4: Nesting Bird Pre-construction Surveys and Avoidance Plan Regardless of the time of year, nesting bird surveys shall be performed by a qualified avian biologist no more than 3 days prior to vegetation removal or ground-disturbing activities for each phase of construction. Pre-construction surveys shall focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior. The qualified avian 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 shall be at least 300 feet for passerines and 500 feet for raptors. A smaller or larger buffer may be determined by the qualified biologist familiar with the nesting phenology of the nesting species and based on nest and buffer monitoring results. Construction activities may not occur inside the established buffers, which shall remain on site until a qualified biologist determines the young have fledged or the nest is no longer active. 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 have fledged or the Project has	No more than three (3) days prior to vegetation clearing or ground-disturbing activities for each phase of construction.	IID

been completed. The qualified biologist has the authority to stop work if nesting pairs exhibit signs of disturbance.		
MM BIO-[D] Southwestern Willow Flycatcher Nesting Surveys If project activities will be completed during the southwestern willow flycatcher nesting season (approximately May 1 to August 15), the Permittee shall designate a CDFW-approved southwestern willow flycatcher biologist (Designated Biologist) that is knowledgeable about the species natural history, habitat requirements, seasonal movements, and range to survey and monitor for southwestern willow flycatcher prior to Project activities. The Designated Biologist shall complete necessary surveys, impact assessments, and associated reports within all locations subject to Project site activities following the protocols provided within A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher (USGS 2010) to ensure avoidance of impacts. Survey results shall be submitted in writing to CDFW for review prior to the start of Project activities. If full avoidance cannot be accomplished, Permittee shall obtain appropriate CESA authorization prior to commencement of Project activities. This may include an incidental take permit (ITP) or a consistency determination.	Prior to the start of Project-related activities.	IID
MM BIO-5: Desert Tortoise Surveys and Avoidance Plan The proposed Project occurs within the range of desert tortoise. IID will complete protocol level surveys over all areas proposed to be directly or indirectly affected by the Project, using appropriately qualified biologists, according to protocols in *Preparing for Any Action that May Occur within the Range of the Mojave Desert Tortoise* (USFWS 2019). Surveys shall be conducted during the species' most active periods (April through May or September through October). IID will work with CDFW and USFWS concurrently to ensure a 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. If desert tortoise is found to be present, the qualified biologist shall immediately notify CDFW and USFWS to determine appropriate avoidance, minimization, and mitigation measures. No more than 14 calendar days prior to start of Project activities and after any pause in Project activities lasting 30 days or more, for each phase of construction, a qualified biologist shall conduct pre-construction surveys for desert tortoise as described in the USFWS 2019 desert tortoise survey methodology (*Preparing for Any Action that May Occur within the Range of the Mojave Desert Tortoise*; https://www.fws.gov/sites/default/files/documents/Mojave%20Desert%20Tortoise_Pre-project%20Survey%20Protocol_2019.pdf). Pre-construction surveys shall be completed using perpendicular survey routes and 100-percent visual coverage for desert tortoise and their sign within the Project area and 50-foot buffer zone. Pre-activity 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. Results of the surveys	**Focused surveys:** Prior to the start of Project-related activities. **Pre-construction surveys:** No more than 14 days prior to start of Project-related activities and after any pause in Project activities lasting 30 days or more, for each phase of construction	IID

shall be submitted to CDFW prior to construction start. If the pre-construction surveys confirm desert tortoise absence, the qualified biologist shall ensure desert tortoise do not enter the Project area. 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.		
MM BIO-6: Flat-tailed horned lizard and Colorado Desert fringe-toed lizard Avoidance and Minimization Measures Protocol-level Surveys: Prior to commencement of Project activities, protocol-level surveys for flat-tailed horned lizard and Colorado Desert fringe-toed lizard should be conducted by a qualified biologist, in accordance with the Flat-tailed Horned Lizard Rangewide Management Strategy(Flat-tailed Horned Lizard Interagency Coordinating Committee 2003), to determine if the species are present within the Project site and surrounding buffer. According to the Management Strategy, survey protocol for a project site of this magnitude (440+ acres), requires a minimum of ten, one-hour presence/absence surveys by qualified surveyors. All roads within and near the survey area shall be driven twice to allow for detection of flat-tailed horned lizard and Colorado Desert fringe-toed lizard. If flat-tailed horned lizard and/or Colorado Desert fringe-toed lizard are present, the qualified biologist shall immediately notify CDFW to determine appropriate avoidance, minimization, and mitigation measures Pre-construction Surveys: Pre-construction surveys shall also be conducted no less than 14 days prior to the start of Project-related activities for each phase of construction. Pre-construction surveys should be performed by a qualified biologist following the recommendations and guidelines provided in the Flat-tailed Horned Lizard Rangewide Management Strategy (Flat-tailed Horned Lizard Interagency Coordinating Committee 2003). If the preconstruction surveys confirm presence of flat-tailed horned lizard and/or Colorado Desert fringe-toed lizard, Project activities shall be immediately halted. The qualified biologist shall coordinate with CDFW to determine appropriate avoidance, minimization, and mitigation measures. Moving Out of Harm's Way: To avoid impacts to flat-tailed horned lizard and/or Colorado Desert fringe-toed lizard, a qualified biologist shall be on-site prior to and during all ground- and habitat-disturbing activities to inspect the Project area prior to any Project activities. Individuals found shall not be harassed and shall be allowed to leave the Project area unharmed. Movement of wildlife out of harm's way should be limited to only those individuals that would otherwise by injured or killed, and individuals should be moved only as far a necessary to ensure their safety. Measures shall be taken to prevent wildlife from re-entering the Project site. Only biologists with appropriate authorization by CDFW shall move CESA-listed or other special-status species.	**Focused surveys:** Prior to the start of Project-related activities. **Pre-construction surveys:** No less than 14 days prior to start of Project-related activities and prior to the start of all Project-related activities.	IID
MM BIO-[E]: American Badger Surveys No more than 30 days prior to the beginning of ground disturbance and/or construction activities, a qualified biologist shall conduct a survey to determine if potential American badger burrows are present in the Project area. If potential burrows are located, they shall be monitored by	No more than 30 days prior to the beginning of ground disturbance and/or	IID

the qualified biologist to determine whether they are active. If the burrow is determined to be active, the qualified biologist shall flag and create a 50-foot buffer around the den. No disturbance of active dens shall take place when juvenile American badgers may be present and dependent on parental care. A qualified biologist shall determine appropriate buffers and maintain connectivity to adjacent habitat should natal burrows be present. Any relocation of American badgers shall require consultation with and approval of CDFW.	construction activities.	
MM BIO-[F]: CDFW Lake and Streambed Alteration Program Prior to construction and issuance of any grading permit, the Project Sponsor 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.		
MM BIO-[G]: Construction Noise Impacts to Biological Resources During all Project construction, IID shall restrict use of equipment to hours least likely to disrupt wildlife (e.g., not at night or in early morning) and restrict use of generators except for temporary use in emergencies. Power to sites can be provided by solar PV (photovoltaic) systems, cogeneration systems (natural gas generator), small micro-hydroelectric systems, or small wind turbine systems. IID shall ensure the use of noise suppression devices such as mufflers or enclosures for generators. Sounds generated from any means must be below the 55-60 dB range within 50-feet from the source.	During Project activities.	IID
MM BIO-[H]: Artificial Nighttime Light During Project construction and operation, IID shall eliminate all nonessential lighting throughout the Project area and avoid or limit the use of artificial light during the hours of dawn and dusk when many wildlife species are most active. IID shall ensure that lighting for Project activities is shielded, cast downward, and does not spill over onto other properties or upward into the night sky (see the International Dark-Sky Association standards at http://darksky.org/). IID shall ensure use of LED lighting with a correlated color temperature of 3,000 Kelvins or less, proper disposal of hazardous waste, and recycling of lighting that contains toxic compounds with a qualified recycler.	During Project construction activities and operation.	IID