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November 9, 2023
Sent via email

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333 East Barioni Boulevard
Imperial, CA 92243



Subject: Notice of Preparation of a Draft Environmental Impact Report
EHL Reservoir and Intake Channel (Project)
State Clearinghouse No. 2023100140

Dear Justina Gamboa-Arce:

The California Department of Fish and Wildlife (CDFW) received a Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) from Imperial Irrigation District (IID) for the EHL Reservoir and Intake Channel (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.

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

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

PROJECT DESCRIPTION SUMMARY

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 All-American Canal (AAC), east of the East Highline Canal, 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.

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, which would manage up to 365,000 acre-feet of water annually. The water managed in the proposed reservoir would be channeled from an AAC Reach then gravity flow into the reservoir basin prior to being channeled into the East Highline Canal. 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 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 East Highline Canal and downstream users.

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.

COMMENTS AND RECOMMENDATIONS

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.

CDFW recommends that the forthcoming DEIR address the following:

Assessment of Biological Resources

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 and that special emphasis should be placed on environmental resources that are rare or unique to the region. To enable CDFW staff to adequately review and comment on the project, the DEIR should include a complete assessment of the flora and fauna within and adjacent to the Project footprint, with particular emphasis on identifying rare, threatened, endangered, and other sensitive species and their associated habitats.

The CDFW recommends that the DEIR specifically include:

1. An assessment of the various habitat types located within the project footprint, and a map that identifies the location of each habitat type. CDFW recommends that floristic, alliance- and/or association-based mapping and assessment be completed following *The Manual of California Vegetation*, second edition (Sawyer et al. 2009²). Adjoining habitat areas should also be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions.
2. A general biological inventory of the fish, amphibian, reptile, bird, and mammal species that are present or have the potential to be present within each habitat type onsite and within adjacent areas that could be affected by the project. CDFW's California Natural Diversity Database (CNDDDB) in Sacramento should be contacted at (916) 322-2493 or CNDDDB@wildlife.ca.gov or <https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data> to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code, in the vicinity of the proposed Project.

CDFW's CNDDDB is not exhaustive in terms of the data it houses, nor is it an absence database. CDFW recommends that it be used as a starting point in

² Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. A manual of California Vegetation, 2nd ed. California Native Plant Society Press, Sacramento, California. <http://vegetation.cnps.org/>

gathering information about the *potential presence* of species within the general area of the project site.

3. A complete, *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 & G. Code, § 3511). 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.

Burrowing Owl (*Athene cunicularia*)

The Project site has the potential to provide suitable foraging and/or nesting habitat for burrowing owl. 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.”

CDFW recommends that the IID follow the recommendations and guidelines provided in the *Staff Report on Burrowing Owl Mitigation* (Department of Fish and Game, March 2012); available for download from CDFW’s website: <https://www.wildlife.ca.gov/conservation/survey-protocols>. The Staff Report on Burrowing Owl Mitigation, specifies three steps for project impact evaluations:

- a. A habitat assessment;
- b. Surveys; and
- c. An impact assessment

As stated in the Staff Report on Burrowing Owl Mitigation, the three progressive steps are effective in evaluating whether a project will result in impacts to burrowing owls, and the information gained from the steps will inform any subsequent avoidance, minimization, and mitigation measures. Habitat assessments are

conducted to evaluate the likelihood that a site supports burrowing owl. Burrowing owl surveys provide information needed to determine the potential effects of proposed projects and activities on burrowing owls, and to avoid take in accordance with Fish and Game Code sections 86, 3503, and 3503.5. Impact assessments evaluate the extent to which burrowing owls and their habitat may be impacted, directly or indirectly, on and within a reasonable distance of a proposed CEQA project activity or non-CEQA project.

Within the 2012 Staff Report, the minimum habitat replacement recommendation was purposely excluded as it was shown to serve as a default, replacing any site-specific analysis and discounting the wide variation in natal area, home range, foraging area, and other factors influencing burrowing owls and burrowing owl population persistence in a particular area. It hypothesized that mitigation for permanent impacts to nesting, occupied, and satellite burrows and burrowing owl habitat should be on, adjacent or proximate to the impact site where possible and where habitat is sufficient to support burrowing owls present. If mitigation occurs offsite, it should include (a) permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and (b) be sufficiently large acreage with the presence of fossorial mammals. Furthermore, the report noted that suitable mitigation lands should be based on a comparison of the habitat attributes of the impacted and conserved lands, including but not limited to: type and structure of habitat being impacted or conserved; density of burrowing owls in impacted and conserved habitat; and significance of impacted or conserved habitat to the species range-wide.

Desert Tortoise (*Gopherus agassizii*)

The proposed Project occurs within the range of desert tortoise; a state- and federally-listed threatened species and state candidate for uplisting to endangered. CDFW recommends that the IID complete protocol level surveys over all areas (i.e., 100 percent coverage) 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 2019³). To reduce the likelihood of nonconcurrency with proposed surveys, methodology, and qualifications of biologists, CDFW recommends working with the

³ USFWS, 2019. Preparing for Any Action that May Occur within the Range of the Mojave Desert Tortoise (*Gopherus agassizii*), United States Fish and Wildlife Service, Desert Tortoise Recovery Office: October 26, 2018 (https://www.fws.gov/sites/default/files/documents/Mojave%20Desert%20Tortoise_Pre-project%20Survey%20Protocol_2019.pdf)

USFWS and CDFW concurrently to ensure a consistent and adequate approach to planning your work (USFWS 2019).

CDFW recommends that biologists retained to complete desert tortoise protocol level surveys submit their qualifications to CDFW and the USFWS prior to initiation of surveys. Should IID desire CDFW to pre-approve the qualifications of biologists conducting protocol level desert tortoise surveys, CDFW requests information for all biologists participating in survey efforts to the following email address:

Alyssa.Hockaday@wildlife.ca.gov.

4. A thorough, recent, floristic-based assessment of special status plants and natural communities, following CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018⁴)
5. Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region (CEQA Guidelines § 15125[c]).
6. A full accounting of all open space and mitigation/conservation lands within and adjacent to the Project.

Analysis of Direct, Indirect, and Cumulative Impacts to Biological Resources

The DEIR should provide a thorough discussion of the direct, indirect, and cumulative impacts expected to adversely affect biological resources as a result of the Project. To ensure that Project impacts to biological resources are fully analyzed, the following information should be included in the DEIR:

1. A discussion of potential impacts from lighting, noise, human activity (e.g., recreation), defensible space, and wildlife-human interactions created by zoning of development projects or other project activities adjacent to natural areas, exotic and/or invasive species, and drainage. The latter subject should address Project-related changes on drainage patterns and water quality within, upstream, and downstream of the Project site, including: volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-Project fate of runoff from the Project site.

⁴ CDFW, 2018. *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*, State of California, California Natural Resources Agency, Department of Fish and Wildlife: March 20, 2018 (<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>)

2. A discussion of potential indirect Project impacts on biological resources, including resources in areas adjacent to the project footprint, such as nearby public lands (e.g., National Forests, State Parks, etc.), open space, adjacent natural habitats, riparian ecosystems, wildlife corridors, and any designated and/or proposed reserve or mitigation lands (e.g., preserved lands associated with a Natural Community Conservation Plan, or other conserved lands).
3. An evaluation of impacts to adjacent open space lands from both the construction of the Project and any long-term operational and maintenance needs.
4. A cumulative effects analysis developed as described under CEQA Guidelines section 15130. Please include all potential direct and indirect Project related impacts to riparian areas, wetlands, vernal pools, alluvial fan habitats, wildlife corridors or wildlife movement areas, aquatic habitats, sensitive species and other sensitive habitats, open lands, open space, and adjacent natural habitats in the cumulative effects analysis. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

Alternatives Analysis

CDFW recommends the DEIR describe and analyze a range of reasonable alternatives to the Project that are potentially feasible, would “feasibly attain most of the basic objectives of the Project,” and would avoid or substantially lessen any of the Project’s significant effects (CEQA Guidelines § 15126.6[a]). The alternatives analysis should also evaluate a “no project” alternative (CEQA Guidelines § 15126.6[e]).

Mitigation Measures for Project Impacts to Biological Resources

The DEIR should identify mitigation measures and alternatives that are appropriate and adequate to avoid or minimize potential impacts, to the extent feasible. The IID should assess all direct, indirect, and cumulative impacts that are expected to occur as a result of the implementation of the Project and its long-term operation and maintenance. When proposing measures to avoid, minimize, or mitigate impacts, CDFW recommends consideration of the following:

1. *Fully Protected Species*: Fully protected species may not be taken or possessed at any time (with the exception of certain projects set forth in SB 147, which was passed on July 10, 2023). Project activities described in the DEIR should generally be designed to completely avoid any fully protected species that have the potential to be present within or adjacent to the Project area. CDFW also recommends that the DEIR fully analyze potential adverse impacts to fully protected species due to habitat modification, loss of foraging habitat, and/or interruption of migratory and breeding behaviors. CDFW recommends that IID include in the analysis how

appropriate avoidance, minimization, and mitigation measures will reduce indirect impacts to fully protected species. Fully protected species with the potential or have been documented to occur within or adjacent to the Project area include Yuma Ridgeway's rail (*Rallus obsoletus yumanensis*) and California black rail (*Laterallus jamaicensis coturniculus*).

2. *Sensitive Plant Communities*: CDFW considers sensitive plant communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3, and S-4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDDB and are included in *The Manual of California Vegetation* (Sawyer et al. 2009). The DEIR should include measures to fully avoid and otherwise protect sensitive plant communities from project-related direct and indirect impacts. Sensitive plant communities with ranks S-1 or S-2 have the potential to or have been documented to occur within or adjacent to the project area, including, but not limited to Abrams' spurge (*Euphorbia abramsiana*) and sand foot (*Pholisma sonora*).
3. *California Species of Special Concern (CSSC)*: CSSC status applies to animals generally not listed under the federal Endangered Species Act or the CESA, but which nonetheless are declining at a rate that could result in listing, or historically occurred in low numbers and known threats to their persistence currently exist. CSSCs should be considered during the environmental review process. CSSC have the potential or have been documented to occur within or adjacent to the Project area, including, but not limited to: burrowing owl (*Athene cunicularia*), flat-tailed horned lizard (*Phrynosoma mcallii*), Colorado Desert fringe toed-lizard (*Uma notata*), Sonoran mud turtle (*Kinosternon sonoriense*), and Yuma hispid cotton rat (*Sigmodon hispidus eremicus*).
4. *Mitigation*: CDFW considers adverse project-related impacts to sensitive species and habitats to be significant to both local and regional ecosystems, and the DEIR should include mitigation measures for adverse project-related impacts to these resources. Mitigation measures should emphasize avoidance and reduction of project impacts. For unavoidable impacts, onsite habitat restoration and/or enhancement, and preservation should be evaluated and discussed in detail. Where habitat preservation is not available onsite, offsite land acquisition, management, and preservation should be evaluated and discussed in detail.

The DEIR should include measures to perpetually protect the targeted habitat values within mitigation areas from direct and indirect adverse impacts in order to meet mitigation objectives to offset project-induced qualitative and quantitative losses of biological values. Specific issues that should be addressed include restrictions on

access, proposed land dedications, long-term monitoring and management programs, control of illegal dumping, water pollution, increased human intrusion, etc.

If sensitive species and/or their habitat may be impacted from the Project, CDFW recommends the inclusion of specific mitigation in the DEIR. CEQA Guidelines section 15126.4, subdivision (a)(1)(8) states that formulation of feasible mitigation measures should not be deferred until some future date. The Court of Appeal in *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645 struck down mitigation measures which required formulating management plans developed in consultation with State and Federal wildlife agencies after Project approval. Courts have also repeatedly not supported conclusions that impacts are mitigable when essential studies, and therefore impact assessments, are incomplete (*Sundstrom v. County of Mendocino* (1988) 202 Cal. App. 3d. 296; *Gentry v. City of Murrieta* (1995) 36 Cal. App. 4th 1359; *Endangered Habitat League, Inc. v. County of Orange* (2005) 131 Cal. App. 4th 777).

CDFW recommends that the DEIR specify mitigation that is roughly proportional to the level of impacts, in accordance with the provisions of CEQA (CEQA Guidelines, §§ 15126.4(a)(4)(B), 15064, 15065, and 16355). The mitigation should provide long-term conservation value for the suite of species and habitat being impacted by the Project. Furthermore, in order for mitigation measures to be effective, they need to be specific, enforceable, and feasible actions that will improve environmental conditions.

5. *Habitat Revegetation/Restoration Plans*: Plans for restoration and revegetation should be prepared by persons with expertise in southern California ecosystems and native plant restoration techniques. Plans should identify the assumptions used to develop the proposed restoration strategy. Each plan should include, at a minimum: (a) the location of restoration sites and assessment of appropriate reference sites; (b) the plant species to be used, sources of local propagules, container sizes, and seeding rates; (c) a schematic depicting the mitigation area; (d) a local seed and cuttings and planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. Monitoring of restoration areas should extend across a sufficient time frame to ensure that the new habitat is established, self-sustaining, and capable of surviving drought.

CDFW recommends that local onsite propagules from the Project area and nearby vicinity be collected and used for restoration purposes. Onsite seed collection should be initiated in advance of project impacts in order to accumulate sufficient propagule material for subsequent use in future years. Onsite vegetation mapping at the

alliance and/or association level should be used to develop appropriate restoration goals and local plant palettes. Reference areas should be identified to help guide restoration efforts. Specific restoration plans should be developed for various project components as appropriate.

Restoration objectives should include protecting special habitat elements or re-creating them in areas affected by the Project; examples could include retention of woody material, logs, snags, rocks, and brush piles.

6. *Nesting Birds and Migratory Bird Treaty Act*: Please note that 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 makes it 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) 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 the 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.).

CDFW recommends that the DEIR include the results of avian surveys, as well as specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur. Project-specific avoidance and minimization measures may include, but not be limited to: project phasing and timing, monitoring of project-related noise (where applicable), sound walls, and buffers, where appropriate. The DEIR should also include specific avoidance and minimization measures that will be implemented should a nest be located within the project site. If pre-construction surveys are proposed in the DEIR, the CDFW recommends that they be required no more than three (3) days prior to vegetation clearing or ground disturbance activities, as instances of nesting could be missed if surveys are conducted sooner.

7. *Moving out of Harm's Way*: To avoid direct mortality to any non-listed terrestrial wildlife, CDFW recommends that the lead agency condition the DEIR to require that a CDFW-approved qualified biologist be retained to be onsite prior to and during all ground- and habitat-disturbing activities to inspect the Project area prior to any Project activities. Any individuals found shall not be harassed and shall be allowed to leave the Project area unharmed. If needed, a qualified biologist may guide, handle, or capture an individual non-listed, non-special-status wildlife species to move it to a nearby safe location within nearby refugium, or it shall be allowed to leave the

Project site of its own volition. Capture methods may include hand, dip net, lizard lasso, snake tongs and snake hook. If the wildlife species is discovered or is caught in any pits, ditches, or other types of excavations, the qualified biologist shall release it into the most suitable habitat near the site of capture. Movement of wildlife out of harm's way should be limited to only those individuals that would otherwise be injured or killed, and individuals should be moved only as far as necessary to ensure their safety (i.e., CDFW does not recommend relocation to other areas). Only biologists with appropriate authorization by CDFW shall move CESA-listed or other special-status species. Furthermore, it should be noted that the temporary relocation of onsite wildlife does not constitute effective mitigation for the purposes of offsetting Project impacts associated with habitat loss.

8. *Translocation of Species*: CDFW generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or endangered species as studies have shown that these efforts are experimental in nature and largely unsuccessful.

California Endangered Species Act

CDFW is responsible for ensuring appropriate conservation of fish and wildlife resources including threatened, endangered, and/or candidate plant and animal species, pursuant to CESA. CDFW recommends that a CESA Incidental Take Permit (ITP) be obtained if the Project has the potential to result in "take" (California Fish and Game Code Section 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of State-listed CESA species, either through construction or over the life of the project. It is the policy of CESA to conserve, protect, enhance, and restore State-listed CESA species and their habitats.

CDFW encourages early consultation, as significant modification to the proposed Project and avoidance, minimization, and mitigation measures may be necessary to obtain a CESA ITP. CDFW must comply with CEQA for issuance of a CESA ITP. CDFW therefore recommends that the DEIR addresses all Project impacts to listed species and specify a mitigation monitoring and reporting program that will meet the requirements of CESA.

CDFW Lake and Streambed Alteration Program

Based on review of material submitted with the NOP and review of aerial photography, East Highline Canal, All American Canal, Mesa Drain Seven, Mesa Six Drain, Mesa Lateral Five, Lateral Five B, All American Drain Two, and several other unnamed ditches/drains traverse the site. Depending on how the Project is designed and constructed, it is likely that the Project applicant will need to notify CDFW per Fish and Game Code section 1602. 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 your 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). To facilitate issuance of an LSA Agreement, if necessary, the DEIR should fully identify the potential impacts to the lake, stream, or riparian resources, and provide adequate avoidance, mitigation, and monitoring and reporting commitments. 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 package, please go to <https://wildlife.ca.gov/Conservation/Environmental-Review/EPIMS>.

ADDITIONAL COMMENTS AND RECOMMENDATIONS

Construction Noise

Project-related construction has the potential to generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project. CDFW recommends that the DEIR include an analysis of impacts to wildlife from Project-related construction noise, and appropriate avoidance, minimization, and mitigation measures that will reduce impacts to less than 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 dB⁵. Anthropogenic noise can disrupt the communication of many wildlife species including

⁵ Barber, J. R., K. R. Crooks, and K. M. Fristrup. 2009. The costs of chronic noise exposure for terrestrial organisms. *Trends in Ecology and Evolution* 25:180-189.

frogs, birds, and bats^{6,7,8,9}. Noise can also affect predator-prey relationships as many nocturnal animals such as bats and owls primarily use auditory cues (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^{10,11}. Noise has also been shown to reduce the density of nesting birds¹² and cause increased stress that results in decreased immune responses¹³. The IID should include measures in the DEIR to ensure the following: restricting the use of equipment to hours least likely to disrupt wildlife (e.g., not at night or in early morning); restricting the use of generators except for temporary use in emergencies; provide power to sites by solar PV (photovoltaic) systems, cogeneration systems (natural gas generator), small micro-hydroelectric systems, or small wind turbine systems; ensure the use of noise suppression devices such as mufflers or enclosure for generators; and sounds generated from any means must be below the 55-60 dB range within 50-feet from the source.

Artificial Nighttime Lighting

The Project will introduce new sources of artificial lighting. CDFW recommends that the DEIR include lighting design specifications for all artificial nighttime lighting that will be used by the Project, an analysis of the direct and indirect impacts of artificial nighttime lighting on biological resources, and appropriate avoidance, minimization, and mitigation measures that will reduce impacts to less than significant. 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 should be included in the DEIR.

Artificial nighttime lighting often results in light pollution, which has the potential to significantly and adversely affect fish and wildlife. Artificial lighting alters ecological

⁶ Sun, J. W. C., and P. M. Narins. 2005. Anthropogenic sounds differentially affect amphibian call rate. *Biological Conservation* 121:419–427.

⁷ Patricelli, G., and J. J. L. Blickley. 2006. Avian communication in urban noise: causes and consequences of vocal adjustment. *Auk* 123:639–649.

⁸ Gillam, E. H., and G. F. McCracken. 2007. Variability in the echolocation of *Tadarida brasiliensis*: effects of geography and local acoustic environment. *Animal Behaviour* 74:277–286.

⁹ Slabbekoorn, H., and E. A. P. Ripmeester. 2008. Birdsong and anthropogenic noise: Implications and applications for conservation. *Molecular Ecology* 17:72–83.

¹⁰ Rabin, L. A., R. G. Coss, and D. H. Owings. 2006. The effects of wind turbines on antipredator behavior in California ground squirrels (*Spermophilus beecheyi*). *Biological Conservation* 131:410–420.

¹¹ Quinn, J. L., M. J. Whittingham, S. J. Butler, W. Cresswell, J. L. Quinn, M. J. Whittingham, S. J. Butler, W. Cresswell, and W. Noise. 2017. Noise, predation risk compensation and vigilance in the chaffinch *Fringilla coelebs*. *Journal of Avian Biology* 37:601–608.

¹² Francis, C. D., C. P. Ortega, and A. Cruz. 2009. Noise pollution changes avian communities and species interactions. *Current Biology* 19:1415–1419.

¹³ Kight, C. R., and J. P. Swaddle. 2011. How and why environmental noise impacts animals: An integrative, mechanistic review. *Ecology Letters* 14:1052–1061.

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 navigation¹⁴. Many species use photoperiod cues for communication (e.g., bird song¹⁵), determining when to begin foraging¹⁶, behavioral thermoregulation¹⁷, and migration¹⁸. Phototaxis, a phenomenon that results in attraction and movement towards light, can disorient, entrap, and temporarily blind wildlife species that experience it⁸. The IID should include measures in the DEIR to ensure the following: eliminate all nonessential lighting throughout the Project area; avoid or limit the use of artificial light during the hours of dawn and dusk when many wildlife species are most active; lighting for Project activities is fully shielded, cast downward, reduced in intensity to the greatest extent, and does not result in spill over onto other properties or upward into the night sky (see the International Dark-Sky Association standards at <http://darksky.org/>); the 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 (CNDDDB). Information can be submitted online or via completion of the CNDDDB field survey form at the following link: <https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The types of information reported to CNDDDB can be found at the following link: <https://wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of 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

¹⁴ Gatson, K. J., Bennie, J., Davies, T., Hopkins, J. 2013. The ecological impacts of nighttime light pollution: a mechanistic appraisal. *Biological Reviews*, 88.4: 912-927.

¹⁵ Miller, M. W. 2006. Apparent effects of light pollution on singing behavior of American robins. *The Condor* 108:130-139.

¹⁶ Stone, E. L., G. Jones, and S. Harris. 2009. Street lighting disturbs commuting bats. *Current Biology* 19:1123-1127.

¹⁷ Beiswenger, R. E. 1977. Diet patterns of aggregative behavior in tadpoles of *Bufo americanus*, in relation to light and temperature. *Ecology* 58:98-108.

¹⁸ Longcore, T., and C. Rich. 2004. Ecological light pollution - Review. *Frontiers in Ecology and the Environment* 2:191-198.


Justina Gamboa-Arce, Senior Water Resources Planner
Imperial Irrigation District
November 9, 2023
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CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.).

CONCLUSION

CDFW appreciates the opportunity to comment on the NOP of a DEIR for the EHL Reservoir and Intake Channel Project (SCH No. 2023100140) and recommends that IID address CDFW's comments and concerns in the forthcoming DEIR. Questions regarding this letter or further coordination should be directed to Alyssa Hockaday, Senior Environmental Scientist (Specialist), at Alyssa.Hockaday@wildlife.ca.gov or (760) 920-8252.

Sincerely,

DocuSigned by:

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Kim Freeburn
Environmental Program Manager

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