



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
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GAVIN NEWSOM, Governor
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December 8, 2021

Governor's Office of Planning & Research

Dec 09 2021

Mrs. Kelley Dyer
Casitas Municipal Water District
71055 North Ventura Avenue
Oak View, California 93022
KDyer@casitaswater.com

STATE CLEARINGHOUSE

Subject: Robles Diversion and Fish Passage Facility Annual Maintenance and Repair Program, Draft Mitigated Negative Declaration, SCH# 2021100456, Ventura County

Dear Mrs. Dyer:

The California Department of Fish and Wildlife (CDFW) has reviewed the Casitas Municipal Water District's (District; Lead Agency) Draft Mitigated Negative Declaration (MND) for the Robles Diversion and Fish Passage Facility Annual Maintenance and Repair Program (Project).

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's Role

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & Game Code, §§ 711.7, subdivision (a) & 1802; Public Resources Code, § 21070; California Environmental Quality Act (CEQA) Guidelines, [§ 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect state fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Public Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & Game 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 & Game Code, § 2050 *et seq.*), or CESA-listed rare plant pursuant to the Native Plant Protection Act (NPPA; Fish & Game Code, §1900 *et seq.*), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

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Project Description and Summary

Objective: Casitas Municipal Water District (Casitas) operates the Robles Diversion and Fish Passage Facility (Facility), which includes the dam, forebay, and fish passage components (fish ladder, fish screen, high and low flow fish exit channels, a spillway energy dissipater, and a series of low-head stone weirs). The Facility diverts Ventura River flows into the Robles Canal, which transports the water to Lake Casitas for storage/municipal use. The fish passage components of the Facility provide upstream passage of adult Southern California steelhead (*Oncorhynchus mykiss*; steelhead) and downstream passage of juvenile steelheads.

Project activities include sediment removal, vegetation control, repair and maintenance of the radial gates (at the entrance to the headworks and spillway), instrumentation, and road maintenance. Repair activities may also include concrete work within the existing footprint of the Facility and replacement of wood timbers to maintain the structural integrity of the timber cut-off wall and debris fence.

Location: The Facility is located on the Ventura River, two miles downstream of Matilija Dam and 14.5 miles upstream of the Pacific Ocean, in unincorporated Ventura County, California (34.464820°N, -119.291107°W). The project is in the Matilija U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle.

Comments and Recommendations

CDFW offers the comments and recommendations below to assist the District in adequately identifying, avoiding, and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources. CDFW recommends the measures below be included in a science-based monitoring program that contains adaptive management strategies as part of the Project's CEQA mitigation, monitoring, and reporting program (Public Resources Code, § 21081.6; CEQA Guidelines, § 15097) (see Attachment A).

Comment #1: Impacts to Aquatic and Riparian Resources; Lake and Streambed Alteration Agreement (LSAA)

Issue #1: Project activities, subject to Fish and Game Code, section 1600 *et. seq.*, are expected to occur within the Ventura River.

Issue #2: CDFW is concerned flows may be insufficient for native fish [e.g., steelhead, arroyo chub (*Gila orcutti*), and partially-armored threespine stickleback (*Gasterosteus aculeatus macrocephalus*)] volitional passage up and down stream (see Fish and Game Code, § 5901).

Issue #3: CDFW is concerned flows may be insufficient to keep native fish that may be planted or exist below the diversion in good condition (see Fish and Game Code, § 5937).

Issue #4: CDFW is concerned that biological resources (potentially including groundwater dependent ecosystems) may be impacted by the proposed Project.

Issue #5: CDFW is concerned the hardened crossing below the diversion impedes upstream migration of southern California steelhead.

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Specific Impact: The Project proposes to modify the Ventura River and its flow regime. Modification of the Ventura River may result in the loss of streams and associated watershed function and biological diversity. Frequent sediment management activities on or near streams is likely to diminish on site and downstream water quality. Project activities may also alter natural hydrologic and geomorphic processes of the Ventura River.

Why Impact Would Occur: The Project will impact the hydromorphological processes, soils, and associated vegetation of the Ventura River. These actions may also result in changes to the streams, altering hydrologic, and geomorphic processes, which may impact plant and wildlife species.

Evidence Impact Would Be Significant: The Project may substantially adversely affect the existing stream, which absent specific mitigation, could result in substantial impacts to fish and wildlife. Debris, soil, silt, oil or other petroleum products, or any other substances which could be hazardous or deleterious to aquatic life, wildlife, or riparian habitat resulting from Project related activities may enter the stream.

Recommended potentially feasible mitigation measure(s):

Mitigation Measure #1: The Project applicant (or “entity”) must provide written notification to CDFW pursuant to section 1600 *et seq.* of the Fish and Game Code. Based on this notification and other information, CDFW shall determine whether a Lake and Streambed Alteration (LSA) Agreement is required prior to conducting the proposed activities. A notification package for a LSA may be obtained by accessing CDFW’s web site at <https://www.wildlife.ca.gov/conservation/lisa>.

CDFW’s issuance of an LSA Agreement for a Project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document of the Lead Agency for the Project. To minimize additional requirements by CDFW pursuant to section 1600 *et seq.* and/or under CEQA, the CEQA document should fully identify the potential impacts to streams or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA Agreement.

Mitigation Measure #2: Any LSA Agreement issued for the Project by CDFW may include additional measures protective of the stream and fish and wildlife at the Project site and downstream of the Project. To compensate for any on-site and off-site impacts to riparian resources, additional mitigation conditioned in any LSA Agreement may include the following: avoidance of resources, on-site or off-site creation, enhancement, or restoration, and/or protection and management of mitigation lands in perpetuity.

Mitigation Measure #3: CDFW recommends fully avoiding impacts to streams, riparian, and wetland vegetation communities. If feasible, CDFW recommends redesigning the Project to avoid impacts to the existing drainage features that support sensitive vegetation communities. Design alternatives should attempt to retain as much surface flow and natural hydrologic processes as possible.

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Mitigation Measure #4: If impacts to riparian habitat, such as arroyo willow thicket, mulefat thicket, and cattail marshes cannot be avoided, CDFW suggests mitigation should be achieved entirely on site. CDFW recommends that an on-site Habitat Mitigation and Monitoring Plan (HMMP) be developed. An HMMP should provide specific, detailed, and enforceable measures.

Mitigation Measure #5: CDFW recommends fish passage improvement downstream of the diversion include the removal of the hardened crossing and replaced with a permanent fish passage improvement project providing uninterrupted fish passage for migrating steelhead.

Recommendation #1: CDFW recommends the District provide an in-stream flows analysis (including measurements of inflows to inform operations of the fishway) and an evaluation of potential impacts on biological resources as part of the final environmental document. At a minimum, the analysis should provide the following:

Changes to Hydrology and Hydraulics

- CDFW recommends the District define the extent of upstream and downstream reach of the Ventura River that may be directly and indirectly affected by the proposed Project and assess potential Project-related impacts on biological resources within this study reach (including any potential groundwater dependent ecosystems).
- An analysis of potential Project-related changes to river hydraulics in both concrete and soft-bottom reaches. This includes water depth (percent change), wetted perimeter (acres gained/lost), and velocity (percent change). Comparing total wetted area may be useful in quantifying the effects on groundwater dependent ecosystems, assuming that infiltration rates are proportional to wetted area.
- CDFW recommends using a 2-D hydraulic model of proposed versus existing habitat to determine whether habitat changes are expected.
- A map of potential changes to channel hydraulics overlain on a map of plant communities and habitat for sensitive wildlife species and birds.
- A discussion of Project-related impacts on biological resources in relation to changes in hydrology throughout the reach.
- CDFW recommends using Normalized Difference Vegetation Index (NDVI).
- Normalized Difference Moisture Index (NDMI) to assess habitat health for the reach on an annual basis.
- Previous and continuous monitoring of flows at the Facility to inform operations of the fishway.

Recommendation #2: CDFW met with the District on November 15, 2021, to discuss the *Instream Flow Evaluation: Southern California Steelhead Passage Through the Intermittent Reach of the Ventura River, Ventura County* report. CDFW recommend the District continue to collaborate with the necessary resource agencies (including CDFW) to ensure adequate flows for biological resources. These discussions should address monitoring of flows to the Facility, incorporating flow recommendations into the in-stream flows analysis for the intermittent reach of the Ventura River (see Fish and Game Code §§ 3901 – 3938).

Comment #2: Impacts to Least Bell's Vireo

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Issue: The District is proposing to perform Project activities in the Ventura River outside of the nesting bird season. CDFW agrees with this approach. However, Project activities, such as vegetation crushing/clearing, may result in the destruction of least Bell's vireo nests and known historic nesting habitat. A search of the California Natural Diversity Database (CNDDDB) indicates Least Bell's vireo are known to occur within the vicinity of the proposed Project (CDFWa). Least Bell's vireo are known to have high site fidelity (Salata 1983b).

Specific impact: Project construction and related activities may result in the destruction of nesting habitat, which may result in temporal or permanent loss of bird nesting habitat.

Why impacts would occur: The Project as proposed would clear/trim vegetation that could provide bird nesting habitat (e.g., ground cover and shrubs). The temporal or permanent loss of vegetation may substantially impact birds that could return to the Project site year after year (Figueira et al. 2020; Haas 1998). Site fidelity exhibited across the avian taxa reflects the benefits associated with previous knowledge of a particular location, likely improving territory acquisition, foraging efficiency, potential breeding partners, and predator avoidance (Figueira et al. 2020). Least Bell's vireo exhibit especially high rates of site fidelity, with many birds not only returning to the same territory but placing nests in the same shrub used the previous year (Salata 1983b).

Evidence impacts would be significant: Nests of all birds and raptors are protected under State laws and regulations, including Fish and Game Code, sections 3503 and 3503.5. Take or possession of migratory nongame birds designated in the Federal Migratory Bird Treaty Act of 1918 (Code of Federal Regulations, Title 50, § 10.13) is prohibited under Fish and Game Code section 3513. The loss of occupied habitat or reductions in the number of sensitive and special status bird species, either directly or indirectly through nest abandonment or reproductive suppression, would constitute a significant impact absent appropriate mitigation.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: Impacts to known historic least Bell's vireo nesting habitat should be avoided.

Recommendation #1: Take under the federal Endangered Species Act (ESA) is more broadly defined than CESA; take under ESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting.

Comment #3: Impacts to Species of Special Concern (SSC)

Issue: CDFW is concerned that Project-related activities may result in significant impacts to ESA-listed red-legged frog (*Rana draytonii*) and western pond turtle (*Emys marmorata*). Both species are listed as an SSC.

Specific impact: Project construction and related activities, directly or through habitat modification, may result in direct injury or mortality of SSC.

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Why impact would occur: Project implementation includes grading, potential vegetation clearing, and other activities that may result in direct mortality, population declines, or local extirpation of pond turtle.

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

- Is extirpated from the State or, in the case of birds, is extirpated in its primary season or breeding role;
- Is listed as ESA-, but not CESA-listed, meets the State definition of threatened or endangered but has not formally been listed;
- Is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; and,
- Has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for CESA status (CDFW 2020c).

Project construction and activities, directly or through habitat modification, may result in direct mortality, reduced reproductive capacity, population declines, or local extirpation of SSC. CEQA provides protection not only for CESA- and ESA-listed species, but for any species including but not limited to SSC which can be shown to meet the criteria for CESA-listing. These SSC meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15065). Take of SSC could require a mandatory finding of significance by the District, (CEQA Guidelines, § 15065).

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: Pursuant to the California Code of Regulations, title 14, section 650, the District/qualified biologist must obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project construction and activities. Please visit CDFW's Scientific Collection Permits webpage (<https://wildlife.ca.gov/Licensing/Scientific-Collecting>) for information (CDFW 2020d). An LSA may provide similar take or possession of species as described in the conditions of the agreement.

CDFW has the authority to issue permits for the take or possession of wildlife, including mammals; birds, nests, and eggs; reptiles, amphibians, fish, plants; and invertebrates (Fish & Game Code, §§ 1002, 1002.5, 1003). Effective October 1, 2018, a Scientific Collecting Permit is required to monitor project impacts on wildlife resources, as required by environmental documents, permits, or other legal authorizations; and, to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with otherwise lawful activities (Cal. Code Regs., tit. 14, § 650).

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Mitigation Measure #2: The District should retain a qualified biologist(s) with experience surveying for and familiarity with the life history of each of the species mentioned above. The qualified biologist should conduct focused surveys for SSC and suitable habitat no more than one month from the start of any ground-disturbing activities or vegetation removal where there may be impacts to SSC. In addition, the qualified biologist should conduct daily biological monitoring during any activities involving vegetation clearing or modification of natural habitat. Positive detections of SSC and suitable habitat at the detection location should be mapped and photographed. The qualified biologist should provide a summary report of SSC surveys to the District prior to implementing any Project-related ground-disturbing activities and vegetation removal. Depending on the survey results, a qualified biologist should develop species-specific mitigation measures for implementation during the Project.

Mitigation Measure #3: Wildlife should be protected, allowed to move away on its own (non-invasive, passive relocation), or relocated to adjacent appropriate habitat on site or to suitable habitat adjacent to the project area. SSC should be captured only by a qualified biologist with proper handling permits. The qualified biologist should prepare a species-specific list (or plan) of proper handling and relocation protocols and a map of suitable and safe relocation areas. A relocation plan should be submitted to the District prior to implementing any Project-related ground-disturbing activities and vegetation removal.

Mitigation Measure #4: The District, in consultation with a qualified biologist, should prepare a worker environmental awareness training. The qualified biologist should communicate to workers that upon encounter with an SSC (e.g., during construction or equipment inspections), work must stop, a qualified biologist must be notified, and work may only resume once a qualified biologist has determined that it is safe to do so.

Mitigation Measure #5: If any SSC are harmed during relocation or a dead or injured animal is found, work in the immediate area should stop immediately, the qualified biologist should be notified, and dead or injured wildlife documented. A formal report should be sent to CDFW and the District within three calendar days of the incident or finding. Work in the immediate area may only resume once the proper notifications have been made and additional mitigation measures have been identified to prevent additional injury or death.

Comment #4: Impacts to Non-Game Mammals and Wildlife

Issue: Wildlife may still move through the Project site during the daytime or nighttime. CDFW is concerned that any wildlife potentially moving through or seeking temporary refuge on the Project site may be directly impacted during Project activities and construction.

Specific impacts: Project activities and construction equipment may directly impact wildlife and birds moving through or seeking temporary refuge on site. This could result in wildlife and bird mortality. Furthermore, depending on the final fencing design, the Project may cumulatively restrict wildlife movement opportunity.

Why impacts would occur: Direct impacts to wildlife may occur from: ground disturbing activities (e.g., staging, access, excavation, grading); wildlife being trapped or entangled in construction materials and erection of restrictive fencing; and wildlife could be trampled by heavy equipment operating in the Project site.

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Evidence impact would be significant: Mammals occurring naturally in California are considered non-game mammals and are afforded protection by State law from take and/or harassment (Fish & Game Code, § 4150; Cal. Code of Regs, § 251.1).

Recommended Potentially Feasible Mitigation Measure(s): CDFW recommends the following four mitigation measures to avoid and minimize direct impacts to wildlife during Project construction and activities.

Mitigation Measure #1: If fencing is proposed for use during construction or during the life of the Project, fences shall be constructed with materials that are not harmful to wildlife. Prohibited materials include, but are not limited to, spikes, glass, razor, or barbed wire. Fencing shall also be minimized so as not to restrict free wildlife movement through habitat areas.

Mitigation Measure #2: To avoid direct mortality, a qualified biological monitor shall be on site prior to and during ground and habitat disturbing activities to move out of harm's way special status species or other wildlife of low mobility that would be injured or killed by grubbing or Project-related construction activities. Salvaged wildlife of low mobility shall be removed and placed onto adjacent and suitable (i.e., species appropriate) habitat out of harm's way.

It should be noted that the temporary relocation of on-site wildlife does not constitute effective mitigation for the purposes of offsetting Program impacts associated with habitat loss.

Mitigation Measure #3: Grubbing and grading shall be done to avoid islands of habitat where wildlife may take refuge and later be killed by heavy equipment. Grubbing and grading shall be done from the center of the Project site, working outward towards adjacent habitat off site where wildlife may safely escape.

Additional Recommendations

Alternatives. CDFW recommends the District consider an alternative that would fully avoid or minimize impacts to streams, sensitive plants and wildlife. CDFW recommends the District recirculate the environmental document after including alternative locations in order to foster meaningful public participation and informed decision making [CEQA Guidelines, §§ 15088.5, 15126.6(f)]. If the District concludes that no feasible alternative locations exist, or the use of alternative locations as a mitigation measure is infeasible, the District must disclose the reasons in the final environmental document and recirculate [CEQA Guidelines, §§ 15088.5(a)(3), 15126.6(f)(2)].

Mitigation and Monitoring Reporting Plan. Per Public Resources Code section 21081.6(a)(1), CDFW has provided the District with a summary of our suggested mitigation measures and recommendations in the form of an attached Draft Mitigation and Monitoring Reporting Plan (MMRP; Attachment A). A final MMRP shall reflect results following additional plant and wildlife surveys and the Project's final on and/or off-site mitigation plans.

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 District and serve to help defray the cost of environmental review by CDFW. Payment of the fee is


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required 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

We appreciate the opportunity to comment on the Project to assist the District in adequately analyzing and minimizing/mitigating impacts to biological resources. CDFW requests an opportunity to review and comment on any response that the District has to our comments and to receive notification of any forthcoming hearing date(s) for the Project [CEQA Guidelines, § 15073(e)]. If you have any questions or comments regarding this letter, please contact Baron Barrera, Environmental Scientist, at Baron.Barrera@wildlife.ca.gov.

Sincerely,

DocuSigned by:

B6E58CFE24724F5

Erinn Wilson-Olgin
Environmental Program Manager I
South Coast Region

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References:

- [CDFWa] California Department of Fish and Wildlife. 2020. Scientific Collecting Permit. Available from: <https://wildlife.ca.gov/Licensing/Scientific-Collecting#53949678>
- [CDFWb] California Department of Fish and Wildlife. 2021. Submitting Data to the CNDDb. Available from: <https://wildlife.ca.gov/Data/CNDDb/Submitting-Data>
- [CNPS] California Native Plant Society. 2020. Rare Plant ranks. Available from: <https://www.cnps.org/rare-plants/cnps-rare-plant-ranks>.
- [CNPS] California Native Plant Society. 1998. Statement Opposing Transplantation as Mitigation for Impacts to Rare Plants. Available from: <https://www.cnps.org/wpcontent/uploads/2018/04/transplanting2.pdf>

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Coop et al. 2020. Wildfire Driven Forest Conversion in Western North American Landscapes. *Bioscience* 70(8):659-673. Available from: <https://doi.org/10.1093/biosci/biaa061>

Figueria, L., Martins, P., Ralph, C.J., Stephens, J.L., Alexander, J.D., and Wolfe, J.D. Effects of breeding and molt activity on songbird site fidelity. *The Auk* 137:1-15.

Godefroid, S., et al. 2011. How successful are plant species reintroductions? *Biological Conservation* 144: 672-682.

Issac Brown Ecology Studio and Los Angeles Sanitation and Environment (LASAN). 2018. 2018 Biodiversity Report. County of Los Angeles. Measurement of the Singapore Index of Cities' Biodiversity and Recommendations for a Customized Los Angeles Index. Available from: <https://www.laCountysan.org/cs/groups/public/documents/document/y250/mdi0/~edisp/cont024743.pdf>

Jepsen, S., D. F. Schweitzer, B. Young, N. Sears, M. Ormes, and S. H. Black. 2015. Conservation Status and Ecology of Monarchs in the United States. 36pp. NatureServe, Arlington, Virginia, and the Xerces Society for Invertebrate Conservation, Portland, Oregon.

Lucas, E. 2020. Recreation-related disturbance to wildlife in California – better planning for and management of recreation are vital to conserve wildlife in protected areas where recreation occurs. *California Fish and Wildlife, Recreation Special Issue 2020*: 29-51.

Pelton, E., Jepsen, C. Schultz, C. Fallon, and S.H. Black. 2016. State of the Monarch Butterfly Overwintering Sites in California. 40+vi pp. Portland, Oregon: The Xerces Society for Invertebrate Conservation. www.xerces.org

Thorne, J.H., Boyton, R.M., Holguin, A.J., Stewart, J.A.E., and Bjorkman, J. 2016. A climate change vulnerability assessment of California's terrestrial vegetation. Final Report to: California Department of Fish and Wildlife. Information Center for the Environment University of California, Davis. Available from: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=116208&inline>

[USACE] Unites States Army Corps of Engineers. National Wetland Plant Lis Indicator Rating Definitions. Available from: <https://www.fws.gov/wetlands/documents/National-Wetland-Plant-List-Indicator-Rating-Definitions.pdf>



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Attachment A: Draft Mitigation and Monitoring Reporting Plan

CDFW recommends the following language to be incorporated into a future environmental document for the Project. A final MMRP shall reflect results following additional plant and wildlife surveys and the Project's final on and/or off-site mitigation plans.

Biological Resources (BIO)			
Mitigation Measure (MM) or Recommendation (REC)		Timing	Responsible Party
MM-BIO-1- Impacts to Aquatic and Riparian Resources; Lake and Streambed Alteration Agreement	<p>Mitigation Measure #1: The Project applicant (or "entity") must provide written notification to CDFW pursuant to section 1600 <i>et seq.</i> of the Fish and Game Code. Based on this notification and other information, CDFW shall determine whether a Lake and Streambed Alteration (LSA) Agreement is required prior to conducting the proposed activities. A notification package for a LSA may be obtained by accessing CDFW's web site at https://www.wildlife.ca.gov/conservation/lsa.</p> <p>CDFW's issuance of an LSA Agreement for a Project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document of the Lead Agency for the Project. To minimize additional requirements by CDFW pursuant to section 1600 <i>et seq.</i> and/or under CEQA, the CEQA document should fully identify the potential impacts to streams or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA Agreement.</p>	Prior to/After Project construction and activities	Lead Agency/ Applicant
MM-BIO-2- Impacts to Aquatic and Riparian	Any LSA Agreement issued for the Project by CDFW may include additional measures protective of streambeds on and downstream of the Project such as additional erosion and pollution control measures. To compensate for any on-site and off-site impacts to	Prior to Project construction and activities	Lead Agency/ Applicant

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Resources; Lake and Streambed Alteration Agreement	riparian resources, additional mitigation conditioned in any LSA Agreement may include the following: avoidance of resources, on-site or off-site creation, enhancement, or restoration, and/or protection and management of mitigation lands in perpetuity.		
MM-BIO-3- Impacts to Aquatic and Riparian Resources; Lake and Streambed Alteration Agreement	CDFW recommends fully avoiding impacts to streams and riparian/wetland vegetation communities. If feasible, CDFW recommends redesigning the Project to avoid impacts to the existing drainage features that support sensitive vegetation communities. Design alternatives should attempt to retain as much surface flow and natural hydrologic processes as possible.	Prior to Project construction and activities	Lead Agency/ Applicant
MM-BIO-4- Impacts to Aquatic and Riparian Resources; Lake and Streambed Alteration Agreement	If impacts to riparian habitat, such as arroyo willow thicket, mulefat thicket, and cattail marshes cannot be avoided, CDFW suggests mitigation should be achieved entirely on site if possible. CDFW recommends that impacts be mitigated at no less than 3:1. CDFW recommends that an on-site Habitat Mitigation and Monitoring Plan (HMMP) be developed. An HMMP should provide specific, detailed, and enforceable measures.	Prior to Project construction and activities	Lead Agency/ Applicant
MM-BIO-5- Impacts to Aquatic and Riparian Resources; Lake and Streambed Alteration Agreement	CDFW recommends fish passage improvement downstream of the diversion include the removal of the hardened crossing and replaced with a permanent fish passage improvement project providing uninterrupted fish passage for migrating steelhead.	Prior to Project construction and activities	Lead Agency/ Applicant

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<p>MM-BIO-6- Impacts to Aquatic and Riparian Resources; Lake and Streambed Alteration Agreement</p>	<p>CDFW recommends the District provide an in-stream flows analysis (including measurements of flows to inform operations of the fishway) and an evaluation of potential impacts on biological resources as part of the final environmental document. At a minimum, the analysis should provide the following:</p> <p><i>Changes to Hydrology and Hydraulics</i></p> <ul style="list-style-type: none"> • CDFW recommends the District define the extent of up- and downstream reach of the Ventura River that may be directly and indirectly affected by the proposed Project and assess potential Project-related impacts on biological resources within this study reach (including any potential groundwater dependent ecosystems). • An analysis of potential Project-related changes to river hydraulics in both concrete and soft-bottom reaches. This includes water depth (percent change), wetted perimeter (acres gained/lost), and velocity (percent change). Comparing total wetted area may be useful in quantifying the effects on groundwater dependent ecosystems, assuming that infiltration rates are proportional to wetted area. • CDFW recommends using a 2-D hydraulic model of proposed versus existing habitat to determine whether habitat changes are expected. • A map of potential changes to channel hydraulics overlain on a map of plant communities and habitat for sensitive wildlife species and birds. • A discussion of Project-related impacts on biological resources in relation to changes in hydrology throughout the reach. • CDFW recommends using Normalized Difference Vegetation Index (NDVI) and Normalized Difference Moisture Index (NDMI) to assess habitat health for the reach on an annual basis. 	<p>Prior to Project construction and activities</p>	<p>Lead Agency/ Applicant</p>
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	<ul style="list-style-type: none"> • Previous and continuous monitoring of flows at the Facility to inform operations of the fishway. 		
MM-BIO-7- Impacts to Aquatic and Riparian Resources; Lake and Streambed Alteration Agreement	CDFW met with the District on November 15, 2021, to discuss the <i>Instream Flow Evaluation: Southern California Steelhead Passage Through the Intermittent Reach of the Ventura River, Ventura County</i> report. CDFW recommend the District continue to collaborate with the necessary resource agencies (including CDFW) to ensure adequate flows for biological resources. These discussions should address monitoring of flows to the Facility, incorporating flow recommendations into the in-stream flows analysis for the intermittent reach of the Ventura river (see Fish and Game Code 3901 – 3938).	Prior to Project construction and activities	Lead Agency/ Applicant
MM-BIO-8- Impacts to Least Bell's Vireo	Impacts to known historic least Bell's vireo nesting habitat should be avoided.	Prior to Project construction and activities	Lead Agency/ Applicant
MM-BIO-9- Impacts to Least Bell's Vireo	Take under the federal Endangered Species Act (ESA) is more broadly defined than CESA; take under ESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting.	Prior to Project construction and activities	Lead Agency/ Applicant
MM-BIO-10- Impacts to California Species of Special Concern	The District should retain a qualified biologist(s) with experience surveying for or is familiar with the life history of each of the species mentioned above. The qualified biologist should conduct focused surveys for SSC and suitable habitat no more than one month from the start of any ground-disturbing activities or vegetation removal where there may be impacts to SSC. In addition, the qualified biologist should conduct daily biological monitoring during any activities involving vegetation	Prior to Project construction and activities	Lead Agency/ Applicant

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	clearing or modification of natural habitat. Positive detections of SSC and suitable habitat at the detection location should be mapped and photographed. The qualified biologist should provide a summary report of SSC surveys to the District prior to implementing any Project-related ground-disturbing activities and vegetation removal. Depending on the survey results, a qualified biologist should develop species-specific mitigation measures for implementation during the Project.		
MM-BIO-11- Impacts to California Species of Special Concern	Wildlife should be protected, allowed to move away on its own (non-invasive, passive relocation), or relocated to adjacent appropriate habitat on site or to suitable habitat adjacent to the project area. SSC should be captured only by a qualified biologist with proper handling permits. The qualified biologist should prepare a species-specific list (or plan) of proper handling and relocation protocols and a map of suitable and safe relocation areas. A relocation plan should be submitted to the District prior to implementing any Project-related ground-disturbing activities and vegetation removal.	Prior to Project construction and activities	Lead Agency/ Applicant
MM-BIO-12- Impacts to California Species of Special Concern	The District, in consultation with a qualified biologist, should prepare a worker environmental awareness training. The qualified biologist should communicate to workers that upon encounter with an SSC (e.g., during construction or equipment inspections), work must stop, a qualified biologist must be notified, and work may only resume once a qualified biologist has determined that it is safe to do so.	Prior to Project construction and activities	Lead Agency/ Applicant
MM-BIO-13- Impacts to California Species of Special Concern	If any SSC are harmed during relocation or a dead or injured animal is found, work in the immediate area should stop immediately, the qualified biologist should be notified, and dead or injured wildlife documented. A formal report should be sent to CDFW and the District within three calendar days of the incident or finding. Work in the immediate area may only resume once the proper notifications have been made and additional mitigation measures have been identified to prevent additional injury or death.	Prior to Project construction and activities	Lead Agency/ Applicant

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<p>MM-BIO-14- Impacts to Non- Game Mammals and Wildlife</p>	<p>If fencing is proposed for use during construction or during the life of the Project, fences shall be constructed with materials that are not harmful to wildlife. Prohibited materials include, but are not limited to, spikes, glass, razor, or barbed wire. Fencing shall also be minimized so as not to restrict free wildlife movement through habitat areas.</p>	<p>Prior to Project construction and activities</p>	<p>Lead Agency/ Applicant</p>
<p>MM-BIO-15- Impacts to Non- Game Mammals and Wildlife</p>	<p>To avoid direct mortality, a qualified biological monitor shall be on site prior to and during ground and habitat disturbing activities to move out of harm's way special status species or other wildlife of low mobility that would be injured or killed by grubbing or Project-related construction activities. Salvaged wildlife of low mobility shall be removed and placed onto adjacent and suitable (i.e., species appropriate) habitat out of harm's way.</p> <p>It should be noted that the temporary relocation of on-site wildlife does not constitute effective mitigation for the purposes of offsetting Program impacts associated with habitat loss.</p>	<p>Prior to Project construction and activities</p>	<p>Lead Agency/ Applicant</p>
<p>MM-BIO-16- Impacts to Non- Game Mammals and Wildlife</p>	<p>Grubbing and grading shall be done to avoid islands of habitat where wildlife may take refuge and later be killed by heavy equipment. Grubbing and grading shall be done from the center of the Project site, working outward towards adjacent habitat off site where wildlife may safely escape.</p>	<p>Prior to Project construction and activities</p>	<p>Lead Agency/ Applicant</p>