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October 3, 2022

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Tijuana Estuary Tidal Restoration Program II Phase I (Project) Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) SCH# 2021050599

Dear Ms. Warner-Lara and Mr. Collins:

The California Department of Fish and Wildlife (CDFW) has reviewed the above-referenced Draft EIR/EIS on the Tijuana Estuary Tidal Restoration Program Phase I, dated August 2022.

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, CDFW appreciates 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 responsible for marine biodiversity protection under the Marine Life Protection Act in coastal marine waters of California and ensuring fisheries are sustainably managed under the Marine Life Management Act.

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

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Proponent: California Department of Parks and Recreation

Objective: The Tijuana Estuary Tidal Restoration Program (TETRP) II Phase I is the first phase of a multi-phase restoration of the southern arm of the Tijuana Estuary and was first evaluated in the overall Restoration Project component of the 1991 Tijuana Estuary Tidal Restoration Program EIR/DEIR. TETRP II Phase I builds upon the revised conceptual restoration plan developed in the Tijuana Estuary – Friendship Marsh Restoration Feasibility and Design Study completed in 2008, which proposed multi-phase restoration of approximately 250 acres of the estuary. TETRP II Phase I has been designed to restore approximately 82-87 acres within the study area to increase the tidal prism (amount of water coming and going with the tides) of the estuary by restoring salt marsh, mudflat, and tidal channels, as well as transitional and upland habitats that have been degraded over the past several decades.

The Draft EIR/EIS describes two alternatives:

1. Alternative 1: this alternative would restore approximately 87 acres of coastal habitat, and would maximize deeper intertidal habitats, such as expanded tidal channels and intertidal mudflat.
2. Preferred Alternative: the proposed Project (formerly “Alternative 2”) is identified as the preferred alternative. This Project would restore approximately 82.5 acres of wetland habitats and preserve 4.6 acres of transitional and upland habitat. Compared to Alternative 1, less area is devoted to restoration of mudflat, with an emphasis on restoration of low and mid to high salt marsh.

Both the proposed Project and Alternative 1 would include a network of intertidal channels to convey tidal flows.

Location: The Project site is located in the southern arm of the Tijuana Estuary in southwestern San Diego County, California and located just south of the main channel of the Tijuana River. The Project is encompassed by the Tijuana River National Estuarine Research Reserve, which includes Border Field State Park and the Tijuana Slough National Wildlife Refuge.

Biological Setting: Tijuana Estuary is the largest coastal wetland in southern California. Despite disturbances due to water pollution and increased sedimentation, among other anthropogenic impacts, the estuary provides essential breeding, feeding, and nesting habitat for resident and migratory wildlife species.

The Biological Resources Technical Report (BTR) identifies the following habitats on site: subtidal (18.4 acres); southern coastal marsh, including intertidal low marsh (11.4 acres) and intertidal high marsh (62.2 acres); mudflat (5.4 acres); disturbed salt panne (11.4 acres); transitional from wetland to upland (78.8 acres); upland (46.7 acres); nonnative upland (17.4 acres); beach (28.1 acres); coastal dune (25.7 acres); and roads/trails (3.4 acres).

Special status bird species with the potential to occur in or near the Project site include: California least tern (*Sterna antillarum browni* Federal Endangered Species Act (ESA)- and CESA-listed endangered; California Fully Protected (FP)); light-footed Ridgway's rail (*Rallus obsoletus levipes*; ESA and CESA-listed endangered; FP), Belding's savannah sparrow (*Passerculus sandwichensis beldingi*; CESA-listed endangered), western snowy plover (*Charadrius alexandrinus nivosus*; ESA-listed threatened; California Species of Special Concern (SSC)), and least Bell's vireo (*Vireo bellii pusillus*; ESA- and CESA-listed endangered).

Sensitive mammal species with the potential to occur near the Project include the San Diego black-tailed jackrabbit (*Lepus californicus bennettii*).

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There is potential for SSC-designated western spadefoot (*Spea hammondi*) within the vicinity of the Project area and the species may be found within road pools along access roads required for the Project.

Sensitive reptiles in the vicinity of the Projects include but are not limited to: California glossy snake (*Arizona elegans occidentalis*; SSC), Baja California coachwhip (*Masticophis fuliginosus*; SSC), two-striped garter snake (*Thamnophis hammondi*; SSC), Blainville's horned lizard (*Phrynosoma blainvillii*; SSC), California legless lizard (*Anniella pulchra*; SSC), and coast horned lizard (*Phrynosoma coronatum*; SSC). Sensitive marine reptiles offshore of the proposed beach fill Project include but are not limited to CESA candidate listed leatherback sea turtle (*Dermochelys coriacea*) and green sea turtle (*Chelonia mydas*).

Sensitive marine fish species and their habitat such as California grunion (*Leuresthes tenuis*) spawn on the sandy upper intertidal beach. Important commercial and recreational fish species and their habitat, such as barred sand bass (*Paralabrax nebulifer*) and California halibut (*Paralichthys californicus*), also have the potential to spawn, shelter, and forage in the nearshore habitat adjacent to the beach proposed fill Project.

Sensitive invertebrates in the vicinity of the Projects include but are not limited to western tidal-flat tiger beetle (*Habroscelimorpha gabbii*; State Rank (S)1), senile tiger beetle (*Cicindela senilis frosti*; S1), western beach tiger beetle (*Cicindela latesignata*; S1), globose dune beetle (*Coelus globosus*; S1S2), sandy beach tiger beetle (*Cicindela hirticollis grvida*; S2), wandering skipper (*Panoquina errans*; S2), and mimic tryonia (California brackish water snail; *Tryonia imitator*, S2). Sensitive marine invertebrates in the Project vicinity may include but are not limited to Pismo clams (*Tivela stultorum*).

Per the BTR, of 57 special-status plant species with potential to occur within the Biological Study Area, only one was found during surveys: Nuttall's acmispon (*Acmispon prostrates*; California Native Plant Society Rare Plant Rank 1B.1).

COMMENTS AND RECOMMENDATIONS

CDFW previously provided comments and recommendations on the Notice of Preparation/Notice of Intent to prepare a Draft EIR/EIS on the TETRP II Phase I Project, in a letter dated July 2021. While we acknowledge the value of this Project for the Tijuana Estuary and are supportive of restoration efforts to support healthy fish and wildlife populations, it does not appear that our prior comments and recommendations were incorporated into the draft environmental document.

CDFW re-summarizes the comments and recommendations that were previously provided below to assist the Department of Parks and Recreation and USFWS in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

I. Terrestrial Comments

COMMENT #1: Impacts to Avian Species

Issue: Impacts to avian species may not be adequately mitigated.

Specific impact: Project Design Feature (PDF)-9 states that continuous construction will be allowed, but that vegetation clearing and grubbing will be restricted to outside the avian breeding season. Additionally, beach nourishment activities will be restricted to outside the breeding season unless a qualified biologist has confirmed no active nesting is occurring in proximity to placement sites. No specific buffers or survey timelines are discussed.

Why impact would occur: The BSA contains areas that provide breeding and foraging habitat for light-footed Ridgway's rails, California least tern, western snowy plover, and other avian species. Western snowy plover are federally threatened. Light-footed

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Ridgway's rails and California least tern are both ESA- and CESA- listed endangered, as well as Fully Protected per section 3511 of the Fish and Game Code.

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Mitigation Measure or Alternative and Related Impact Shortcoming)

Recommendation #1:

To minimize significant impacts: CDFW recommends avoidance of occupied avian habitat to the extent practicable. For unavoidable impacts to occupied avian habitat, CDFW recommends further avoidance measures be included in the EIR/EIS. These measures should include but are not limited to:

- a. If project construction is necessary during the bird breeding season, a qualified biologist with experience in conducting bird breeding surveys should conduct weekly bird surveys for nesting birds, within three days prior to the work in the area, and ensure no nesting birds in the Project area would be impacted by the Project. If an active nest is identified, a buffer shall be established between the construction activities and the nest so that nesting activities are not interrupted. CDFW generally recommends the buffer be a minimum width of 100 feet for general passerine birds, 300 feet from state or federal listed bird species, and 500 feet for Fully Protected species and raptor species. The buffer should be demarcated by temporary fencing and remain in effect as long as construction is occurring or until the nest is no longer active. No Project construction should occur within the fenced nest zone until the young have fledged, are no longer being fed by the parents, have left the nest, and will no longer be impacted by the Project. Reductions in the nest buffer distance may be appropriate depending on the avian species involved, except for Fully Protected Species, due to ambient levels of human activity, screening vegetation, or possibly other factors.
- b. When conducting work within suitable habitat, the Project biologist or designated biological monitor should be on-site during construction to ensure that buffers are maintained and that listed or Fully Protected species and/or their nests are avoided.

COMMENT #2: Impacts to Sensitive Reptiles

Issue: Potential impacts to sensitive reptile species may not be adequately minimized.

Specific impact: Per the BTR, the Project area potentially contains a variety of sensitive reptile species. PDF-10 states that while clearing and grubbing activities are occurring, a Biological Monitor shall walk along the impacted area ahead of machinery to flush resident birds and other wildlife. However, further mitigation measures for sensitive reptiles are recommended.

Why impact would occur: Sensitive reptile species such as California glossy snake, Baja California coachwhip, and coast horned lizard may get trapped in trenches, holes, or pipes on the project site, or may be crushed by construction equipment.

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Mitigation Measure or Alternative and Related Impact Shortcoming)

Recommendation #2:

To minimize significant impacts: As stated in our prior letter, CDFW recommends that the Project incorporate avoidance and minimization measures that include exclusion methods to prevent sensitive reptile species from entering construction areas. This could include wildlife pre-construction surveys, daily inspections of trenches and holes for entrapped wildlife prior to the onset of Project construction activities, and inspections of pipes, culverts, and similar construction material for entrapped wildlife at the beginning and end of the day. If sensitive wildlife species are observed during pre-construction surveys, a

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qualified biologist should require additional measures to reduce potential impacts, such as establishing an appropriate buffer, or moving individuals out of harm's way.

The qualified biologist should be required to obtain, as applicable, Scientific Collecting Permits (SCP). A Species Relocation Plan may be appropriate to establish protocol for relocation of wildlife, including guidelines for the SCP-holding biologist to capture unharmed and release found species in appropriate habitat an adequate distance from the Project site, unless they are an ESA- and/or CESA-listed species in which coordination and direction from USFWS and/or CDFW, respectively, shall be required.

COMMENT #3: Impacts to Western Spadefoot and Vernal Pools

Issue: Potential impacts to western spadefoot and vernal pools have not been addressed.

Specific impact: Again, there is potential for western spadefoot within the vicinity of Project areas and the species may be found within road pools along access roads required for the Project. Western spadefoot typically breed in vernal pools and other seasonal water basins and spend much of the year in earth-filled burrows. The Draft EIR/EIS and the BTR do not address vernal pools or potential impacts to western spadefoot.

Why impact would occur: Vernal pools are considered a rare resource, as it is estimated over 95% of vernal pools in San Diego County have been destroyed (USFWS 1998). CDFW considers the loss of these pool complexes to be regionally and biologically significant.

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Mitigation Measure or Alternative and Related Impact Shortcoming)

Recommendation #3:

To minimize significant impacts: To the extent practicable, vernal pools and depressions, and the entire sub-watershed that supports the hydrology of the pool/depression, should be avoided. The EIR/EIS should identify any existing vernal pool habitat, analyze potential impacts, and propose avoidance and mitigation measures should vernal pools be identified on site. If vernal pools, including road pools, are identified within the Project areas, surveys for western spadefoot should be conducted between February and May when potential breeding pools are present (Fisher 2004). If the species is found, an avoidance, minimization, and mitigation plan should be developed.

COMMENT #4: Rabbit Hemorrhagic Disease

Issue: Best Management Practices are not included for Rabbit Hemorrhagic Disease

Specific impact: Rabbit Hemorrhagic Disease is a highly contagious and lethal virus which has been found in San Diego County. It impacts lagomorphs (members of the rabbit family).

Why impact would occur: Black-tailed jackrabbits have the potential to be present in and around Project areas.

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Mitigation Measure or Alternative and Related Impact Shortcoming)

Recommendation #4:

To minimize significant impacts: Project personnel should be made aware of Rabbit Hemorrhagic Disease, which can cause 70 to 100 percent mortality. CDFW recommends that Best Management Practices, such as disinfecting equipment and work boots with a ten percent bleach solution, be employed to help prevent the spread of the disease.

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COMMENT #5: Polyphagous and Kuroshio Shot Hole Borers (ISHBs)

Issue: Best Management Practices are not included for ISHBs.

Specific impact: ISHBs are invasive ambrosia beetles that introduce fungi and other pathogens into host trees.

Why impact would occur: ISHBs have been documented in the Tijuana River area and could occur within the Project site(s).

Recommendation #5:

To minimize significant impacts: CDFW recommends an analysis that considers the impacts of Project activities on the potential spread of ISHBs. Figures that depict potentially sensitive or susceptible vegetation communities within the Project areas, the known occurrences of ISHBs within the project areas (if any), and ISHBs proximity to above referenced activities, should be included.

Additionally, please modify the Best Management Practices to include measures to limit the spread of ISHBs. Examples of appropriate measures include:

- a. education of on-site workers regarding ISHBs and their spread;
- b. reporting signs of ISHB infestation, including sugary exudate (“weeping”) on trunks or branches and ISHB entry/exit-holes (about the size of the tip of a ballpoint pen), to the Department and UC Riverside’s Eskalen Lab;
- c. equipment disinfection;
- d. pruning infected limbs in infested areas where project activities may occur;
- e. Avoidance and minimization of transport of potential host tree materials;
- f. chipping potential host materials to less than 1 inch and solarization, prior to delivering to a landfill;
- g. chipping potential host materials to less than 1 inch, and solarization, prior to composting on-site; and
- h. solarization of cut logs and/or burning of potential host tree materials.

Please refer to UCR’s Eskalen lab website for more information regarding ISHBs:
<http://eskalenlab.ucr.edu/pshb.html>.

COMMENT #6: Lake and Streambed Alteration Agreement

The Project site includes aquatic features that have a bed, bank, or channel. As a Responsible Agency under CEQA, CDFW has authority over a) activities in streams and/or lakes that will divert or obstruct the natural flow; b) changes in the bed, channel, or bank (including vegetation associated with the stream or lake) of a river or stream; and c) use of material from a streambed. For any such activities, an entity must provide written notification to CDFW pursuant to Fish and Game Code section 1600 et seq. CDFW suggests early coordination to determine if notification to CDFW is appropriate.

II. Marine Comments

COMMENT #7: Sensitive Marine Habitats

The Project proposes to place dredged sediment from excavated channels (101,000-305,000 cy) within the swash zone (if sediment consists of 51-75% sand) or upper beach above the mean high tide line (if sediment consists of 75-90% sand) to support barrier dune development and minimize the need to transport sediment long distances from the Project site. Sediment will either be transported via trucks or a pipeline slurry, and then distributed on the beach using heavy equipment. The Project aims to conduct beach placement during late fall-early spring but may occur during other times of the year. As needed, the Project will continue to conduct periodic removal of sand from the river mouth (up to 10,000 cy/year) to provide continual tidal exchange post-restoration. The sand will

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be placed on adjacent barrier dunes or along the shoreline either north or south of the mouth of the estuary above the mean high tide line. All equipment will drive above the high tide line of the beach. The DEIR/DEIS states that no hard bottom reefs or vegetated intertidal or marine habitats are in proximity to the beach nourishment site, and the closest mapped hard bottom surface is located between the Tijuana River mouth and the Imperial Beach pier north of the beach placement footprint.

Recommendation #7:

CDFW recommends the FEIR/FEIS include a map that shows the distance and direction to the nearest hard bottom reef in relation to the beach placement footprint. The FEIR/FEIS should clarify if sediment being distributed across the beach profile will involve equipment operating below the mean high tide line. CDFW recommends all beach placement operations avoid equipment below the mean high tide line, unless sediment is being placed in the swash zone due to high sand content. CDFW also recommends a long-shore and cross-shore sediment transport model be used to identify appropriate sediment placement volumes and locations to avoid or minimize marine habitat and river mouth impacts. Results from the sediment transport model should be included in the FEIR/FEIS.

COMMENT #8: Impacts to Marine Fish

The California marine fisheries management plans, including the Pelagic, Highly Migratory, and Near-shore management plans, have fish species that utilize the coastal nearshore environment adjacent to the Project area. Many important commercial and recreational fish species use the Project area for shelter, spawning, and foraging.

Recommendation #8:

CDFW recommends potential impacts to marine fish should be identified in the FEIR/FEIS and any significant impacts should be avoided and minimized to below a level of significance. A list and description of fish species and the fisheries management plans can be found on the CDFW's website (<https://wildlife.ca.gov/Conservation/Marine>).

COMMENT #9: California Grunion

Grunions are an ecologically, recreationally, and culturally important species in southern California, and an important prey species for numerous marine species. Grunions are vulnerable to disturbance from beach fill projects within the intertidal and nearshore during their reproductive cycle because they spawn and bury their eggs within the upper intertidal. Grunions have the potential to spawn within the proposed beach fill footprint during the spawning season (March through August). Direct impacts could include crushing incubating eggs from driving heavy equipment within egg nests and burying incubating eggs from movement of sand, which may lead to inviable eggs or eggs unable to hatch out. Grunions have a limited spawning habitat range within southern California and northern Baja California, much of which is disturbed or degraded.

During the grunion spawning season the proposed beach placement site will be monitored for grunion runs unless the beach is considered unsuitable for spawning (consists of 100% cobble). Grunion monitoring should be conducted by a qualified biologist for 30 minutes prior to and two hours following the predicted start of each spawning event. If more than 100 fish are reported, than avoidance and minimization measures should be implemented, such as relocation/rescheduling of work/equipment or specification of acceptable vehicle routes.

Recommendation #9:

CDFW appreciates the inclusion of a grunion monitoring plan and recommends the following additional measures be incorporated into the plan to further minimize impacts:

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- a. CDFW recommends all beach nourishment activities occur outside of the grunion spawning season (March through August). If beach placement does occur during the grunion spawning season, the locations of the spawning run should be marked physically and/or by Global Positioning System (GPS) locations. The density of the grunion throughout the area should be noted using the Walker Scale. The Project should ensure that maintenance workers avoid the spawning area and that a 50-foot buffer is used to avoid impacting any spawning areas adjacent to the sediment placement sites. If grunion spawning occurs within the Project area, work in that area below the mean high tide line should not be conducted until after the grunion eggs have hatched (2 weeks).
- b. CDFW recommends that removal of sand from the river mouth also occur outside of the grunion spawning season. If sediment removal occurs during the grunion spawning season, a grunion monitoring plan as stated above should be implemented and include coordination with CDFW.

COMMENT# 10: Pismo Clams

Pismo clams are a state recreationally managed species that tend to develop high concentrations on wide, relatively flat intertidal areas of beaches and at the mouths of bays, rivers, and estuaries. Established Pismo clam beds are historically known to exist in San Diego County, including the intertidal and subtidal zones of Imperial Beach, and they are vulnerable to direct and indirect burial impacts from beach fill projects.

Recommendation #10:

Pismo clam surveys should be conducted according to the best available methods. If the species and/or their habitat is identified, pre-and post-construction surveys and biological monitoring should be conducted as applicable, and impacts should be avoided and/or minimized.

COMMENT #11: Tijuana River Mouth State Marine Conservation Area

The Tijuana River Mouth State Marine Conservation Area (SMCA) west boundary line (mean high tide line) is located within and/or adjacent to the entire length of the proposed beach fill footprint.

Recommendation #11:

CDFW recommends the following mitigation measures be incorporated into the FEIR/FEIS to avoid and minimize impacts the Tijuana River Mouth SMCA from the proposed sediment placement work within or adjacent to the Tijuana River Mouth SMCA and the Tijuana River inlet.

- a. **Baseline Assessment:** The marine habitats and species that occupy the Tijuana River Mouth SMCA should be identified with baseline surveys and impact assessments. Additionally, CDFW recommends Tijuana River Mouth SMCA sediments and water quality within the beach fill footprint be sampled pre-construction to identify baseline conditions. Potential direct and indirect construction and sediment placement impacts below or adjacent to the mean high tide line boundary should be identified.
- b. **Minimization Measures:** To the extent feasible, CDFW recommends that all beach nourishment construction work occur outside the SMCA boundaries (above the mean high tide line) to avoid and minimize Project impacts to marine habitat, species, and water quality. Construction routes and staging areas should be geo-referenced on maps in relation to the SMCA boundaries showing potential areas of impact and avoidance and minimizing mitigation measures. To protect the Tijuana River Mouth SMCA from daily construction impacts, biological monitoring should take place on site during construction to avoid or minimize impacts to sensitive habitat or water degradation below the mean high tide boundary line. If long-term impacts to species

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and/or habitat are anticipated within the SMCA, habitat monitoring should be conducted. CDFW recommends the Project proponent consult with CDFW regarding the SMCA boundaries, allowable uses, and appropriate mitigation measures.

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). The CNDDDB field survey form can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDDB_FieldSurveyForm.pdf. The completed form can be mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

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 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 Draft EIR/EIS to assist to assist the California Department of Parks and Recreation and the USFWS in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Brigid Moran at Brigid.Moran@wildlife.ca.gov or Corianna Flannery for marine region comments at Corianna.Flannery@wildlife.ca.gov.

Sincerely,

DocuSigned by:


David A. Mayer

Environmental Program Manager
South Coast Region

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REFERENCES

- California Department of Fish and Wildlife. 2020. Lake and Streambed Alteration Program. <https://wildlife.ca.gov/Conservation/LSA>.
- California Department of Fish and Wildlife. Disease and Mortality Monitoring, Rabbit Hemorrhagic Disease. <https://wildlife.ca.gov/Conservation/Laboratories/Wildlife-Health/Monitoring#55671861-rabbit-hemorrhagic-disease>
- California Environmental Quality Act (CEQA). 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.
- California Office of Planning and Research. 2009 or current version. CEQA: California Environmental Quality Act. Statutes and Guidelines, § 21081.6 and CEQA Guidelines, § 15097, §15126.4(2)
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Attachment A: CDFW Draft Mitigation, Monitoring, and Reporting Plan and Associated Recommendations

Biological Resources			
Recommendation (REC)		Timing	Responsible Party
REC 1 Impacts to Avian Species	<p>To minimize significant impacts: CDFW recommends avoidance of occupied avian habitat to the extent practicable. For unavoidable impacts to occupied avian habitat, CDFW recommends further avoidance measures be included in the EIR/EIS. These measures should include but are not limited to:</p> <p>c. If project construction is necessary during the bird breeding season, a qualified biologist with experience in conducting bird breeding surveys should conduct weekly bird surveys for nesting birds, within three days prior to the work in the area, and ensure no nesting birds in the Project area would be impacted by the Project. If an active nest is identified, a buffer shall be established between the construction activities and the nest so that nesting activities are not interrupted. CDFW generally recommends the buffer be a minimum width of 100 feet for general passerine birds, 300 feet from state or federal listed bird species, and 500 feet for Fully Protected species and raptor species. The buffer should be demarcated by temporary fencing and remain in effect as long as construction is occurring or until the nest is no longer active. No Project construction should occur within the fenced nest zone until the young have fledged, are no longer being fed by the parents, have left the nest, and will no longer be impacted by the Project. Reductions in the nest buffer distance may be appropriate depending on the avian species involved, except for Fully Protected Species, due to ambient levels of human activity, screening vegetation, or possibly other factors.</p> <p>d. When conducting work within suitable habitat, the Project biologist or designated biological monitor should be on-site during construction to ensure that buffers are maintained and that listed or</p>	Prior to and during Project activities	California Department of Parks and Recreation and USFWS

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	Fully Protected species and/or their nests are avoided.		
REC 2 Impacts to Sensitive Reptiles	<p>To minimize significant impacts: As stated in our prior letter, CDFW recommends that the Project incorporate avoidance and minimization measures that include exclusion methods to prevent sensitive reptile species from entering construction areas. This could include wildlife pre-construction surveys, daily inspections of trenches and holes for entrapped wildlife prior to the onset of Project construction activities, and inspections of pipes, culverts, and similar construction material for entrapped wildlife at the beginning and end of the day. If sensitive wildlife species are observed during pre-construction surveys, a qualified biologist should require additional measures to reduce potential impacts, such as establishing an appropriate buffer, or moving individuals out of harm's way.</p> <p>The qualified biologist should be required to obtain, as applicable, Scientific Collecting Permits (SCP). A Species Relocation Plan may be appropriate to establish protocol for relocation of wildlife, including guidelines for the SCP-holding biologist to capture unharmed and release found species in appropriate habitat an adequate distance from the Project site, unless they are an ESA- and/or CESA-listed species in which coordination and direction from USFWS and/or CDFW, respectively, shall be required.</p>	Prior to and during Project activities	California Department of Parks and Recreation and USFWS
REC 3 Impacts to Western Spadefoot and Vernal Pools	<p>To minimize significant impacts: To the extent practicable, vernal pools and depressions, and the entire sub-watershed that supports the hydrology of the pool/depression, should be avoided. The EIR/EIS should identify any existing vernal pool habitat, analyze potential impacts, and propose avoidance and mitigation measures should vernal pools be identified on site. If vernal pools, including road pools, are identified within the Project areas, surveys for western spadefoot should be conducted between February and May when potential breeding pools are present (Fisher 2004). If the species is found, an avoidance, minimization, and mitigation plan should be developed.</p>	Prior to and during Project activities	California Department of Parks and Recreation and USFWS
REC 4 Rabbit Hemorrhagic Disease	<p>To minimize significant impacts: Project personnel should be made aware of Rabbit Hemorrhagic Disease, which can cause 70 to 100 percent mortality. CDFW recommends</p>	Prior to and during Project activities	California Department of Parks and Recreation and USFWS

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	that Best Management Practices, such as disinfecting equipment and work boots with a ten percent bleach solution, be employed to help prevent the spread of the disease.		Recreation and USFWS
REC 5 Polyphagous and Kuroshio Shot Hole Borers (ISHBs)	<p>To minimize significant impacts: CDFW recommends an analysis that considers the impacts of Project activities on the potential spread of ISHBs. Figures that depict potentially sensitive or susceptible vegetation communities within the Project areas, the known occurrences of ISHBs within the project areas (if any), and ISHBs proximity to above referenced activities, should be included.</p> <p>Additionally, please modify the Best Management Practices to include measures to limit the spread of ISHBs. Examples of appropriate measures include:</p> <ul style="list-style-type: none"> i. education of on-site workers regarding ISHBs and their spread j. reporting signs of ISHB infestation, including sugary exudate (“weeping”) on trunks or branches and ISHB entry/exit-holes (about the size of the tip of a ballpoint pen), to the Department and UC Riverside’s Eskalen Lab k. equipment disinfection l. pruning infected limbs in infested areas where project activities may occur m. avoidance and minimization of transport of potential host tree materials n. chipping potential host materials to less than 1 inch and solarization, prior to delivering to a landfill o. chipping potential host materials to less than 1 inch, and solarization, prior to composting on-site; p. solarization of cut logs and/or burning of potential host tree materials. 	Prior to and during Project activities	California Department of Parks and Recreation and USFWS
REC 7 Sensitive Marine Habitats	CDFW recommends the FEIR/FEIS include a map that shows the distance and direction to the nearest hard bottom reef in relation to the beach placement footprint. The FEIR/FEIS should clarify if sediment being distributed across the beach profile will involve equipment operating below the mean high tide line. CDFW recommends all beach placement operations avoid equipment below the mean high tide line, unless sediment is being placed in the swash zone due to high sand content. CDFW also recommends a long-shore and cross-shore sediment transport model be used to identify appropriate sediment placement volumes and locations to avoid or minimize marine habitat and river mouth impacts. Results	Prior to and during Project activities	California Department of Parks and Recreation and USFWS

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	from the sediment transport model should be included in the FEIR/FEIS.		
REC 8 Impacts to Marine Fish	CDFW recommends potential impacts to marine fish should be identified in the FEIR/FEIS and any significant impacts should be avoided and minimized to below a level of significance. A list and description of fish species and the fisheries management plans can be found on the CDFW's website (https://wildlife.ca.gov/Conservation/Marine).	Prior to and during Project activities	California Department of Parks and Recreation and USFWS
REC 9 California Grunion	CDFW appreciates the inclusion of a grunion monitoring plan and recommends the following additional measures be incorporated into the plan to further minimize impacts: a. CDFW recommends all beach nourishment activities occur outside of the grunion spawning season (March through August). If beach placement does occur during the grunion spawning season, the locations of the spawning run should be marked physically and/or by Global Positioning System (GPS) locations. The density of the grunion throughout the area should be noted using the Walker Scale. The Project should ensure that maintenance workers avoid the spawning area and that a 50-foot buffer is used to avoid impacting any spawning areas adjacent to the sediment placement sites. If grunion spawning occurs within the Project area, work in that area below the mean high tide line should not be conducted until after the grunion eggs have hatched (2 weeks). b. CDFW recommends that removal of sand from the river mouth also occur outside of the grunion spawning season. If sediment removal occurs during the grunion spawning season, a grunion monitoring plan as stated above should be implemented and include coordination with CDFW.	Prior to and during Project activities	California Department of Parks and Recreation and USFWS
REC 10 Pismo Clams	Recommendation #10: Pismo clam surveys should be conducted according to the best available methods. If the species and/or their habitat is identified, pre-and post-construction surveys and biological monitoring should be conducted as applicable, and impacts should be avoided and/or minimized.	Prior to and during Project activities	California Department of Parks and Recreation and USFWS
REC 11 Tijuana River Mouth State	CDFW recommends the following mitigation measures be incorporated into the FEIR/FEIS to avoid and minimize impacts the Tijuana River Mouth SMCA from the	Prior to and during	California Department of Parks and

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<p>Marine Conservation Area (SMCA)</p>	<p>proposed sediment placement work within or adjacent to the Tijuana River Mouth SMCA and the Tijuana River inlet.</p> <p>a. Baseline Assessment: The marine habitats and species that occupy the Tijuana River Mouth SMCA should be identified with baseline surveys and impact assessments. Additionally, CDFW recommends Tijuana River Mouth SMCA sediments and water quality within the beach fill footprint be sampled pre-construction to identify baseline conditions. Potential direct and indirect construction and sediment placement impacts below or adjacent to the mean high tide line boundary should be identified.</p> <p>b. Minimization Measures: To the extent feasible, CDFW recommends that all beach nourishment construction work occur outside the SMCA boundaries (above the mean high tide line) to avoid and minimize Project impacts to marine habitat, species, and water quality. Construction routes and staging areas should be geo-referenced on maps in relation to the SMCA boundaries showing potential areas of impact and avoidance and minimizing mitigation measures. To protect the Tijuana River Mouth SMCA from daily construction impacts, biological monitoring should take place on site during construction to avoid or minimize impacts to sensitive habitat or water degradation below the mean high tide boundary line. If long-term impacts to species and/or habitat are anticipated within the SMCA, habitat monitoring should be conducted. CDFW recommends the Project proponent consult with CDFW regarding the SMCA boundaries, allowable uses, and appropriate mitigation measures.</p>	<p>Project activities</p>	<p>Recreation and USFWS</p>
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