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July 12, 2021

July 13 2021

STATE CLEARINGHOUSE

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Subject: Comments on the Notice of Preparation of a Draft Environmental Impact Report for Tijuana Estuary Tidal Restoration Program II Phase I (TETRP II Phase I); Environmental Impact Report/Environmental Impact Statement (Project); #2021050599

Dear Mr. Collins:

The California Department of Fish and Wildlife (CDFW) received a Notice of Preparation/Notice of Intent (NOP/NOI) of a Draft Environmental Impact Report/Draft Environmental Impact Statement (DEIR/DEIS) from the California Department of Parks and Recreation (Department of Parks and Recreation) for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines, and in coordination with the U.S. Fish and Wildlife Service (USFWS) as Lead Agency for the National Environmental Policy Act (NEPA).

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 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.), related authorization as provided by the Fish and Game Code will be required.

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PROJECT DESCRIPTION SUMMARY

Proponent: California Department of Parks and Recreation and the United State Fish and Wildlife Service (USFWS).

Objective: TETRP II Phase I is the first phase of a multi-phase restoration of the southern arm of the Tijuana Estuary as 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 80 to 85 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 NOP describes two alternatives:

1. Alternative 1: (Maximum Tidal Prism) is currently identified as the proposed action. This alternative, which would restore approximately 85 acres of coastal habitat, would maximize deeper intertidal habitats, by expanding tidal channels and intertidal mudflat.
2. Alternative 2: (Reduced Impact Alternative), which would restore approximately 80 acres of coastal habitat, has been designed to preserve existing native plant communities, including high salt marsh and transition zone throughout the project site. The primary tidal connection to Alternative 2 is the existing South Beach Slough, which would be deepened to increase tidal flows into the proposed restoration site.

Location: TETRP II Phase I project site is 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 (TRNERR), which includes Border Field State Park and the Tijuana Slough National Wildlife Refuge (NWR).

Biological Setting: Preliminary biological analysis identifies the following sensitive habitats on site: subtidal; southern coastal marsh, including intertidal low marsh and intertidal high marsh; mud flat; sand flat; salt flat; alkali meadow; tidal channel; beach; coastal dune; and upland transitional.

Special status bird species with the potential to occur near the Project include: the federally and State endangered and California Fully Protected California least tern (*Sterna antillarum browni*), the federally endangered and California Fully Protected light-footed Ridgway's rail (*Rallus obsoletus levipes*), State endangered Belding's savannah sparrow (*Passerculus sandwichensis beldingi*), the federally threatened western snowy plover (*Charadrius alexandrinus nivosus*), and California Species of Special Concern (SSC) burrowing owl (*Athene cunicularia*). The California threatened and Fully Protected California black rail (*Laterallus jamaicensis coturniculus*) was historically reported from lagoons in coastal San Diego County but there have been no detections for approximately 40 years and this species is not believed to be potentially affected by the Project,

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

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There is potential for SSC 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 SSC California glossy snake (*Arizona elegans occidentalis*), SSC Baja California coachwhip (*Masticophis fuliginosus*), SSC two-striped garter snake (*Thamnophis hammondi*), and SSC Blainville's horned lizard (*Phrynosoma blainvillii*).

Sensitive marine reptiles offshore of the proposed beach fill Project include but are not limited to the State Candidate Endangered Leatherback sea turtle (*Dermochelys coriacea*).

Sensitive marine fish species and their habitat such as California grunion (*Leuresthes tenuis*, grunion) spawn on the sandy upper intertidal beach. Important commercial and recreational fish species and their habitat, such as barred sand bass (*Paralabrax nebulifer*), California halibut (*Paralichthys californicus*), and rockfish (*Sebastes spp.*) have the potential to spawn, shelter, and forage in the nearshore sensitive habitats such as cobble reef, rocky reef, surfgrass, eelgrass, and kelp 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 gravida*; 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 California spiny lobster (*Panulirus interruptus*), abalone (*Haliotis spp.*), and Pismo clams (*Tivela stultorum*). Their habitat includes surfgrass, eelgrass, marine algae, kelp, cobble reef, rocky reef, macrophyte beach wrack, and the sandy intertidal and subtidal.

Sensitive terrestrial and estuarine plants in the vicinity of the Projects include but are not limited to: Federally and State endangered salt marsh bird's-beak (*Chloropyron maritimum* ssp. *maritimum*), State endangered Baja California birdbush (*Ornithostaphylos oppositifolia*), California Native Plant Society (CNPS) Rare Plant Rank 1B.1 Nuttall's acmispon (*Acmispon prostrates*), Orcutt's dudleya (*Dudleya attenuata* ssp. *orcuttii*), CNPS 1B.1 beach goldenaster (*Heterotheca sessiliflora* ssp. *sessiliflora*), CNPS 1B.1 Orcutt's pincushion (*Chaenactis glabriuscula* var. *orcuttiana*), CNPS 1B.1 Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), CNPS 1B.1 Brand's star phacelia (*Phacelia stellaris*), CNPS 1B.2 coast woollyheads (*Nemacaulis denudata* var. *denudata*), CNPS 1B.2 San Diego sand aster (*Corethrogyne filaginifolia* var. *incana*), CNPS 1B.2 estuary seablite (*Suaeda esteroa*), CNPS 1B.2 south coast saltscale (*Atriplex pacifica*), CNPS 1B.2 aphanisma (*Aphanisma blitoides*), and CNPS 2B.2 sea dahlia (*Leptosyne maritima*).

Sensitive marine plants and algae in the vicinity of the beach fill Project may include but are not limited to: eelgrass (*Zostera marina*) and (*Zostera pacifica*), surfgrass (*Phyllospadix scouleri* and *Phyllospadix torreyi*), and giant kelp (*Macrocystis pyrifera*).

Timeframe: A time frame was not provided for the Project.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the Department of Parks and Recreation and the USFWS in adequately identifying and/or mitigating the Project's significant, or

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potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources. Based on the potential for the Project to have a significant impact on biological resources, CDFW agrees that an EIS/DEIR is appropriate for the Project.

Listed Species and California Species of Special Concern

CESA-listed species

1. A review of the California Natural Diversity Database (CNDDDB) indicates the presence of State-listed species, including Belding's savannah sparrow, leatherback sea turtle, Baja California birdbush, and salt marsh bird's-beak in the Project vicinity. Project related activities may adversely impact potential habitat for this species. CDFW considers adverse impacts to a species protected by CESA to be significant without mitigation under CEQA. Take of any endangered, threatened, candidate species, or State-listed rare plant species that results from the Project is prohibited, except as authorized by state law (Fish and Game Code, §§ 2080, 2085; Cal. Code Regs., tit. 14, §786.9). As identified in the NOP, if the Project, Project construction, and Project-related activities during the life of the Project may result in take of a species designated as endangered or threatened, CDFW recommends that the Project Proponent seek appropriate take authorization under CESA prior to implementing the Project. Appropriate authorization from CDFW may include an Incidental Take Permit (ITP) or a Consistency Determination in certain circumstances, among other options (Fish & G. Code, §§ 2080.1, 2081, subds. (b) and (c)). CDFW encourages early consultation because significant modification to a Project and mitigation measures may be required to obtain a CESA Permit. Revisions to the Fish and Game Code, effective January 1998, may require that CDFW issue a separate CEQA document for the issuance of an ITP unless the Project CEQA document addresses all Project impacts to CESA-listed species and specifies a mitigation, monitoring, and reporting program that will meet the requirements of an ITP. For these reasons, biological mitigation, monitoring, and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for a CESA ITP.

California Fully Protected species

2. Light-footed Ridgway's rails and California least terns are both federally and State endangered, as well as Fully Protected per section 3511 of the Fish and Game Code. Due to the Fully Protected status of this species, CDFW is unable to authorize take of these species, as defined by section 86 of the California Fish and Game Code.

CDFW recommends avoidance of occupied habitat to the extent practicable. For unavoidable impacts to occupied habitat CDFW recommends avoidance measures be included in the EIS/DEIR. These measures should include but are not limited to:

- a. When initiating activities within 500 feet of California least tern suitable habitat, a qualified biologist shall conduct focused species-specific surveys prior to activity initiation. If light-footed Ridgway's rail, California black rail, or least terns are noted on-site or immediately adjacent within 500 of Project impacts, CDFW and USFWS, collectively known as the Wildlife Agencies, will be contacted; no work shall begin until the Wildlife Agencies have been notified and appropriate buffers are established (i.e. a minimum of 500 feet). The buffer shall remain in place until the nest has fledged or is no longer active.

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- b. When conducting work within suitable habitat the Project biologist or designated biological monitor shall be on-site during construction to ensure that buffers are maintained and that listed or Fully Protected species and/or their nests are avoided.

Federally listed species

3. Western snowy plovers are known to use salt flat habitat within the Tijuana Estuary (Zedler *et al* 1992). Loss of suitable nesting habitat, due to the type conversion of salt flat openings has the potential to impact the species. Although salt marsh is a desirable habitat for many species, the Project may lead to a net loss of acres of suitable nesting habitat for western snowy plovers. Loss of occupied or suitable habitat may affect and would likely adversely affect the species and therefore be considered take under the Federal Endangered Species Act (FESA). Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required to determine species presence under FESA. If present, the EIS/DEIR should disclose potential impacts to the species as well as proposed avoidance and mitigation measures. CDFW considers impacts to federally threatened species a significant direct and cumulative adverse effect without the implementation of appropriate avoidance and/or mitigation measures. If impacts are proposed to occupied or suitable habitat or adjacent habitats, CDFW recommends that the EIR/DEIS include consultation with the USFWS at the earliest opportunity as take authorization may be required.
4. Southern California steelhead (*Oncorhynchus mykiss irideus*; distinct population segment 10) are federally endangered and are considered extirpated from the Tijuana River Watershed; however, efforts are being made to recover the species where it has been historically present. The Project may impact future access to upstream habitat for the species. Restoration of the mouth of the Tijuana River should consider fish passage for anadromous fishes and other issues such as sedimentation and turbidity.
5. Federally endangered abalone species that may occur in nearshore rocky habitat includes Black abalone (*Haliotis cracherodii*) and White abalone (*Haliotis sorenseni*). Additionally, CDFW considers them rare, and they are managed by CDFW Abalone Recovery and Management Plan. Black abalones are found in rocky habitat in the low intertidal zone, up to 6 m deep. White abalone are found at 24-to-60-meter depths in low and high relief rock or boulder habitat (<https://wildlife.ca.gov/Conservation/Marine/ARMP>).

California Species of Special Concern

6. Burrowing owls are known to occupy areas near potential Project impacts. The CDFW Staff Report on Burrowing Owl Mitigation Appendix D: Breeding and Non-breeding Season Surveys and Reports contains the recommended survey requirements including suitable avoidance buffers (2012). Early coordination with CDFW and USFWS, collectively known as the Wildlife Agencies, is recommended if burrowing owls are detected within the Project area.
7. Sensitive reptiles have been identified within the vicinity of the Project, CDFW recommends that the Project incorporate avoidance and minimization measure that include exclusion methods to prevent these species from entering construction areas.
8. 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 Projects. Western spadefoot typically breed in vernal pools and other seasonal water basins and spend much of the year in

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earth-filled burrows. 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. 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 DEIR 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.

Other Sensitive Terrestrial Wildlife Species

9. Black-tailed jackrabbits have the potential to be present in and around Project areas, and Project personnel should be made aware of Rabbit Hemorrhagic Disease (RHD), which can cause 70 to 100 percent mortality in individuals. 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.
10. Sensitive terrestrial invertebrates have been identified in the vicinity of the Project. Surveys should be conducted according to the best available methods, disclosed in the DEIR/DEIS, and species avoided to the extent practicable.

California Rare Plant Rank 1B.1 and 1B.2 plants

11. CNDDDB also documents the presence of California Rare Plant Rank 1B.1 and 1B.2 plants. The DEIR should include a report of seasonally appropriate surveys in all areas with suitable habitat for sensitive plants, conducted within the last two years. If present, the DEIR should disclose potential impacts to the species as well as proposed avoidance and mitigation measures.

Sensitive Marine Species

12. The California marine fisheries management plans including Pelagic, Highly Migratory, and Near-shore management plan have fish species that utilize the coastal nearshore adjacent to the Project area for their habitat. Many important commercial and recreational fish species, use the Project area for breeding, shelter, spawning, foraging, and resting. California fisheries management plans should be addressed in the DEIR/DEIS. Potential impacts to marine fish should be identified 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 Department's website (<https://wildlife.ca.gov/Conservation/Marine>).
13. Grunion is a sensitive species and vulnerable to beach fill projects within the intertidal, and nearshore. This species is ecologically, recreationally, and culturally important in southern California. They are vulnerable to human disturbances during their reproductive cycle because they spawn out of water on the upper intertidal where they bury their eggs. Additionally, they are not an abundant species, and they have a limited spawning habitat range within southern California and northern Baja California, much of which is disturbed or degraded. Grunion is also an important prey species for fishery management plan species and protected marine wildlife. Published documents and literature can be found at <https://wildlife.ca.gov/Fishing/Ocean/Grunion#28352307-grunion-facts-and-faqs>, and at www.grunion.org. The placement of beach sand and other construction activities during the

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grunion spawning season could result in significant localized impacts since grunion have the potential to spawn on the sandy beach within the proposed beach fill footprint during spawning season. The CDFW recommends that impacts during the grunion season be avoided, and that monitoring and minimization strategies include, but not be limited to, the following:

- a. Sediment deposition, beach driving, or bulldozing in the intertidal should be conducted outside of the grunion spawning season from March 1st to August 31st.
 - b. If avoiding the grunion spawning season is not feasible, then the CDFW recommends the development of a CDFW-approved spawning and egg nest mitigation and monitoring plan.
14. The California spiny lobster, a California marine invertebrate fisheries management plan species, may utilize the coastal nearshore adjacent to the beach fill Project because their habitat, consisting of rocky and cobble reef, kelp, and surfgrass, is present in the nearshore. This species and their habitats are vulnerable to indirect burial and sedimentation impacts. Abalone species populations found in San Diego County are considered rare due to human disturbances and coastal development. California invertebrate management plans should be identified and discussed in the DEIR/DEIS, and if appropriate, surveys should be conducted according to the best available methods. If abalone and lobster and/or their habitat is identified, impacts to the species and/or their habitat should be avoided and/or minimized to below a level of significance. A list and description of invertebrate species management plans can be found on the Department's website (<https://wildlife.ca.gov/Conservation/Marine>).
15. Pismo clams are a state recreationally managed species that tends 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 and Imperial Beach beaches in the intertidal and subtidal zones, and they are vulnerable to direct and indirect burial impacts from beach fill projects. 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 to insignificant.

Project Description and Alternatives

16. To facilitate meaningful review of the Project from the standpoint of the protection of plants, fish, and wildlife, CDFW recommends the following information be included in the DEIR:
- a. the document should contain a complete discussion of the purpose and description of the Project, including all staging areas and access routes to the construction and staging areas;
 - b. the DIER should include a range of feasible alternatives to ensure that alternatives to the Project are fully considered and evaluated; the alternatives should avoid or otherwise minimize impacts to sensitive biological resources. And,
 - c. all Project Alternatives should consider the effects of potential future sea level rise on habitat modifications.

Biological Baseline Assessment

17. CDFW has responsibility for wetland and riparian habitats. CDFW strongly discourages development in wetlands or conversion of wetlands to uplands. CDFW opposes any

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development or conversion that would result in a reduction of wetland acreage or wetland habitat values, unless, at a minimum, project mitigation assures there will be “no net loss” of either wetland habitat values or acreage. Development and conversion include but are not limited to conversion to subsurface drains, placement of fill or building of structures within the wetland, and channelization or removal of materials from the streambed. All wetlands and watercourses, whether ephemeral, intermittent, or perennial, should be retained and provided with substantial setbacks that preserve the riparian and aquatic values and maintain their value to on-site and off-site wildlife populations. Mitigation measures to compensate for impacts to aquatic resources must be included in the DEIR.

- a. 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.* The NOP does not specify which organization will be the lead for conducting the groundwork within the tidal channels. CDFW suggest early coordination to determine if notification to CDFW is appropriate.
- b. CDFW’s issuance of a Lake or Streambed Alteration Agreement (LSAA) 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 Environmental Impact Report of the local jurisdiction (Department of Parks and Recreation) for the Project. To minimize additional requirements by CDFW pursuant to section 1600 *et seq.* and/or under CEQA, the DEIR should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSAA.
- c. A preliminary delineation of the streams and associated riparian habitats should be included in the DEIR. The delineation should be conducted pursuant to the USFWS wetland definition adopted by CDFW (Cowardin *et al.* 1979). Be advised that some wetland and riparian habitats subject to CDFW’s authority may extend beyond the jurisdictional limits of the U.S. Army Corps of Engineers’ section 404 permit and Regional Water Quality Control Board section 401 Certification.
- d. In Project areas which may support ephemeral streams, herbaceous vegetation and woody vegetation also serve to protect the integrity of these resources and help maintain natural sedimentation processes; therefore, CDFW recommends effective setbacks be established to maintain appropriately sized vegetated buffer areas adjoining ephemeral drainages. If these buffer areas are proposed for impact, they should be included in the sensitive habitat impact analysis.
- e. Project-related changes in drainage patterns, runoff, and sedimentation should be included and evaluated in the DEIR.
- f. As part of the LSAA Notification process, CDFW requests a hydrological evaluation of the 100-, 50-, 25-, 10-, 5-, and 2-year frequency storm event for existing and proposed conditions. CDFW recommends the DEIR evaluate the results and address avoidance, minimization, and/or mitigation measures that may be necessary to reduce potential significant impacts.

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establish baseline vegetation conditions.

Marine Biological Species and Habitat Baseline Assessments

- f. if beach placement of excavated sediment is chosen for beneficial re-use, the sediment placement areas within, and adjacent to, the beach fill footprint, should be included in a site-specific baseline marine resources survey and impacts assessment. This would include the Tijuana River mouth, sandy beach intertidal areas, and nearshore below the mean high tide to identify sensitive or vulnerable beach species, macrophyte wrack habitat, beach spawning fish and their egg nests, and marine habitats and species within the potential areas of impacts. This should be performed to accurately assess direct and indirect beach fill impacts to fish and wildlife. Historical marine biological species and habitats for the Project area may be found in the Marine BIOS database on the CDFW's website (<https://wildlife.ca.gov/Conservation/Marine/GIS/MarineBIOS>). CDFW recommends the marine biological survey and impact assessment reports include a summary table listing each Project component affecting each habitat, the total area of habitat impacted, and proposed mitigation measures for avoiding and minimizing impacts.
- g. Tijuana River Mouth State Marine Conservation Area (Tijuana River Mouth SMCA) west boundary line (mean high tide line) is located within and/or adjacent to the entire length of the proposed beach fill footprint where direct or indirect impacts are likely to occur depending on how and where the beach fill Project is constructed. The marine habitats and species should be identified with comprehensive 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. Pre-and post-construction eelgrass or surfgrass surveys should be conducted if eelgrass or surfgrass is found in the potential area of impact including Tijuana River mouth, and the estuary where suitable habitat may exist. Potential direct and indirect construction and sediment placement impacts below or adjacent to the mean high tide line boundary should be identified with maps and diagrams. The CDFW defines the Tijuana River Mouth SMCA as having an area of 3.02 square miles, a shoreline span of 2.2 miles, a depth range of 0 to 55 feet, and has identified the following key habitats:
 - i. Sandy Beaches: 2.09 square miles
 - ii. Rock: 0.59 square mile
 - iii. Unidentified/other: 0.34 square mile(<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=98231&inline>)

Biological Direct, Indirect, and Cumulative Impacts and Proposed Mitigation Measures

19. To facilitate meaningful review of the Project's potential impacts on biological resources, CDFW recommends the DEIR/DEIS provide a thorough discussion on direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts.
 - a. Marine Impacts: Regarding marine biological impacts, the beach fill Project activities may have direct and indirect impacts to marine species and habitats such as short and long-term burial, turbidity, sedimentation, scouring, and reduced water quality (e.g., harmful

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algal blooms). Specifically, beach fill activities may have significant impacts to sensitive and/or special-status resources including rocky reefs, cobble reefs, and associated reef community, benthic and epibenthic invertebrates, fish, marine algae, and seagrasses. Additionally, the Tijuana River mouth could be indirectly impacted if beach fill sediment volumes placed on the beach are significant enough to cause shoaling and/or complete closing of the river mouth which may cause an emergency dredge condition.

Contaminated or inappropriately high silt and organic content sediments may be placed on the beach that are not clean, beach compatible sediment causing beach sand compaction impacts to the intertidal benthic invertebrate prey base and the higher trophic level fish and shorebirds that forage in the intertidal. Long-shore and cross-shore sediment transport will eventually begin once sediment volumes are placed onto the beach. Large volumes of sediment placed on the beach can have significant marine habitat and river mouth impacts such as burial, river mouth shoaling and closures, scouring, turbidity, reduced water quality and sedimentation depending on the sediment volumes, beach placement locations, and methods.

- b. Indirect Impacts: a discussion of potential adverse impacts from lighting, noise, exotic species, and human activity and proposed mitigation measures to alleviate such impacts.
 - i. Adjacent Resources: the DEIR should include a discussion regarding indirect Project impacts on biological resources, including resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands (e.g., preserve lands associated with NCCPs). Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in adjacent areas, should be fully evaluated in the DEIR.
- c. Mitigation Measures: the DEIR should include mitigation measures for adverse Project-related impacts to sensitive plants, animals, and habitats. Mitigation measures should emphasize avoidance and reduction of Project impacts. For unavoidable impacts, on-site habitat restoration or enhancement should be discussed in detail and should include measures to provide compensation for temporal losses.
 - i. Sensitive Bird Species: to avoid impacts to nesting birds, the DEIR should require that, when biologically warranted, construction (especially clearing and rough grading) would occur outside of the peak avian breeding season which generally runs from February 1 through September 1 (as early as January 1 for some raptors). 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 State 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 shall 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, ambient levels of human activity, screening vegetation, or possibly other factors.

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- ii. Translocation: CDFW generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or endangered species. Studies have shown that these efforts are experimental in nature and largely unsuccessful.
- iii. Biological Monitor: a biological monitor shall be present on site during all initial grubbing and clearing of vegetation to ensure that perimeter construction fencing is being maintained and to minimize the likelihood that nests containing eggs or chicks are abandoned or fail due to construction activity. A biological monitor shall also perform of the construction site during all initial and major grading to ensure that impacts to sensitive plants and wildlife are minimized. These inspections should take place once or twice a week, as defined by the Wildlife Agencies, depending on the sensitivity of the resources. The biological monitor shall notify the Wildlife Agencies immediately if clearing is done outside of the Project footprint

d. Marine Protected Area Mitigation Measures

The following Marine Protected Area (MPA) mitigation measures should be incorporated into a MPA Impact Avoidance, Minimization and Monitoring plan for the proposed sediment placement work within or adjacent to the Tijuana River Mouth SMCA and the Tijuana River inlet.

- i. Avoidance and Minimization Measures: Construction work and staging within or adjacent to the MPA should be identified and described either above the mean high tide (outside the MPA boundary) or below the mean high tide (inside the MPA boundary). Additionally, equipment, vehicle routes, dump trucks, bulldozers, and workers should travel, set up and operate outside the MPA boundaries to the extent feasible to avoid and minimize significant Project impacts to marine habitat, species, and water quality. All driving, dumping, bulldozing routes and locations should be geo-referenced on maps and diagrams in relation to the MPA boundaries showing potential areas of impact and avoidance and minimizing mitigation measures. The Project proponent should consult with CDFW regarding the MPA boundaries, allowable uses, and MPA mitigation measure plans should be submitted for CDFW review and approval. MPA information can be found on CDFW's website, <https://wildlife.ca.gov/Conservation/Marine/MPAs/Network/Southern-California>).
- ii. Avoidance Measures: To the extent feasible, CDFW recommends using other sediment disposal options for clean sediments such as the dune restoration option of the Project, and choosing construction methods within the MPA designed to fully avoid significant fish and wildlife habitat and community impacts. To protect Tijuana River Mouth SMCA from daily construction impacts, biological monitoring should take place on site during construction to avoid or minimize significant sensitive habitat damage or water degradation below the mean high tide boundary line. If necessary, long-term habitat monitoring should be conducted to identify indirect and long-term impacts. A separate Marine Protected Area Protection, Mitigation and Monitoring plan should be developed in collaboration with the CDFW to address MPA marine habitat, species, water quality protection, mitigation, monitoring and reporting. The CDFW should review and approve all draft and final MPA surveys, and protection and mitigation plans.
- iii. If beach fill is chosen for sediment disposal, a sediment assessment sampling plan

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should be developed, and only clean, beach compatible sand placed, which is similar to receiver beach sediment size, color, and percent silt content.

- iv. Long-shore and cross-shore sediment transport modeling should be done to identify appropriate sediment placement volumes and locations to avoid or minimize significant marine habitat and river mouth impacts.
- e. Cumulative Effects: a cumulative effects analysis should be developed as described under CEQA Guidelines, section 15130. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to the DEIR impacts on similar wildlife habitats.
 - i. The Project should consider coordination with the Environmental Protection Agency (EPA) on United States Mexico Canada Agreement (USMCA) Mitigation of Contaminated Transboundary Flows Project number Six to prevent potential overlap and conflict.
 - ii. Cumulative marine habitat and species beach fill Project impacts should be considered.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a data base 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 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 NOP to assist the Department of Parks and Recreation and USFWS in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Jennifer Turner, at Jennifer.Turner@wildlife.ca.gov or Loni Adams for marine region comments at Loni.Adams@wildlife.ca.gov.

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Sincerely,

DocuSigned by:



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