RECORD OF DECISION

Tijuana Estuary Tidal Restoration Program II, Phase I

(TETRP II Phase I)

Tijuana Slough National Wildlife Refuge

San Diego County, California

May 2023

This document should be cited as follows:

U.S. Fish and Wildlife Service. 2023. Record of Decision. Tijuana Estuary Tidal Restoration Program II Phase I, Tijuana Slough National Wildlife Refuge. San Diego County, CA.

RECORD OF DECISION

Tijuana Estuary Tidal Restoration Program II Phase I

Final Environmental Impact Statement

Introduction

This Record of Decision (ROD) for the Tijuana Estuary Tidal Restoration Program II Phase I (TETRP II Phase I), which has been prepared in accordance with 40 CFR § 1505.2, documents my decision and rationale for selecting Alternative 2, as described in the TETRP II Phase I Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR), for implementation. Under Alternative 2, approximately 68 acres of coastal wetlands and 15 acres of native transitional and upland habitat would be restored within the Tijuana Estuary. The restoration site is located within southwestern San Diego County, California (Attachment 1 – Project Location) and is included within the boundaries of the Tijuana River National Estuarine Research Reserve. The project represents a partnership between the U.S. Fish and Wildlife Service (USFWS) and the California Department of Parks and Recreation (CDPR), with the northern portion of the restoration site located within the Tijuana Slough National Wildlife Refuge and the southern portion located within Border Field State Park. The U.S. Army Corps of Engineers participated in this process as a Cooperating Agency.

Alternatives Considered in the Draft and Final EIS

In accordance with 40 C.F.R. § 1502.14, the USFWS analyzed two action alternatives and the no action alternative in the draft and final EIS/EIR and provided the analyses for public review and comment. Both action alternatives propose restoration on land situated just to the east of the Pacific Ocean and northwest of Monument Road in the Tijuana River Valley (see Attachment 1). Each alternative is summarized below.

Alternative 1 - Alternative 1 was designed to maximize deeper intertidal habitats, such as mudflat and low marsh habitats. The restoration footprint for Alternative 1 includes approximately 86.8 acres of primarily disturbed upland habitat located both north and south of the previously restored Model Marsh (Attachment 2). Under this alternative, approximately 18 acres of intertidal mudflat, 15.6 acres of low salt marsh, 34.8 acres of middle to high salt marsh, 9.0 acres of native transitional habitat (i.e., non-tidal habitat adjacent to the coastal wetland edge), and 2.6 acres of native upland habitat would be restored. The project would also create and/or improve 6.8 acres of intertidal channels. In addition, a 0.5-acre area of existing transitional and native upland habitat, generally located to the north of the restoration footprint, would be preserved under this alternative, but restored to wetlands under Alternative 2. Under both alternatives, a network of newly constructed intertidal channels would connect to existing tidal channels that extend north, providing a connection to the Tijuana River mouth and the Pacific Ocean.

The primary tidal connection under Alternative 1 would be from the existing South Beach Slough, which currently provides tidal flows to the Model Marsh. A smaller area of restored wetlands at the eastern edge of the restoration site would receive tidal flows from a connection to the Old River Slough. To facilitate drainage of the restored wetlands during low tide, Alternative 1 would deepen the existing South Beach Slough.

Excavation to create the restored wetlands under Alternative 1 would generate approximately 585,000 cubic yards of material. Approximately 5,000 cubic yards would be used to create transitional habitat within the project site. Various disposal options for the excavated material are identified including trucking the material off-site to appropriate locations east of the project site and/or disposing of suitable material on the upper beach or in the swash zone depending upon the percent of sand content in the sediment.

During the implementation of Alternative 1, significant impacts related to water quality and biological resources could occur, as summarized below, and described in detail in Sections 4.3 and 4.6 of the Final EIS.

Alternative 2 - Alternative 2 focuses on restoring higher elevation salt marsh habitat within a restoration footprint of approximately 83.6 acres (Attachment 3). Habitats to be restored under Alternative 2 include: 6.4 acres of intertidal mudflat, 22.9 acres of low salt marsh, 33.5 acres of middle to high salt marsh, 11.8 acres of native transitional habitat, and 2.8 acres of native upland habitat. This alternative also proposes to create and/or improve 5.1 acres of intertidal channels, as well as preserve 1.1 acres of existing transitional habitat and 0.1 acres of native upland habitat in the northwestern portion of the project site. Additionally, a 3.5-acre area of native transitional habitat that would be restored to wetlands under Alternative 1 would be preserved under Alternative 2.

Similar to Alternative 1, a system of tidal channels would be established to connect the restored habitat to existing tidal channels. Under Alternative 2, the restore wetlands would be connected at three locations, including two along the South Beach Slough and one at the Old River Slough. The existing South Beach Slough, which would be the primary tidal connection under this alternative, would be deepened to increase tidal flows into the proposed restoration area.

The implementation of Alternative 2, which proposes to restore fewer acres of mudflat habitat, would generate a lower volume of excavated material than Alternative 1. Under Alternative 2, approximately 514,000 cubic yards of material would be generated, of which 7,000 cubic yards would be used to create transitional habitat within the project site. The remaining 507,000 cubic yards would be disposed of using the same combination of disposal options described for Alternative 1.

During the implementation of Alternative 2, significant impacts related to water quality and biological resources could occur, as summarized below, and described in detail in Section 4.3 and 4.6 of the Final EIS.

No Action Alternative – Under the No Action Alternative, no restoration would occur, and most of the site would remain at elevations above the influence of the tides. Implementation of the No Action Alternative would avoid those impacts to water quality and biological resources that could occur under Alternatives A or B during construction but would not address the adverse effects to the project area that have resulted from years of sedimentation from upstream sources. This accumulation of sediment has reduced the tidal prism within the estuary, and as a result, the velocity of the tidal flows in and out the estuary has deceased. Lower tidal velocities combined with an influx of sand within the mouth of the Tijuana River has resulted in the closure of the inlet on several occasions. Therefore, under the No Action Alternative, the potential for the inlet to close due to a buildup of sand within the inlet channel is likely to continue. In the past, inlet closure has resulted in impacts to water quality and biological resources. Following such a closure of the river mouth on March 28, 2016, the dissolved oxygen level in the estuary depleted to an anoxic condition. This caused a subsequent die-off of most oxygen-using organisms in the estuary including fishes and benthic invertebrates. Based on the current conditions, under the No Action Alternative, the estuary would be subject to impacts related to water quality and biological resources due to the potential for future inlet closures.

Measures to Avoid or Minimize Environmental Harm

In selecting Alternative 2 for implementation, the USFWS has adopted all practicable means to avoid or minimize environmental harm. Nevertheless, implementing Alternative 2 will result in temporary impacts related to water quality and biological resources, as described in the following discussion. These temporary impacts would also occur under Alternative 1. To avoid the potential for impacts to other resources, monitoring plans and/or specific design features (see Table 3-9 in the Final EIS) have been incorporated into the scope of the project, as described below.

The Final EIS for TETRP II Phase I evaluated the potential effects of the proposed restoration for 18 environmental issue areas, as summarized in Section 6.3 of the Final EIS. No significant direct or indirect effects, as defined by the National Environmental Policy Act, were identified for topics related to land use, recreation and public access, coastal processes, public safety, hazardous materials, sensitive native plant communities, wildlife movement, critical habitat, geology and soils, paleontological resources, visual resources, transportation, air quality, greenhouse gas emissions, noise, and environmental justice. In some cases, such as for cultural resources and environmental justice, measures have been incorporated into the project that will be implemented before and/or during the restoration process to avoid the potential for significant impacts.

Measures to avoid significant impacts to historic or archaeological resources that could be substantially damaged or destroyed during project-related excavation have also been incorporated into the scope of the project. These include: preparing a Monitoring and Discovery Plan prior to the issuance of required project regulatory permits; retaining a qualified archaeological monitor and a Kumeyaay cultural monitor to be present during all project-related ground-disturbing activities; conducting a cultural resources training session for project construction personnel; implementing specific procedures in the event of encountering human remains and/or funerary objects; and installing exclusionary fencing as needed to avoid inadvertent disturbance to known or discovered cultural resources.

The Monitoring and Discovery Plan, which will include the protocols to be followed in the event archaeological resources are encountered during project implementation, will be prepared in coordination with Tribal representatives. The final plan will be approved by California Department of Parks and Recreation and the USFWS's Regional Historic Preservation Officer.

To avoid significant impacts related to environmental justice, the project scope requires implementation of a public information program to be initiated in advance of any construction activities. The program will assist the surrounding community in understanding the purpose of the proposed project and disseminate pertinent project information in languages accessible to the community regarding restoration schedules, haul truck activity, and contact information for questions and concerns.

The measures that have been incorporated into the project to minimize environmental harm related to water quality and biological resources are described below.

Water Quality. Impacts to water quality during excavation will be avoided through adherence to the best management practices (BMPs) outlined in Table 4.3-2 of the Final EIS. These BMPs address turbidity, sediment, and erosion control measures, as well as soil and sediment management for spill prevention and control, temporary stockpile and solid waste management, appropriate work site practices, and a requirement for turbidity monitoring downstream of the project site during construction. Also, prior to construction, a Storm Water Pollution Prevention Plan (SWPPP) will be prepared that identifies the best management practices to be implemented during construction.

Water quality impacts were also evaluated for disposal options, including placement of suitable material on the adjacent beach in support of ongoing beach nourishment along the San Diego coastline. Monitoring requirements related to water quality include conducting grain size analysis prior to placing any excavated material on the beach or in the swash zone, and testing for contamination for regulated constituents (including bacteria) in coordination with the Southern California Dredged Material Management Team, if required by the permitting agencies. During beach nourishment, twice weekly water quality monitoring will be required

for regulated constituents within 100 feet (down current from placement). If water quality violations are identified, additional samples will be taken along the beach adjacent to the river mouth and/or other stormwater input locations to confirm violations are due to beach nourishment associated with the project. If the project is confirmed responsible for water quality violations, then beach nourishment will stop and soils in the immediate area of excavation will be diverted off-site to an appropriate reuse or disposal site. However, testing might not identify inactive or dormant bacteria. Further, if monitoring identifies exceedance for regulated constituents and halts current operations, this action will not necessarily avoid an impact that has already occurred. Therefore, there is the potential for significant temporary impacts to water quality resulting from activities related to beach nourishment. Monitoring of turbidity levels downstream of the project site will be conducted during construction activities to verify that erosion control measures are effective.

Biological Resources. If construction continues through the breeding season, construction noise will result in temporary significant impacts to federally and state-listed, special-status, and migratory bird species. Although the dynamic nature of the noise-generating construction equipment throughout the project site will limit the length of time a certain area is exposed to increased noise levels; overall noise will increase in adjacent habitats resulting in temporary adverse impacts to various bird species.

Proposed design features that would reduce the adverse impacts to nesting birds from construction noise, including equipping construction equipment, both fixed and mobile, with properly operating and maintained mufflers and housing engines on dredging equipment to the greatest extent feasible to minimize engine noise. Additionally, a biological monitor, experienced with each of the listed species, will be on-site during construction to conduct weekly surveys for nesting birds during the breeding season. If an active nest is observed, a fenced buffer will be established, and construction activities will be limited near the occupied nest until the nest is no longer active. No construction will occur within the fenced nest zone until the young have fledged and/or will no longer by impacted by the project. Additionally, removal of vegetation will be limited to outside of the breeding season, and prior to vegetation clearing, a pre-construction survey by a qualified biologist will be required. During construction, areas may be fenced if determined necessary to reduce the ability of light-footed Ridgway's rails to enter active construction zones.

Mitigation measures such as noise walls and restriction of construction activities to outside the breeding season were considered, but ultimately determined infeasible as described in the FEIS. Therefore, temporary noise impacts to sensitive biological species associated with the grading and soil management activities would be significant.

To avoid impacts to grunion, a qualified biologist will conduct grunion monitoring if beach nourishment activities are scheduled during the grunion spawning period (March through August) and the beach consists of less than 100 percent cobble (i.e., there is sand on the beach).

Public Involvement

Public involvement has been an essential component of the EIS process for TETRP II Phase I. The USFWS developed a list of individuals, organizations, Tribes, and local, State, and Federal agencies that would likely be interested in TETRP II Phase I. We communicated with the public, Tribes, and affected agencies at every step along the process, from initial scoping, through analysis and publication of the Draft and Final EIS/EIR. The comments and other input provided during the scoping process are addressed in Appendix B of the Final EIS/EIR. The comments on the Draft EIS and responses to those comments are provided in Appendix D of the Final EIS/EIR. Additionally, pursuant to C.F.R. 1502.17(b), a Summary of Submitted Alternatives, Information, and Analysis is presented in Chapter 8 of the Final EIS/EIR.

Three comments were received in response to the Notice of Availability of the Final EIS/EIR, one from the U.S. Environmental Protection Agency (EPA) and two from members of the public. The EPA's comment stated continued support for the USFWS's and CDPR's "prioritization of options to beneficially reuse sediments and . . . the commitment in the Final EIS/EIR to coordinate on permitting and adaptive management plans through the Southern California Dredged Material Management Team. In addition, the EPA stated: We appreciate the clarification about the USFWS's role in joint consultation with the CDPR and the additional environmental justice information provided in the Final EIS/EIR. The EPA notes that, while the project's haul routes may not have been optionally or specifically routed through areas with relatively high minority populations and existing environmental burdens, the lack of available options does not automatically mean that impacts are not disproportionately high and adverse to the affected communities. Overall, expanding the Traffic Control Plan in the Final EIS/EIR to include consideration of adjacent residents and to distribute trips to minimize impacts is an improvement that has the potential to mitigate some construction traffic-related impacts to communities with environmental justice concerns." Public comment #1 expressed appreciation for the proposal to restore habitat and improve water quality in the estuary. Public comment #2 stated appreciation for "the effort that has gone into preparing the TETRP II Phase I project, but urged taking into account the concerns of the nearby communities, the impact on the environment, and the financial burden of the project." All three comments are provided in the entirety in Attachment 4.

Decision

Informed by the summary of the submitted alternatives, information, and analyses in the Final EIS, together with any other material in the record determined to be relevant, including the comments received in response to the Notice of Preparation, and the comments on the analysis provided in the Draft EIS and associated responses and the comments on the Final EIS, I have selected Alternative 2 for implementation.

Under Alternative 2, the estuary's overall tidal prism would be expanded, but with a focus on the restoration of higher elevation salt marsh habitat, which takes into consideration the future effects of sea level rise. Alternative 2 also preserves areas of existing native transitional and upland habitat that would be restored to wetlands under Alternative 1.

I certify that the USFWS has considered all the alternatives, information, analyses, and objections submitted by State, Tribal, and local governments, and public commenters for consideration by the lead and cooperating agencies in developing the Final EIS, and that my decision provides the best balance of restoration activities to respond to the purpose and need, issues, and public comments, while complying with all applicable laws and regulations.

I intend to implement this decision as soon as possible to meet the timelines for obtaining other required permits and approvals. The earliest possible implementation date is 30 days after the EPA published their notice of the Final EIS in the Federal Register, which occurred on March 31, 2023.

PAUL SOUZA Digitally signed by PAUL SOUZA Date: 2023.05.22 14:38:59 -07'00'

Regional Director **Date**

Attachments:

Attachment 1 – Project Location

Attachment 2 – Alternative 1

Attachment 3 – Alternative 2

Attachment 4 – Comments Received for the Notice of Availability of the Final EIS

Attachments
to the
Record of Decision

Tijuana Estuary Tidal Restoration Program II, Phase I
(TETRP II Phase I)

Tijuana Slough National Wildlife Refuge

San Diego County, California

May 2023

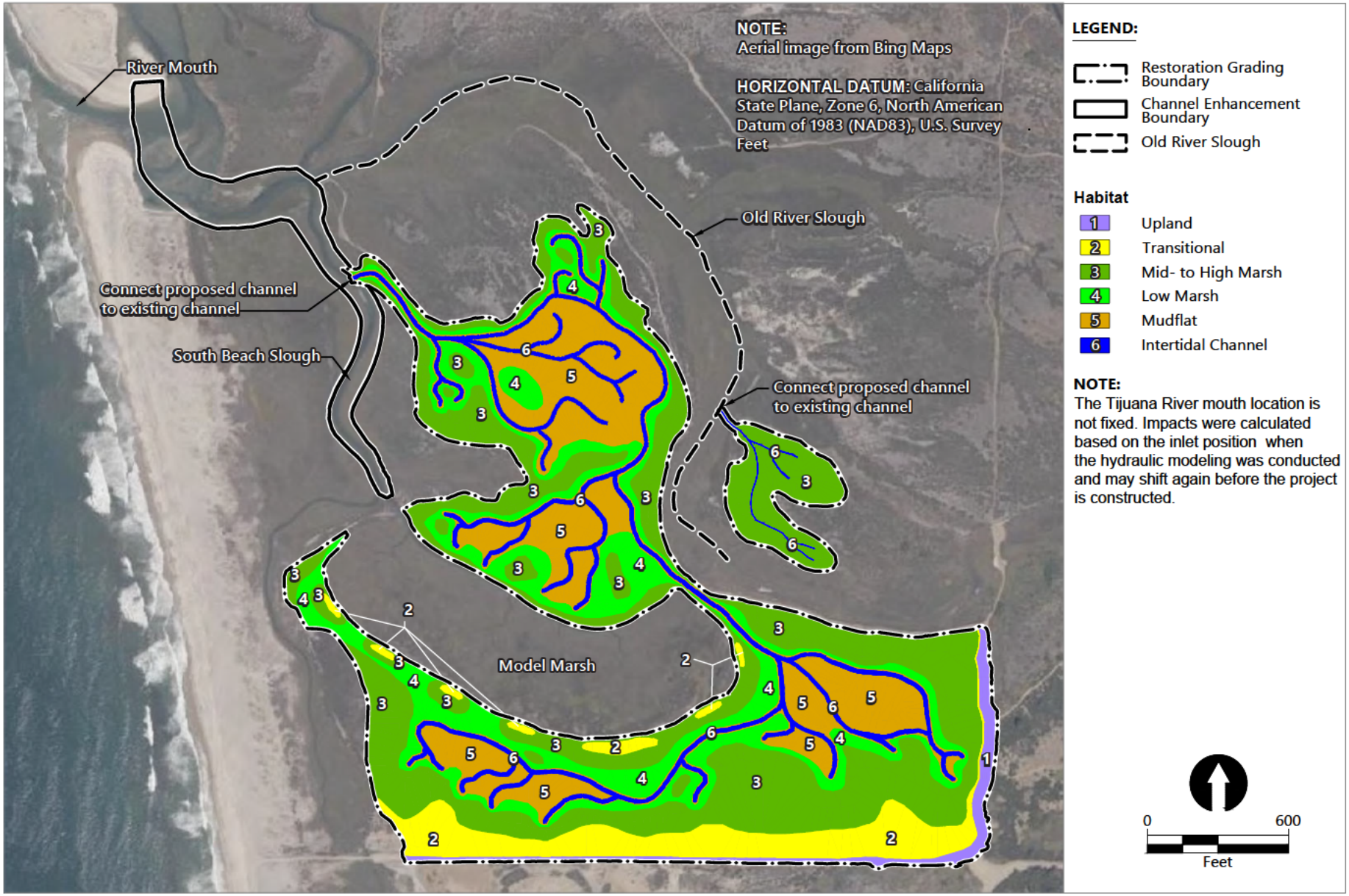
Note: The Tijuana River mouth location is not fixed. Impacts were calculated based on the inlet position when the hydraulic modeling was conducted and may shift again before the project is constructed.

Source: GoogleEarth 2021

606045881\Figure 2-2 Project Location.ai dbrady 05/17/2022

San Diego County, California
TETRP II Phase I EIR/EIS

ATTACHMENT 1 - PROJECT LOCATION

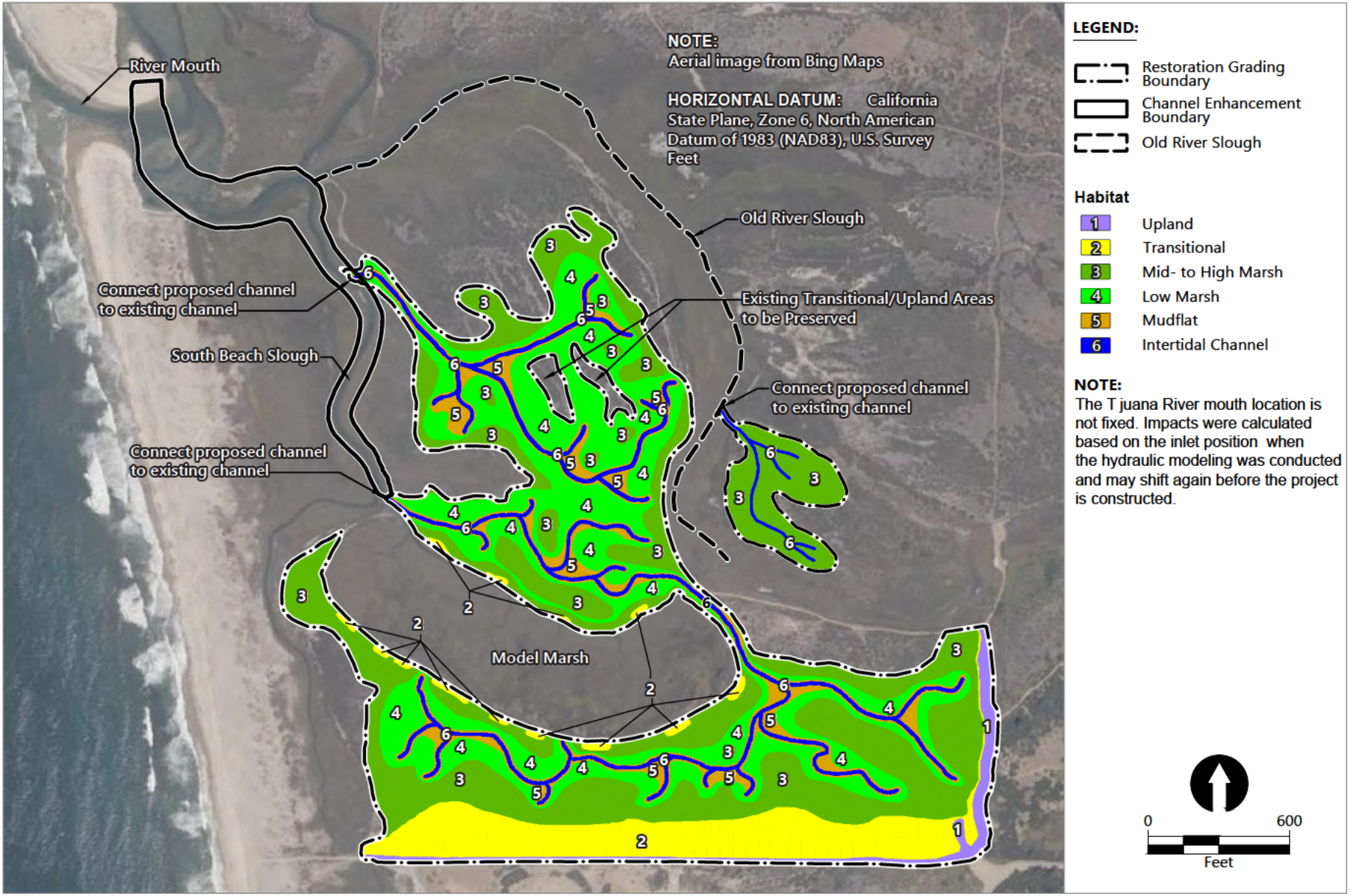


Source Anchor QEA 2021

606045881 3-1 Alternative 1 Proposed HabitatDistribution.ai dbrady 06/23/2022

San Diego County, California
TETRP II Phase I EIR/EIS

ATTACHMENT 2 - ALTERNATIVE 1



Source Anchor QEA 2021

60604588 Figure 3-3 Alternative 2 Proposed Habitat Distribution.ai dbrady 06/23/2022

San Diego County, California
TETRP II Phase I EIR/EIS

ATTACHMENT 3 - ALTERNATIVE 2

Attachment 4

Comments Received for the Notice of Availability of the Final EIS

Tijuana Estuary Tidal Restoration Program II Phase I

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

April 25, 2023

Victoria Touchstone
U.S. Fish and Wildlife Service
San Diego National Wildlife Refuge Complex
1080 Gunpowder Point Drive
Chula Vista, California 91910

Subject: Final Environmental Impact Statement/Environmental Impact Report for the Tijuana Estuary Tidal Restoration Program II Phase I, San Diego County, California (EIS No. 20230042)

Dear Victoria Touchstone:

The U.S. Environmental Protection Agency has reviewed the above-referenced document pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

The Final EIS/EIR identifies the Proposed Action/Alternative 2 as the NEPA "environmentally preferrable" and the USFWS's preferred alternative, as well as the California Department of Parks and Recreation's California Environmental Quality Act "environmentally superior" alternative. The Proposed Action would restore approximately 82.5 acres of wetlands habitat and preserve a total of approximately 4.5 acres of uplands and transitional habitat, requiring the removal of up to about 514,000 cubic yards of material compared with the 580,000 cubic yards under Alternative 1.

The EPA provided scoping comments to the USFWS on July 12, 2021 and provided comments on the Draft EIS/EIR on September 29, 2022. In our comments on the Draft EIS/EIR, we requested the USFW coordinate with the Southern California Dredged Material Management Team, of which the EPA is a member, for permits related to the options for beneficial reuse of excavated sediments through placement in the littoral zone at nearby beaches. We also recommended that the USFW develop adaptive management plans to sample sediments and monitor the effects of placement in the littoral zone on the nearby marine environment. We continue to support the USFWS's and California Department of Parks and Recreation's prioritization of options to beneficially reuse sediments and we appreciate the commitment in the Final EIS/EIR to coordinate on permitting and adaptive management plans through the Southern California Dredged Material Management Team. Robust sediment characterization and post-placement water quality and marine sediment monitoring will likely be important conditions of permitting for littoral zone placement.

We also provided recommendations regarding environmental justice and government-to-government consultation with tribal governments. We appreciate the clarification about the USFWS's role in joint consultation with the California Department of Parks and Recreation and the additional environmental justice information provided in the Final EIS/EIR. EPA notes that, while the project's haul routes may not have been optionally or specifically routed through areas with relatively high minority populations and existing environmental burdens, the lack of available options does not automatically mean that impacts are not disproportionately high and adverse to the affected communities. Overall, expanding the

Traffic Control Plan in the Final EIS/EIR to include consideration of adjacent residents and to distribute trips to minimize impacts is an improvement that has the potential to mitigate some construction traffic - related impacts to communities with environmental justice concerns.

Thank you for the opportunity to review this Final EIS/EIR. Please provide an electronic copy of the Record of Decision once it has been signed. If you have any questions, please contact me at (415) 972-3308, or contact Hugo Hoffman, the lead reviewer for this project, at 415-972-3929 or hoffman.hugo@epa.gov.

Sincerely,

Janice Chan
Acting Manager, Environmental Review Branch

cc (via email): Carol Roberts, U.S. Fish and Wildlife Service
Robert Smith, U.S. Army Corps of Engineers
Chris Peregrin, California Department of Parks and Recreation
Cassidy Teufel, California Coastal Commission
Dan Lawson, National Marine Fisheries Service
Bryant Chesney, National Marine Fisheries Service
Allan Monji, San Diego Regional Water Quality Control Board
Kirsten Macintyre, California Department of Fish and Wildlife
Julianne Polanco, State Historic Preservation Officer
Nicole Dobroski, California State Lands Commission

[EXTERNAL] Tijuana Estuary Tidal Restoration EIS Comments

Bryce Campbell <[redacted]>

Sat 4/22/2023 10:01 PM

To: Touchstone, Victoria <victoria_touchstone@fws.gov>

Dear Ms. Touchstone,

I appreciate the opportunity to submit comments on the scope of the Tijuana Estuary Tidal Restoration Program II Phase I project. I would just like to say that I'm from San Diego, and this Estuary area is very important to me. I looked over the EIS and am very grateful for the proposed project. I believe it would be very successful in the end at restoring habitat, and also improving water quality. I wish you the best with this project, and I am excited to see it being carried out.

Thank you,
Bryce

Tijuana Estuary Tidal Restoration Program II Phase I

Jared Johnson <usfws@fws.gov>

Tue 4/25/2023 2:28 PM

To: Touchstone, Victoria <victoria_touchstone@fws.gov>

U.S. FISH & WILDLIFE SERVICE

This email has been generated by the "send a message" contact form on your FWS.gov profile.

Submitted on Tue, 04/25/2023 - 21:28

Name Provided:
Jared Johnson

Email Provided:
[redacted]

Subject
Tijuana Estuary Tidal Restoration Program II Phase I

Message
Firstly, it is commendable that the Tijuana Estuary Tidal Restoration Program II Phase I takes into account the various environmental impacts that the project may have, such as impacts on water quality, wetlands, and wildlife. The report also evaluates the potential effects on cultural resources and social and economic factors, which is important for any development project.
However, as a public stakeholder, I have a few concerns regarding the proposed project. One of the primary concerns is the potential impact on nearby communities. The report does mention that the project could result in increased traffic, noise, and air pollution, which may have adverse effects on the quality of life for residents in the area. Therefore, I would urge the project developers to consider measures to mitigate these impacts.
Another concern is the potential impact on endangered species and other wildlife in the area. The report acknowledges that the project may have some adverse effects on local ecosystems, particularly in the short-term. While the long-term benefits of the project may outweigh these impacts, I would urge the developers to consider the impact on the environment and take appropriate measures to minimize negative effects on wildlife.
Finally, the report states that the project would cost several million dollars, and it is unclear who will bear the financial burden of the project. As a public stakeholder, I would like to see more details on the financing plan for the project, including information on funding sources and the allocation of costs.
Overall, I appreciate the effort that has gone into preparing the Tijuana Estuary Tidal Restoration Program II Phase I. However, I urge the developers to take into account the concerns of nearby communities, the impact on the environment, and the financial burden of the project.