
EXECUTIVE SUMMARY

Introduction: This final environmental assessment (EA) has been prepared by the U.S. Fish and Wildlife Service (Service or USFWS) to describe and analyze the environmental effects of the Coastal Wetland Restoration at the D Street Fill Sweetwater Marsh Unit of the San Diego Bay National Wildlife Refuge (NWR), a proposal to restore a portion of the D Street Fill to intertidal wetlands consistent with the recommendations presented in the San Diego Bay NWR Comprehensive Conservation Plan (CCP) (USFWS 2006). The proposed restoration would occur near the southeast corner of the D Street Fill, located to the west of Interstate 5 and south of the Sweetwater River flood control channel, within the Sweetwater Marsh Unit of the San Diego Bay NWR, in Chula Vista, San Diego County, California.

NEPA Process: The project is subject to the National Environmental Policy Act (NEPA), because it is proposed on lands owned and managed by the Federal government and the Service, a Federal agency, will implement the project. This EA has been prepared by the Service in accordance with NEPA (42 USC 4341 et seq.) and the Council on Environmental Quality (CEQ) NEPA Regulations contained in C.F.R. Parts 1500-1508. The analysis presented in the final EA provide the basis for the Service's determination to implement the proposed action, as well as the basis for determining that the proposed action would not constitute a major Federal action significantly affecting the quality of the human environment. Our decision to prepare a Finding of No Significant Impact (FONSI) is supported by the final EA (USFWS 2015).

Purpose and Need: The purpose of the proposed action is to restore a portion of the D Street Fill to intertidal wetlands consistent with the recommendations presented in the San Diego Bay NWR CCP (USFWS 2006). The restoration of 11.03 acres of coastal wetlands also represents compensatory mitigation for impacts to jurisdictional wetlands associated with the San Diego Gas and Electric Company (SDG&E) South Bay Substation Relocation (SBSR) project. The proposed restoration is needed to assist the Refuge in achieving the goals and objectives of the Refuge's CCP, including the CCP's goal to provide opportunities for reversing the trend of historical wetland loss in San Diego Bay by incorporating proposals for restoring, where possible, the Refuge's historical native habitats.

Public Involvement and Agency Coordination: Comments on the draft EA were solicited from various local, State, and Federal government agencies, tribal governments, non-governmental organizations, and the public during the 30-day comment period (July 29, 2015 to August 27, 2015). The draft EA distribution list is provided in Appendix C. The draft EA was also sent to the California State Clearinghouse (SCH#15071069) for distribution to interested State agencies. Five comment letters were received during the public comment period. These letters and our responses are provided in Appendix D. Underlined text in the Final EA represents changes made

between the draft EA and Final EA in response to comments received during the public comment period.

The comments received during the public review period have been considered by the Service during our analysis of the proposed action and alternatives, in determining the effects to the human environment, and in selecting the preferred alternative for implementation. Agency consultation and coordination with California Coastal Commission (CCC), U.S. Army Corps of Engineers (USACE), San Diego Unified Port District (SDUPD), and National Oceanic and Atmospheric Administration (NOAA) was also conducted and considered as part of our decision making process.

Project Summary: The Service, in partnership with SDG&E, proposes to implement Alternative B, the proposed action, which would restore 11.03 acres of tidally influenced coastal wetland habitat and 1.41 acres of upland transition habitat within a 12.44-acre area at the southeast corner of the D Street Fill. Preparation of the site to support 0.62 acre of subtidal habitat, 0.98 acre of intertidal mudflat habitat, 6.60 acres of low salt marsh habitat, 2.83 acres of mid-high salt marsh habitat, and 1.41 acres of native upland/wetland transitional habitat would require the excavation of approximately 125,000 cubic yards of material. The material excavated from the restoration site would be relocated to the northwest portion of the D Street Fill to raise the elevation of approximately 29.85 acres of land managed by the Service and Port of San Diego as a California least tern nesting site. The restoration of 11.03 acres of coastal wetlands also represents compensatory mitigation for impacts to jurisdictional wetlands associated with the SDG&E South Bay Substation Relocation project. In addition, a construction staging area will be required on a disturbed portion of the D Street Fill and another off site construction staging area, if necessary, could be established on land immediately to the east of the D Street Fill in a currently disturbed area. Once excavation is completed, the restoration site will be planted with appropriate native vegetation and monitored and maintained for five years.

The draft EA evaluated the no action alternative and two action alternatives. The primary difference between the two action alternatives involved the way in which the material excavated from the restoration site is handled. Under Alternative B (the proposed action), the approximately 125,000 cubic yards of soil (material) to be excavated from the restoration site would be used to raise the elevation of the California least tern nesting site located on the D Street Fill to the northwest of the restoration site. Under Alternative C, the excavated material would be trucked off the site for appropriate disposal and or reuse elsewhere. For purposes of analyzing the effects of moving the material offsite, it was assumed that the material would be disposed of at the Otay Landfill in Chula Vista.

Summary of Potential Effects: A summary of the potential effects associated with each of the alternatives evaluated in the draft EA is presented below.

Summary of Potential Effects of Implementing Alternatives A, B, or C			
Resource	Alternative A	Alternative B	Alternative C
Biological Resources	No biological resources would be adversely affected by this alternative and the benefits associated with wetland restoration would not be realized.	<p><u>Habitat and Vegetation</u></p> <p>Implementation of the restoration project would impact 0.23 acre of tidally influenced southern coastal salt marsh, 1.92 acres of nontidal disturbed coastal salt marsh, 5.32 acres of baccharis scrub and 29.85 acres of a California least tern nesting site located to the northwest of the restoration site. This impact is considered less than significant as the restoration project would result in an increase in higher quality habitat with greater ecological functionality than that being lost. Additionally, sensitive habitat and plants would be avoided/and or salvaged resulting in a less than significant impact to sensitive habitat and plants.</p> <p><u>Wildlife and Fisheries</u></p> <p>The implementation of the restoration project would result in temporary disturbances to relatively low numbers of wildlife that forage and otherwise utilize the existing restoration site.</p> <p><u>Endangered and Threatened Species and Other Species of Special Concern</u></p> <p>The habitat restoration proposed under this</p>	Same as Alternative B

Summary of Potential Effects of Implementing Alternatives A, B, or C			
Resource	Alternative A	Alternative B	Alternative C
		alternative would temporarily impact some sensitive species; however, implementation of mitigation measures Bio-1 thru Bio-8 identified below would reduce these impacts to a less than significant level.	
Cultural Resources	This alternative assumes the restoration project is not implemented and there is no change from existing management programs. This alternative serves as the baseline to which all other action alternatives are compared. There would be no major changes in habitat management under this alternative. No historic properties would be affected by this alternative.	The proposed action is anticipated to have no effect to historic properties. Given the land use history of the project area (e.g., area was filled with dredge spoils), the potential for intact archaeological sites is considered low.	Same as Alternative B

Mitigation Measures: The measures presented here have been incorporated into the project design to mitigate potential impacts described above to below a level of significance. The Service would be responsible for ensuring that these measures are implemented as described.

Mitigation Measure BIO-1: Avoidance of indirect impacts to eelgrass and aquatic wildlife would be achieved through the implementation of a Storm Water Pollution Prevention Plan (SWPPP) and storm water best management practices (BMPs) to prevent erosion and sedimentation. A strategic grading process shall also be implemented to prevent actively graded areas from being exposed to tides. The process would leave a narrow berm of soil directly adjacent to the square-shaped subtidal embayment in place until all other grading is complete. The remaining berm of soil would be removed last, thus limiting the exposure of active grading to tidal action. The monitoring program would include pre-construction and post-construction eelgrass surveys in the square-shaped subtidal embayment and the immediately adjacent tidal channel for a distance of approximately 400 feet to the east and to the west. Pre-construction surveys shall document existing eelgrass populations. Post-construction surveys shall continue through the 2-year monitoring period in accordance with the NOAA Fisheries' Southern California Eelgrass Mitigation Policy to confirm no long-term indirect impacts to eelgrass populations have occurred. If impacts are identified, re-initiation of consultation with the USACE or NOAA Fisheries is required and shall be requested.

Mitigation Measure BIO-2: To avoid impacts to nesting birds, construction on D Street Fill shall be confined to the period between September 30 and February 15, unless work outside this period is authorized by the Service. In addition, biological monitoring shall be performed to reduce impacts to wildlife such as nesting birds, sea turtles, jackrabbits, and marine mammals. If an animal is believed to be at risk based on the Restoration Ecologist's judgment, construction shall be suspended until the animal moves out of harm's way on its own or through relocation measures approved by the regulatory agencies.

Mitigation Measure BIO-3: Impacts to pinnipeds protected by the Marine Mammal Protection Act and federally listed endangered East Pacific green sea turtles would be mitigated through standard construction BMPs and monitoring during construction. If an animal is believed to be at risk based on the Restoration Ecologist's judgment, construction shall be suspended until the animal moves out of harm's way on its own or through relocation measures approved by the regulatory agencies. SDG&E has completed consultation with the Service and NOAA Fisheries pursuant to Section 7 of the Federal Endangered Species Act and Section 305(b) of the Magnuson-Stevens Act regarding potential impacts to California least terns and other nesting birds, East Pacific green sea turtles, marine pinnipeds, and Essential Fish Habitat. A concurrence letter from NOAA Fisheries was received on May 14, 2015 and a Refuge Special Use Permit will be issued by the Service.

Mitigation Measure BIO-4: Restoration construction activities on D Street Fill that include excavating, grading, and hauling of materials with large equipment would occur outside of the nesting season (September 30 through February 15, unless work outside this period is authorized by the Service) to avoid disturbance to birds protected by the Migratory Bird Treaty Act or the Endangered Species Act that may nest on-site, and the numerous sensitive bird species (e.g., California least tern, Belding's savannah sparrow, light-footed Ridgway's rail) known to nest in the immediate vicinity. The harvesting and transplantation of salt marsh plants shall occur during the non-breeding season of sensitive bird species, unless authorized by the Service following verification that no nests occur in proximity to the collection area. Restoration construction activities using hand labor such as boundary staking, planting, and irrigation may be allowed within the nesting season if adequate avoidance measures are implemented. These include pre-construction surveys, non-disturbance buffers, and contractor education. Non-disturbance buffer zones would be determined in coordination with the Refuge Manager.

Mitigation Measure BIO-5: The excavation and grading work would involve the salvage and stockpiling of the nesting material layer (coarse sand and shells) prior to ground-disturbing activity associated with the restoration outside the nesting season; the raising of the existing nesting area by up to 8 feet, to a uniformly flattened area with a 20:1 slope around the entire site; and, the reapplication of the nesting material. This work would take place outside the nesting

season and would result in a net benefit to the California least tern and potentially the western snowy plover. Raising and flattening the site while creating 20:1 slopes would allow for a clear line of sight to potential predators, which is a key nest selection criterion for California least tern. In accordance with the predator management plan for the NWR, plants within the transition zone of the restoration site should not provide perches, refuge, or nesting habitat for predators of California least tern. Management actions by the Refuge to control undesirable plants or noxious weeds with the goal of maintaining an optimal nesting substrate for ground nesting seabirds and shorebirds would continue annually after project completion and prior to each nesting season.

Mitigation Measure BIO-6: Impacts to wandering skipper butterflies would be minimized by conducting focused surveys for adult wandering skipper butterflies during the flight period and selectively timed vegetation removal. Vegetation removal on the restoration site shall occur in the fall, when nectaring adults are less likely to be present to minimize impacts to this species.

Mitigation Measure BIO-7: Existing native salt marsh vegetation that occurs on the slopes of the existing square-shaped embayment would be salvaged for later replanting. Plants would be salvaged using an excavator or backhoe and would include approximately 1 foot of soil as well as the aboveground biomass of the plants. Salvaged plants would be stored on-site in basins lined with polyethylene or similar impervious plastic. Salvaged plant storage areas would be located in existing disturbed areas within the project limit of work. Plants would be watered during the storage period as directed by the Restoration Ecologist and Construction Manager.

Mitigation Measure BIO-8: To minimize impacts to sensitive plant species, a seasonal focused rare plant survey shall be conducted to document the sensitive plant populations on-site prior to construction. If sensitive plant species are identified within the proposed restoration footprint, and if avoidance is not feasible, salvage of plants and/or seeds and replanting within the restoration area would occur to the extent feasible.

Mitigation Measure Cul-1: Monitoring by a qualified archaeologist and a Kumeyaay Cultural Monitor shall be conducted as the D Street Fill area is being capped with fill material and throughout the excavation phase of the project. In the event that human remains are encountered during ground-disturbing activities, all work in the immediate vicinity shall cease and the Medical Examiner will be contacted, per the California Public Resources Code. Should the remains be identified as Native American, the Medical Examiner will contact the Native American Heritage Commission within 24 hours of identification to provide a most likely descendent to determine appropriate actions. All human remains would be treated in accordance with the Native American Graves Protection and Repatriation Act (NAGPRA). Additionally, if cultural resources are encountered during ground-disturbing activities, work in the immediate vicinity shall be suspended until the discovery is assessed by a qualified archaeologist and treatment is determined.