

Sweetwater Habitat Restoration SEP

Project Applicant: Port of San Diego

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Contact Person(s):

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Project Category: Environmental Restoration and Protection

Project Location

The proposed project is located within the Sweetwater District of the Chula Vista Bayfront. The Sweetwater District includes lands bracketed by the San Diego Bay National Wildlife Refuge (NWR) including Sweetwater/E Street Marsh to the north, to the south by the Entrance Channel connector marsh that feeds into the F&G Street Marsh, to the west by the Sweetwater Shoreline and San Diego Bay, and to the east by the future Sweetwater Park. The proposed project will buffer the future Sweetwater Park and US Fish and Wildlife National Refuge lands.

Project Description

The proposed Project will include developing plans and designs, obtaining entitlements, and construction for the restoration, creation, and enhancement of 24 acres, and up to 35 acres of coastal shoreline and upland habitat, spanning roughly 400-feet of shoreline and upland area between the Refuge and the future Sweetwater Park (Figure 1, green and purple areas). Sweetwater Park, which will begin construction in 2023, is a passive park focused on habitat restoration, wildlife viewing, and nature-play. In addition, and depending on final design cost and environmental review, the proposed Project may incorporate up to 11 additional acres of environmentally degraded habitat (Figure 1, blue area) into the project scope. Project design will focus on habitat restoration and protection of Sweetwater Park and adjacent community from sea level rise, erosion, and coastal flooding. The proposed Project will enhance habitat connectivity with the Refuge and San Diego Bay, which will in turn support migratory birds and endemic species, sequester carbon, improve water quality, buffer the community against sea level rise, and improve public access to the coast. Prior to initiating construction, the project area must undergo permitting and design including: conducting environmental mapping, hydraulic analyses, and sediment testing; creating 60%, 90%, and 100% design and construction documents; and obtaining required permits, including a Coastal Development Permit, U.S. Army Corps of Engineers (USACE) permit, and Regional Water Quality Control Board (RWQCB) Section 401 Water Quality certification. The project has received CEQA entitlements and has completed an Environmental Impact Report (Figure 2). Once all design and construction plans are completed and permits acquired, the Project will be shovel ready. This project demonstrates sustained longevity of environmental outcomes as the project site is located within the Port's jurisdiction/ State Tidelands. The project area is agreed to be a no-touch buffer for habitat restoration and coastal resiliency. This project will be incorporated into the Port's Master Plan and Land Use Planning document. The purpose of the Port Master Plan is to provide the official

planning policy, consistent with a general statewide purpose, for the physical development of the tide and submerged lands conveyed and grant in trust to the Port. The Port Master Plan is also approved by the California Coastal Commission. This project is a key component of the Chula Vista Bayfront Master Plan developed in conjunction with the city of Chula Vista and the Port of San Diego and other stakeholders from Chula Vista. Any changes to the Chula Vista Bayfront Master Plan would have to be approved by the Board Port of Commissioners, Chula Vista City Council, Coastal Commission. The Sweetwater Park buffer is part of the restoration and alternatives plan to protect Sweetwater Park from storm surges, reconnect wetlands, and enhance habitat value in the Sweetwater District in Chula Vista. In addition, this project is supported by the Chula Vista Natural Resource Management Plan established as the guiding document for development in the Chula Vista Bayfront. This plan requires a minimum of 5 years monitoring post construction to confirm improvements and ecosystem value is upheld. The Port currently has not secured any funding opportunities but is actively applying for opportunities to fund Planning and Design efforts. Construction permits will also be needed from the Army Corps of Engineers and the Regional Water Quality Control Board. The project will be constructed in 4 different phases upon the completion of the entitlements and design phase. The proposed project phased work includes the following:

Phase 1 F&G Street Seasonal Wetlands:

Phase 1 of the proposed project focuses on the Seasonal Wetlands which are connected to the F&G Street Marsh, located along the eastern shoreline of south San Diego Bay within the Chula Vista Bayfront. The Seasonal Wetlands are disturbed wetlands exposed to intermittent high tides and are located north of the F&G Street Marsh. The Seasonal Wetlands are dry for most of the year and contain bay fills. Vegetation in this area is similar to the ruderal species found in the adjacent, higher elevation filled portion of F&G Street Marsh. The proposed project will remove existing invasive species such as Crown Daisy and restore native maritime succulent scrub plant species including Diegan coastal scrub in the upland boundary of the marsh. This invasives removal and native plant restoration effort will bolster existing coastal brackish marsh habitat, transitional, and riparian habitats that surrounds the seasonal wetlands. As part of the Chula Vista Bayfront Master plan, environmental mapping and surveying must occur in both the seasonal wetlands and F&G street marsh (across Lagoon Drive) before any work can be conducted in the approximate 11 acres of seasonal wetlands. This is to ensure that any physical work in one area doesn't significantly impact tidal circulation in either marsh.

Phase 2 Restore Upland Habitat:

Phase 2 of the proposed project will enhance roughly 5 acres of coastal sage scrub recently restored area adjacent to the RV Park, in addition to the restoration of approximately 16 acres of coastal sage scrub. The 16 acres borders existing wetlands and proposed future coastal salt marsh to the west. Existing invasive species include crown daisy, which will require clearing and grubbing with grow kill cycles occurring prior to planting native plans. Upland refugia areas will be seeded with a mix of native vegetation including Diegan coastal sage scrub and maritime succulent scrub species.

Phase 3: Enhanced Wetlands

Phase 3 of the proposed project would create 2 acres of wetlands that border the National Wildlife Refuge lands to the south, to improve connectivity of marshlands and natural habitats in the refuge. After the existing upland invasive species are removed, the area will be excavated to create low, mid, and high marsh habitat and replanted with salt marsh plants.

Phase 4: Sweetwater District Shoreline Coastal Salt Marsh

Phase 4 of the proposed project includes the creation of 5 acres of coastal salt marsh habitat in the Sweetwater District habitat buffer of the Chula Vista Bayfront, which is on the western shoreline of the future Sweetwater Park (Figure 1 green area). Construction would include excavating, grading and stabilizing channel slopes and planting of wetland species to aid in flood protection and sea level rise. Roughly 5 acres of coastal salt marsh will be created by excavating a tidal channel extending from the F&G Street Marsh Entrance Channel to the north, terminating midway to Gunpowder Point Drive. The restored area would support tidal flats, low, mid, and high coastal salt marsh habitat. The shoreline slopes would be graded to provide a sea level rise transgression. Sea level rise planning (potential flood protection measures) for adjacent developed parcels to the south will be incorporated into the restoration effort to reduce flood risk.

Work Plan

Prior to construction, the proposed project must go through an entitlements process. The entitlements process will include obtaining a Coastal Development Permit (CDP), and possibly National Environmental Policy Act (NEPA) review. Any habitat and hydrology modifications within the National Wildlife Refuge lands will require cooperation with and approval by our long-time partners the U.S. Fish and Wildlife Service. Additional permitting will include a nationwide 27 – Aquatic Habitat Restoration, Enhancement, and Establishment Activities permit from the Army Corps of Engineers (USACE) and a 401-water quality certification from the Regional Water Quality Control Board (RWQCB). The total timeline for the entitlements process is expected to take 9-12 months. After the permitting and additional entitlements process is complete, a contractor solicitation is required which will take approximately 4 -6 months, with construction of the buffer area taking an estimated 12-18 months. The total project timeline is expected to take 2-3 years from start to completion. The end deliverables will include enhancement, and creation of 24, and up to 35 acres of high, mid, and low-lying wetlands, riparian, and brackish marsh habitat planted with a diverse range of native marsh and upland plants. The Port will monitor the restoration project annually. Annual reports will be completed for 5 years with a final completion report.

Pre-Construction Costs (Entire Project Area):

Environmental Mapping/ Hydraulic Studies/ Topographical Surveys: \$150,000

60% Construction Documents: \$70,000

90%-100% Construction Documents: \$50,000

Final Construction Documents: \$30,000

Total Pre-Construction Costs: ~ \$300,000

Construction Project Costs

Project Costs include as needed clearing/ grubbing, cutting/grading, irrigation, and planting.

Contingency of 25% is based on preliminary estimates.

Phase 1: F&G Street Seasonal Wetlands

Total Acres: 11

Costs (per acre): \$222,200

Subtotal: \$2,444,200

Contingency (25%): \$611,050

Total: \$3,055,250

Phase 2: Restored Uplands Habitat

Total Acres: 16

Costs (per acre): \$222,360

Subtotal: \$3,557,752

Contingency (25%): \$889,438

Total: \$4,447,190

Phase 3: Enhanced Wetlands

Total Acres: 2

Cost (per acre): \$779,350

Subtotal: \$1,558,700

Contingency (25%): \$389,675

Total: \$1,948,375

Phase 4: Sweetwater District Shoreline Habitat Marsh

Total Acres: 5

Cost (per acre): \$1,948,377

Subtotal: \$9,741,886

Contingency (25%): \$2,435,472

Total: \$12,177,358

5 Years of post-construction monitoring (500,000)

Total construction project costs for four phases including monitoring are roughly **\$22,128,173**

Project Readiness

An Environmental Impact Report (EIR) was certified for this project in 2010. Additional permits needed include obtaining the CDP, USACE and RWQCB permits, to be obtained prior to construction. The current EIR for the Chula Vista bayfront covers the existing proposed project including approximately 16 acres of upland scrub and grassland restoration, 11 acres of upland restoration in the Seasonal Wetlands, and 7 acres of wetland/salt marsh restoration in the buffer areas in the Sweetwater District. There are no landowner agreements required as the project location lies within the San Diego Unified Port District's jurisdiction.

Expected Benefits

The proposed project for the Sweetwater Shoreline Habitat Buffer provides a unique opportunity to enhance, restore and create 24-35 acres of uplands and wetland habitats including coastal salt marsh, brackish/ riparian marsh, and mudflats. The adjacency of the Sweetwater Bicycle & Pedestrian Path (Bike Path) and future Sweetwater Park provides further opportunities for recreation, education, and passive wildlife viewing. The planned Sweetwater Park, and the adjacent Habitat Buffer allows for unparalleled educational and enrichment opportunities, including interpretive gardens and volunteer growing grounds, overlooks of San Diego Bay, hiking trails and walking paths, nature-play areas, and educational signage. Wildlife viewing would occur at safe locations along the Bike Path bridge over the F&G Street Entrance Channel and adjacent F&G Street Marsh. The F&G Street Marsh currently supports approximately 25 acres of coastal salt marsh and intertidal mudflat habitat and provides nesting habitat for the state endangered Belding's savannah sparrow (*Passerculus sandwichensis beldingi*) and habitat for the federally endangered light-footed Ridgway's rail (*Rallus longirostris obsoletus*). Bolstering these 25 acres by creating additional habitat buffers and improving tidal inundation will help protect one of San Diego Bay's few remaining historic wetland habitats, prepare for climate change impacts like sea level rise, and provide refuge and nesting habitat for migrating and resident birds.

EJ Community

The Sweetwater District of the Chula Vista Bayfront is located in West Chula Vista and adjacent to San Diego Bay. According to the most recent data from CalEnviroScreen 4.0, the Chula Vista Bayfront is an Environmental Justice Community. The communities bordering the Sweetwater District project site currently range in the 50th-90th percentile for pollution and socioeconomic stressors that make them

more vulnerable to the impacts of pollution. Pollution burdens represent the potential exposure to pollutants and the adverse environmental conditions caused by the pollution. Residents within the Chula Vista Bayfront area experience poor health outcomes with an inequity in social determinants, such as access to parks, income disparity, and education. The San Diego Association of Governments (SANDAG) has developed a Healthy Communities Assessment Tool (HCAT) to rank city neighborhoods within the County of San Diego on over 40 physical, economic, and social indicators that are important to community health. HCAT's assessment ranks the Chula Vista Bayfront 141st out of 150 neighborhoods in San Diego County in concentrated poverty, with 25.6% of the area's residents living below the federal poverty level. The Bayfront also ranks in the bottom tier for employment rate, public assisted households, median home values, pedestrian connectivity, environmental hazards, educational opportunities, health systems, and public safety.

State Waterboard right to Water

The proposed project focuses on enhancement, creation and restoration of wetland and saltmarsh habitats and therefore, would not apply directly to drinking water.

Optional Info

-In accordance with Section II of the SWRCB Resolution no. 2017-0012, the creation of wetlands in the Sweetwater district will reduce storm surges and 100-year flood events to help support uplands natural infrastructure to improve ecosystem resilience. The project goals will also facilitate habitat restoration, improve water quality, enhance carbon sequestration, and build healthy soils.

-We anticipate seeking additional grant funds for this project when grant funding comes available.

-This is not a project required by another agency or entity.

-Post construction monitoring will be conducted for 5 years in compliance with USACE and RWQCB reporting and permitting standards for restoration and enhancement areas. We plan to monitor created habitats, what species that are attracted to the area, and any water quality improvements. The Port plans to follow the Mitigation Monitoring and Reporting Program (MMPR) developed as part of the CEQA process to guide the development along the Chula Vista Bayfront.

-The Port has an established record of completing wetlands and other water quality improvement projects in coordination with the San Diego Regional Water Quality Control Board including the installation of the Native Oyster Living Shoreline; removal of over 350 tons of debris from the former A-8 Anchorage; restoration and enhancement of 280 acres of wetlands at the Chula Vista Wildlife Reserve and Ponds 10, 10A and 11 in the South Bay Refuge; created 11 acres of mitigation wetlands at the D Street Fill; and the construction of the Sweetwater Bike and Pedestrian Path, to name a few.

-The Port has the institutional capacity to complete the project as we have jurisdiction in managing the Sweetwater project area.

Figures

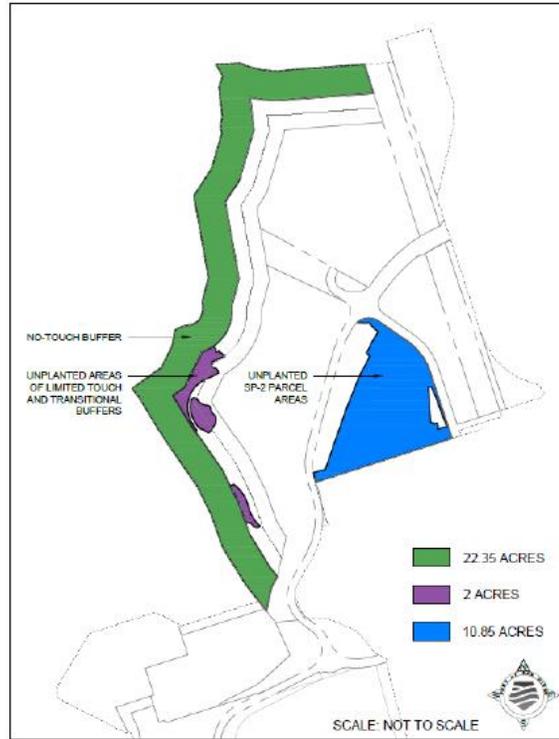


Figure 1 Project area

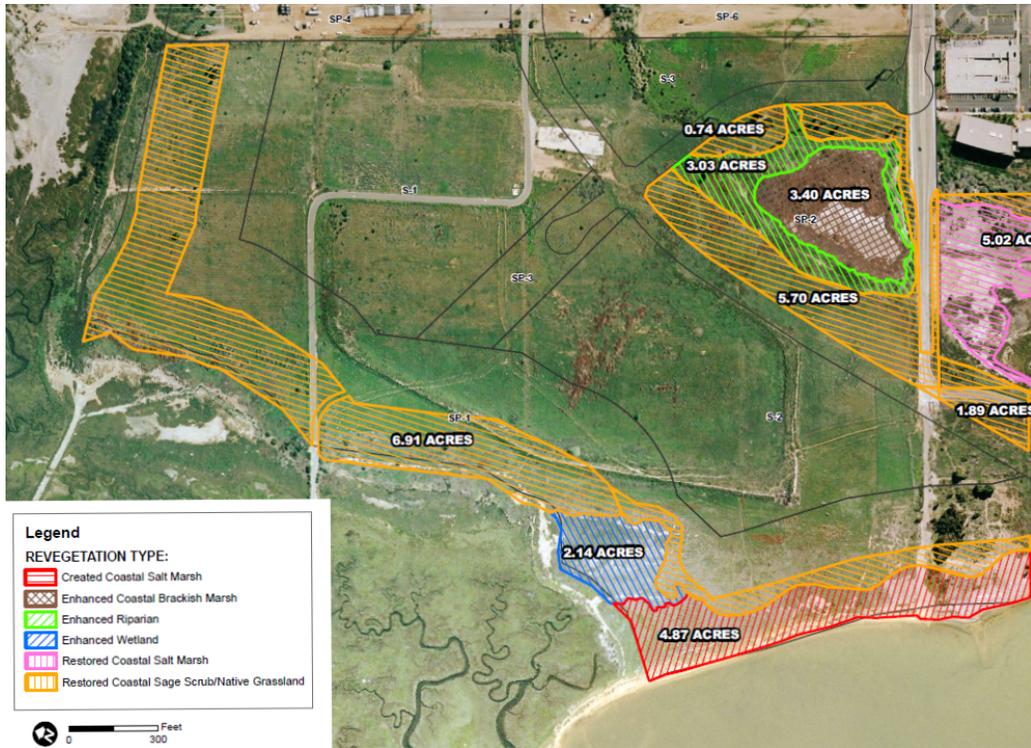


Figure 2 Project Location and Approximate Acreages

