



## Staff Report

**TO:** Board of Harbor Commissioners

**FROM:** John Moren, Director of Operations  
**THRU:** James B. Pruet, General Manager

**DATE:** July 20, 2022

**SUBJECT:** Surfers Beach Restoration Pilot Project – Eelgrass Mitigation Update and Proposal

**Requested Action:**

Receive an update presentation from consultant Damitz on the Pillar Point Harbor Surfers Beach Pilot Restoration and Eelgrass Mitigation Project. Consider a proposal for continued project management, environmental review, permitting and bid process support to complete the planning phase of the project in preparation for construction planned for 2023.

**Recommended Motion:**

Motion: Recommended Motion: Receive an updated presentation from consultant Brad Damitz on the Pillar Point Harbor Surfers Beach Pilot Restoration and Eelgrass Mitigation Project. Approve an agreement for continued project management, environmental review, permitting and bid process support to complete the planning phase of the project in preparation for construction planned for 2023 not to exceed \$57,000.

**Policy Implications:** Consistent with the District's goal to use excess sediment build-up from within the Harbor for beneficial re-use on Surfers Beach.

**Background:**

The goal of the Surfers Beach Shoreline Restoration Pilot Project is to remove sediment which has built up inside the PPH outer breakwater and move it to Surfers Beach as part of a beneficial re-use beach restoration project. In addition to addressing coastal erosion and public access issues at Surfers Beach caused by the outer breakwater preventing lateral sand movement, this project would also address the impacts to vessel navigation and anchoring associated with the shoaling that has occurred inside of the Harbor. The anticipated outcome is that the project will address impaired public access/recreational impacts and damages from coastal storms.



*Figure 1. Photo showing the proposed Surfers Beach placement area*

The ESA/Damitz team has prepared permitting-level and draft engineering design documents for the Project based on input provided by a Technical Advisory Committee (TAC) composed of local, state and federal agency staff, including the District, City of Half Moon Bay, San Mateo County, California Department of Fish and Wildlife, California Coastal Commission, California Department of Transportation, U.S. Army Corps of Engineers, and Greater Farallones National Marine Sanctuary. The outcome was a preferred approach for design and construction of the project using a suction dredge and pumping system to transport a sand slurry via pipeline from the Pillar Point Harbor to Surfer's Beach.

The project planning phase has recently encountered some noteworthy delays related to the discovery of eelgrass beds, necessitating development of plans required by state and federal regulation to mitigate for impacts to eelgrass habitat within the proposed dredging area. A harbor-wide eelgrass survey conducted in late 2019 led to the discovery that eelgrass beds have recently established in the proposed project dredging footprint, due to the shoaling caused by the PPH outer breakwaters. This survey mapped a total of 5,712 square meters of eelgrass habitat, with 4,258 square meters occurring in the Harbor's east basin (see Figure 2 below).



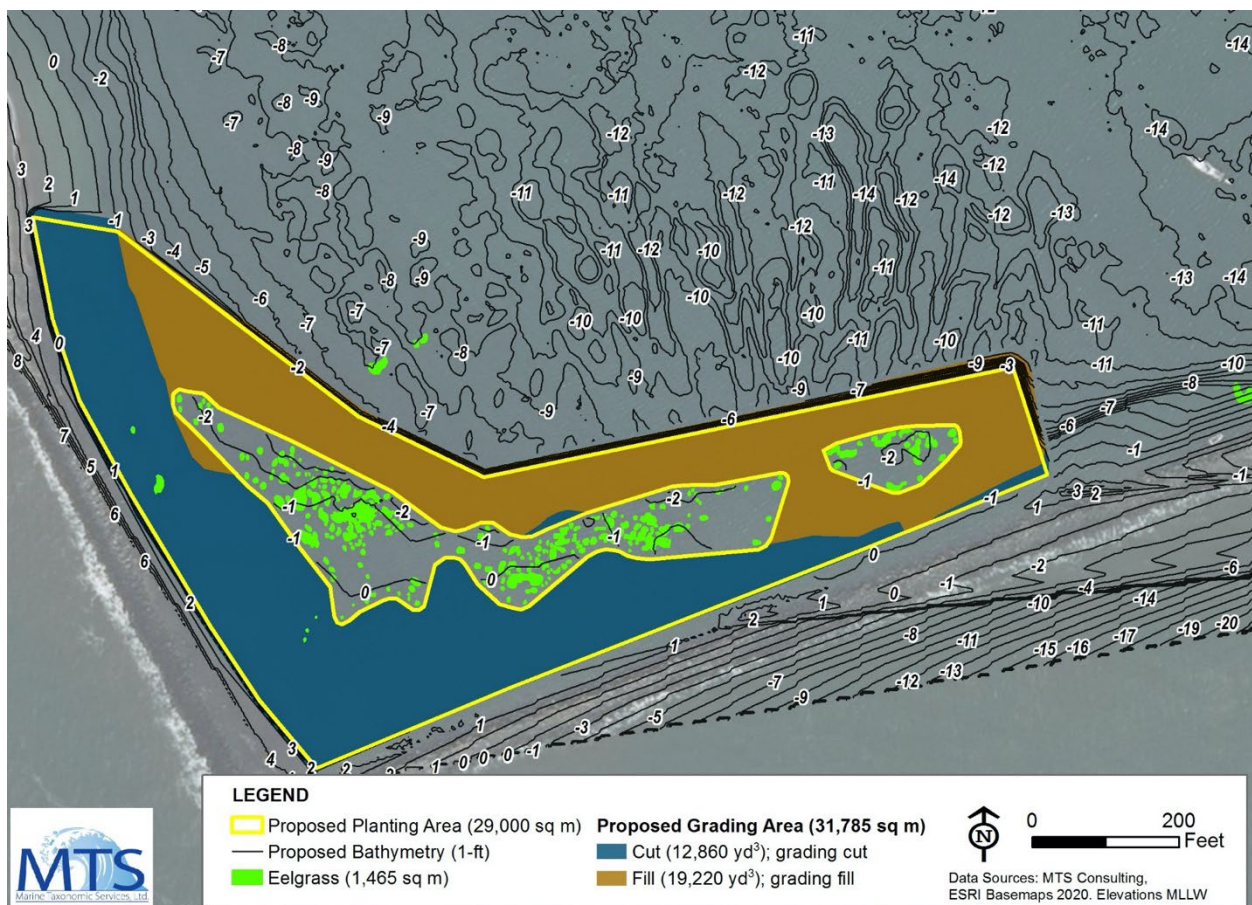
Figure 2. November 2019 PPH Harbor-wide Eelgrass Survey Results

Since the existence of eelgrass means that any future dredging of this area (including for the Surfers Beach Project or routine boat launch ramp maintenance dredging) would require mitigation for the eelgrass that is impacted, District staff and consultant Brad Damitz made the decision to move forward with the development of an eelgrass mitigation plan for PPH. Damitz subcontracted with Marine Taxonomic Services, Ltd. to prepare an eelgrass mitigation plan. This included a series of assessments and evaluations required by permitting agencies for eelgrass mitigation planning.

A Pillar Point Harbor Eelgrass Management and Mitigation Plan (Plan) was finalized in September 2020. This Plan proposes to establish a large (29,000 square meter) “platform”, by cutting and filling an area off of the West Breakwater in the Harbor’s west basin, identified in the Plan, to establish a -1’ MLLW depth, which was determined to be an optimal depth for eelgrass growth in this area (see Figure 3). In addition to cutting/filling at the mitigation site, the mitigation entails dredging and importing additional sediment from another site in PPH and placing the sediment at this area in the West Basin identified in the Eelgrass Management Plan. The proposed plan is to obtain this material from off of the PPH Boat Launch Ramps, since there is an existing need for periodic maintenance dredging in this area to maintain usability of the ramps.

Meetings were held with staff from Army Corps of Engineers, Regional Water Quality Control Board, California Coastal Commission and National Marine Fisheries Service, to obtain input prior to the mitigation plan development process.

Due to the large volume of eelgrass beds that require mitigation, and subject to the requirements and guidelines in the National Marine Fisheries Service’s California Eelgrass Mitigation Policy (CEMP), the proposed eelgrass mitigation concept involves implementing a fairly large construction project necessary to establish the large platform by excavating the shallow areas of the site and filling the deeper areas, as well as dredge and import additional fill from elsewhere in PPH (see Figure 3 below for conceptual plan).



**Figure 3. Conceptual plans for proposed eelgrass mitigation adjacent to West Breakwater**

The proposed Surfers Beach Pilot Restoration Project involves dredging of up to 100,000 cubic yards (CY) of clean sand accumulated along the inside of Pillar Point Harbor’s East Breakwater and a one-time placement of that sand to form an elevated berm along an approximately 1,000-foot-long section of shoreline at Surfers Beach in Half Moon Bay. The project will create up to 4.1 acres of beach habitat and 3.90 acres

of eelgrass habitat, at an estimated cost of \$2.9 to \$3.6 million for dredging/beach nourishment and approximately \$1.8 million for eelgrass restoration. The proposed pilot project will also include physical and biological monitoring programs to assess the effectiveness of the project in meeting its goals and objectives and to identify any ecological impacts from proposed project activities.

Permit applications for the project were submitted in February 2022 to U.S. Army Corps of Engineers, California Coastal Commission and Monterey Bay/Greater Farallones National Marine Sanctuaries. Permit applications have been prepared for a volume of up to 100K cy. A draft CEQA Initial Study/Mitigated Negative Declaration was completed in February 2022 and will be filed with San Mateo County Clerk and the State CEQA Clearinghouse in July 2022.

Construction is being planned for a spring/summer 2023 timeframe to begin a phased approach, first completing the eelgrass dredging/filling components of the project, followed by Surfers Beach dredging and beach placement and transplanting of eelgrass several weeks after the mitigation site is constructed, pending availability of Project funding and permits.

A detailed project description along with download links for various project planning documents is available on the District's Surfers Beach project webpage at <https://www.smharbor.com/surfers-beach-pilot-restoration-project>. Additional documents available for download include Project Description, Preliminary Design Report, Permitting-level Engineering Plans, CEQA Draft IS-MND, PPH Harbor-wide Eelgrass Mitigation and Management Plan, Sediment Sampling and Analysis Report, and Biological Assessment.

**Staff Recommendation:**

Board Receive an update presentation from consultant Damitz on the Pillar Point Harbor Surfers Beach Pilot Restoration and Eelgrass Mitigation Project. Approve the proposal for \$57,000 to continue design and permitting efforts necessary to ready the project for construction bid. Approve an increase in Capital Expenditure Appropriations of \$57,000 to be funded by available working capital.

**Attachments:**

- 1) [Surfers Beach Project PPT Update Presentation](#)
- 2) [Proposal from Consultant Damitz](#)