



PROJECT 11

SAN LEON AND DOLLAR REEF OYSTER MITIGATION SITES

Background

Oyster reefs are present in many areas of the Galveston Bay system and provide ecologically important functions. The Houston Ship Channel Expansion (HSC) Channel Improvement Project (ECIP) will result in unavoidable adverse impacts to existing oyster reefs. As documented in the 2019 Final Integrated Feasibility Report – Environmental Impact Statement for the HSC ECIP, mitigation for impacts was proposed by restoring oyster reef in Galveston Bay to compensate for the loss of existing oyster habitat from the channel modifications. In coordination with resource agencies, two (2) desirable sites were selected from historic reef sites identified as impacted by Hurricane Ike and have since been the focus of Texas Parks and Wildlife Department (TPWD) efforts to help restore in Galveston Bay. These sites are located in the San Leon and Dollar Reef areas.

Summary of Work

The construction of the mitigation efforts was divided into two separate contracts. The first contract (W912HY21C0025) was contracted and administered by the USACE Galveston District and included the creation of three (3) oyster pads totaling 44.6 acres of new oyster habitat within the Dollar Reef Mitigation Site. The design of these oyster pads did not utilize beneficial use of dredge material. Instead, these oyster pads employed traditional construction methods of solely using cultch material to achieve the optimum relief for oyster recruitment as coordinated with and approved by resources agencies. During the November 2-3, 2022, TPWD Commission Meeting these oyster pads were closed for two harvest seasons in order to conduct oyster habitat restoration activities and allow oysters to repopulate these areas and reach market size.

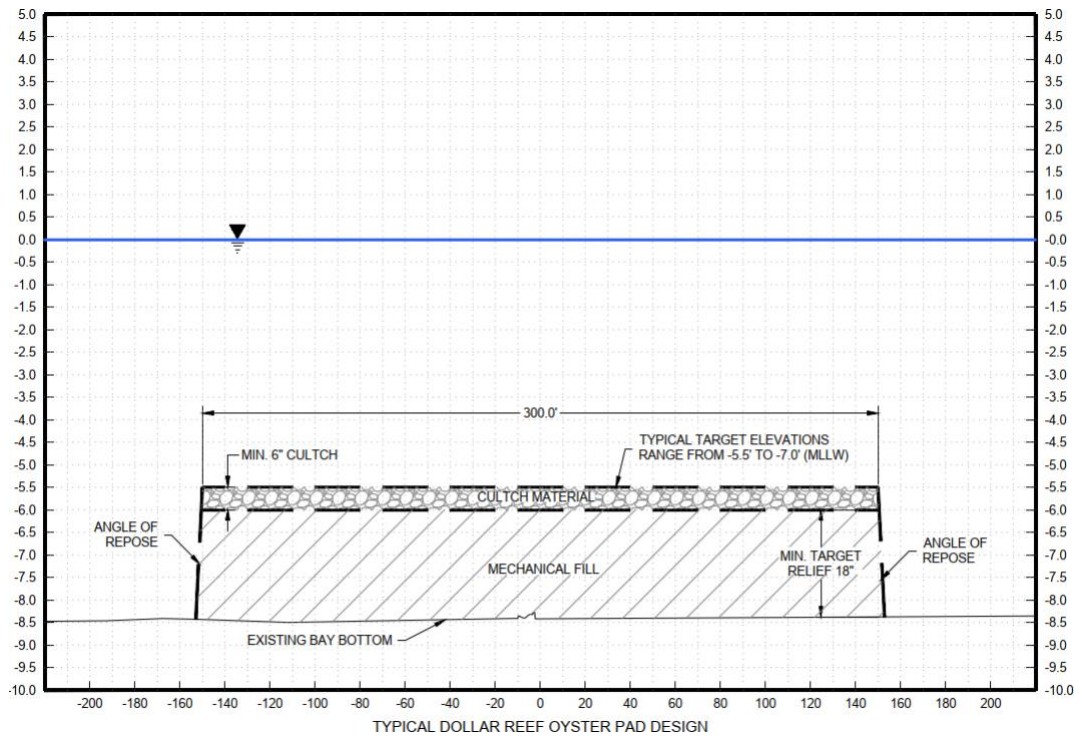
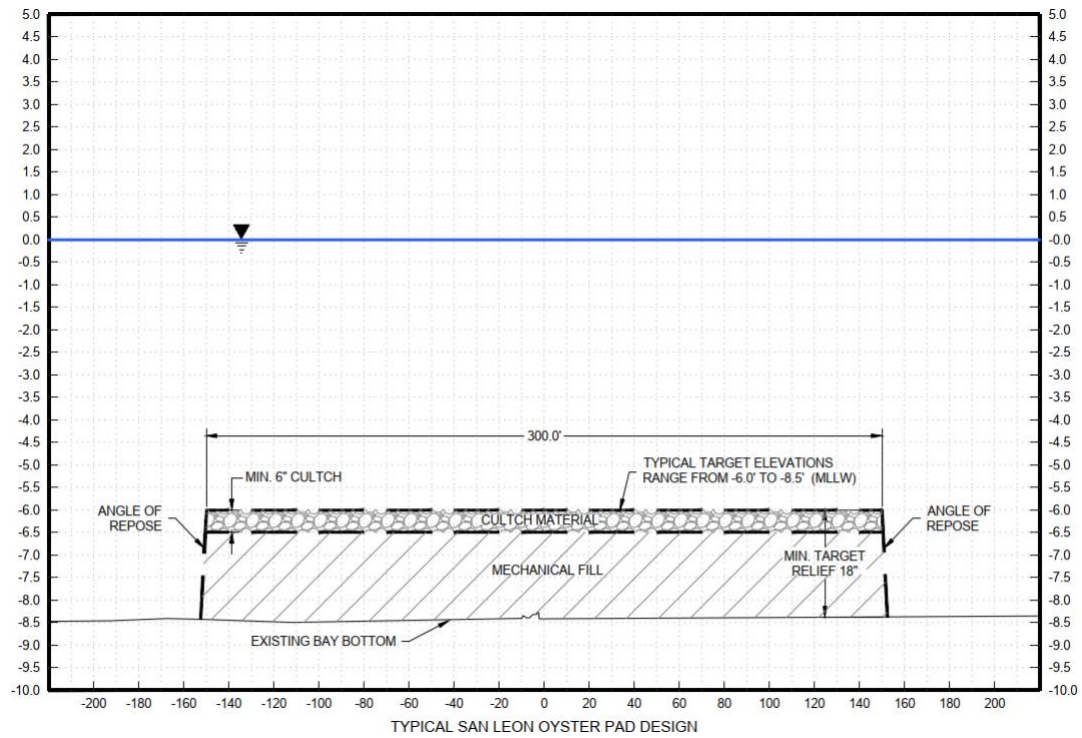
The second contract includes the creation of fifteen (15) oyster mitigation pads totaling 259.9 acres of new oyster habitat with the San Leon Mitigation Site and Dollar Reef Mitigation Site. Construction began in December of 2022 with a completion date expected in Summer 2023. The initial fill is being placed by split hull scow barges. Then, a layer of cultch material will be placed on top of the dredge fill to promote oyster recruitment. The minimum targeted relief is 18 inches above the existing bay bottom, which varies slightly by individual pad location. For the oyster pads located at the San Leon Mitigations Site and Dollar Reef Mitigation Site, the typical target elevation ranges from -6.0 to -8.5 feet Mean Lower Low Water (MLLW) and -5.5 to 7.0 feet MLLW, respectively. Oyster pads located at the San Leon Mitigation Site are expected to remain closed to shellfish harvesting indefinitely as this area is an existing restricted area. The oyster pads located at the Dollar Reef Mitigation Site are foreseen to be closed for two harvesting seasons in order to conduct oyster habitat restoration activities and allow oysters to repopulate these areas and reach market size.

See exhibits below for more information.

Take-Aways for Boaters

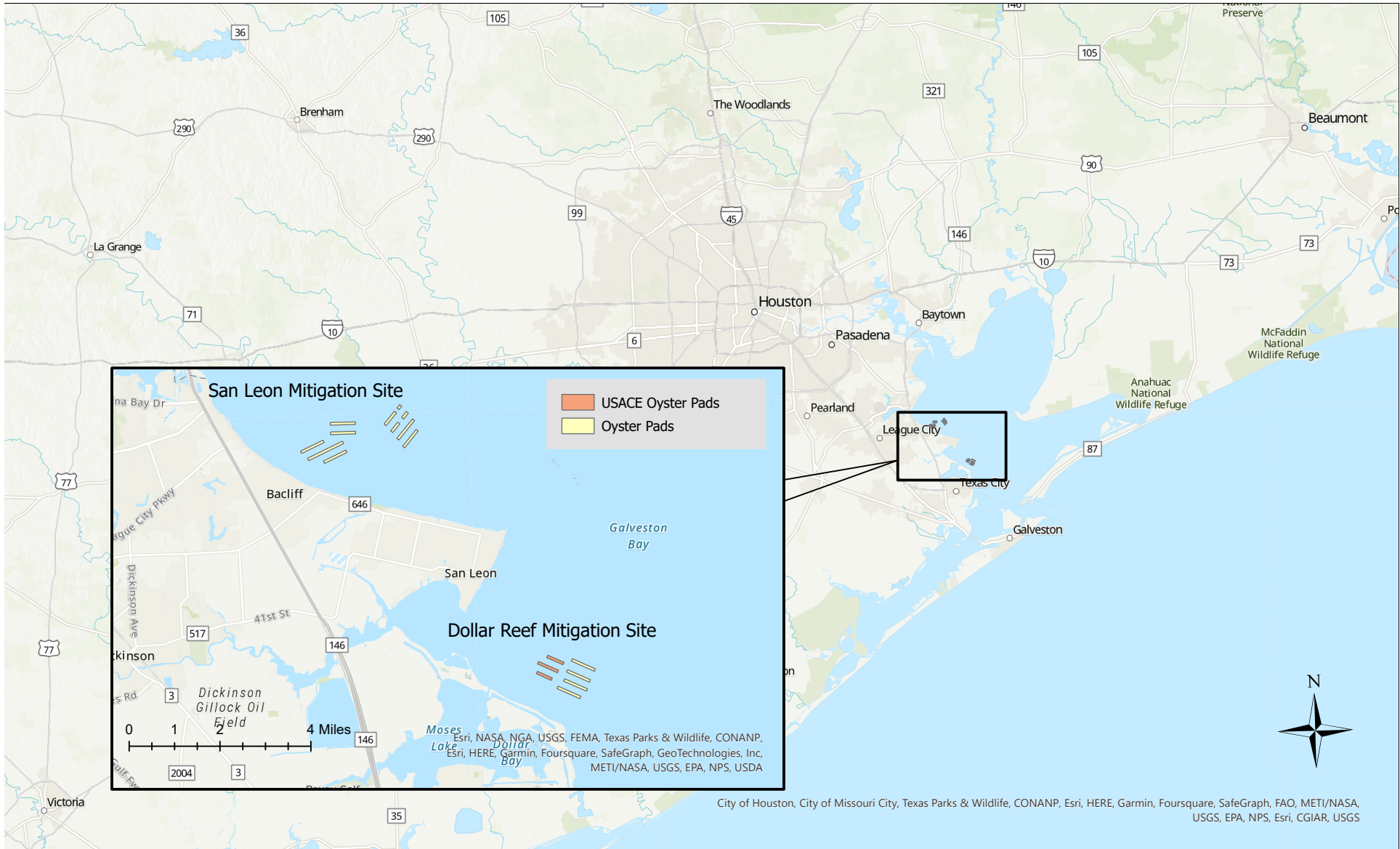
During construction of the oyster pads, high spots of mechanical fill may impact navigation within the project footprint. High spots are a result of material that stacks up higher than the targeted elevation and are typically caused by rough seas that affect the accuracy of the placement. Recent progress surveys have shown high spots near -4 feet MLLW. These high spots are relatively uncommon and **will** be leveled out before the end of construction. It's important to note that the cultch material will not be placed on top of a high spot. High spots are typically mounds of clay that may or may not have the structural strength to cause a vessel to run aground. Each pad under construction is visually marked at 200ft intervals along the perimeter with stakes marked with hi-vis paint and reflective tape. **It is advisable for boaters to avoid the San Leon Mitigation and Dollar Reef Mitigation Sites during the construction phase.** Bed leveling operations **have commenced and will be ongoing** until on or about Apr 30, 2023. Bed leveling will be conducted using an oyster boat dredge as well as a barge mounted A-frame drag bar pushed by a tugboat. From approximately Feb 27, 2023 to May 31, 2023, a placement barge, DB Ironbound, will be located at the San Leon oyster mitigation site placing material. Then the placement barge will relocate to Dollar Reef oyster mitigation site on approximately May 31, 2023 and conclude operations on or about July 12, 2023.

Survey boats, crew boats, tugboats, split hull scow barges, a cultch off-loader barge, and other accompanying equipment will be working in the area 24 hours per day. These vessels are all equipped with a VHF radio and will be monitoring Channel 13. It is advisable to provide ample space for the operating equipment in this area.



Notes:

1. All Elevations are in U.S. Survey Feet and Vertical Axis is Referenced to MLLW Datum.
2. Existing Bay Bottom Varies.
3. Dollar Reef Oyster Pads constructed by USACE are not represented by the above exhibits.



San Leon Mitigation Site

NAD 1983 StatePlane Texas S Central FIPS 4204 (US Feet)

Coordinate Points

Drawn Boundary

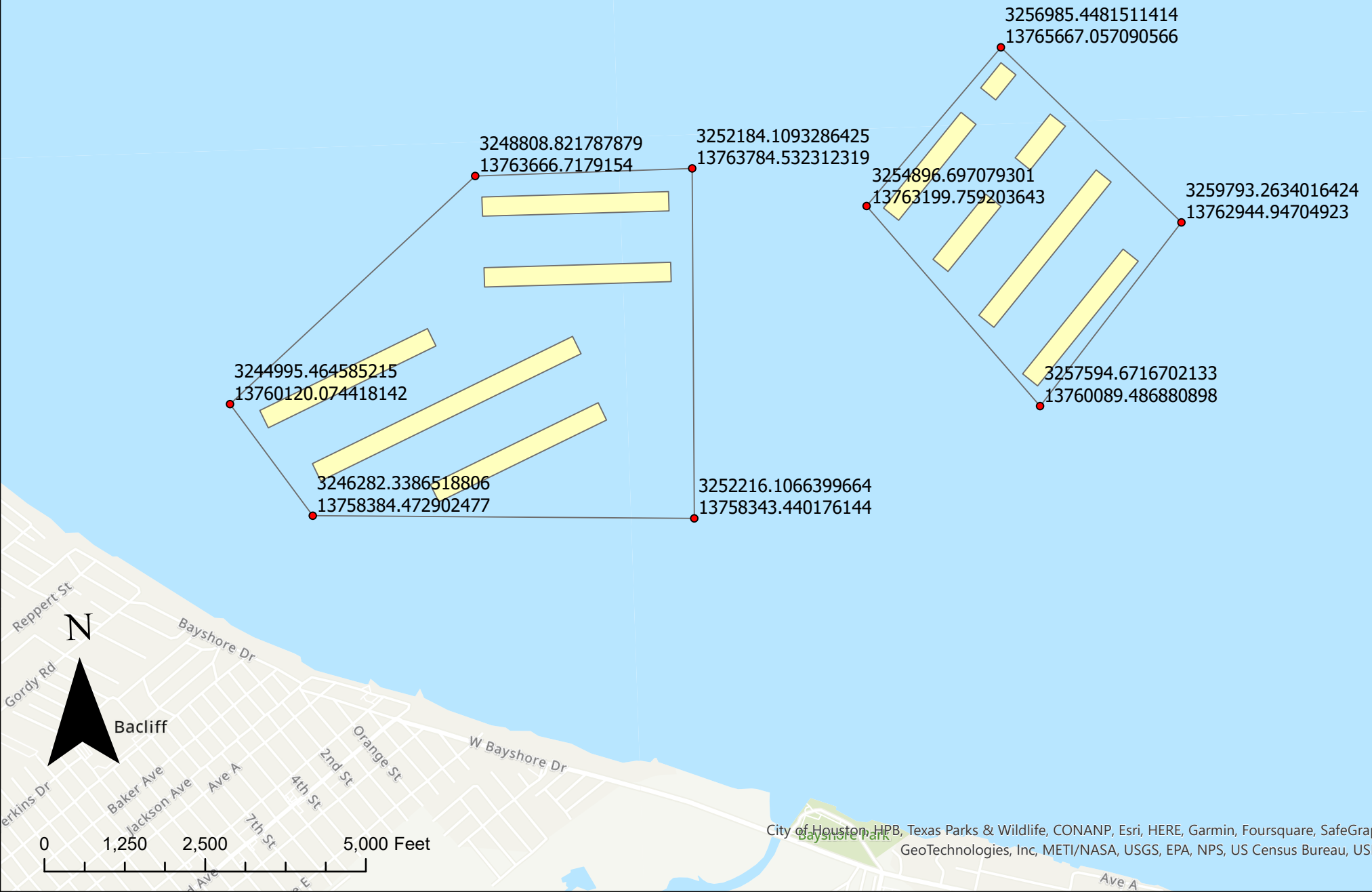
Oyster Pads



NOAA San Leon Mitigation Site

NAD 1983 StatePlane Texas S Central FIPS 4204 (US Feet)

- Coordinate Points
- Drawn Boundary
- Oyster Pads



Dollar Reef Mitigation Site

NAD 1983 StatePlane Texas S Central FIPS 4204 (US Feet)

- Coordinate Points
- Drawn Boundary
- USACE Oyster Pads
- Oyster Pads

