

City of Port Lavaca - Harbor of Refuge Project

Kickoff Meeting and Site Visit

Project:	Harbor of Refuge		
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Approved by:	Josh Carter	Checked by:	Thomas Everett
Subject:	Kickoff Meeting and Site Visit		

1 Kickoff Meeting

Mott MacDonald (MM) / Coast and Harbor Engineering (CHE) (Josh Carter, Thomas Everett, and Anna Hnatow) met with City of Port Lavaca (CPL) representatives (Jody Weaver and Jim Rudellat) and Texas General Land Office (GLO) representative Abigail Richardson to kickoff a living shoreline breakwater project proposed for the Harbor of Refuge. The project proposes to stabilize the Harbor of Refuge shoreline, reduce erosion, and enhance the ecosystem. MM/CHE representatives gave a presentation at town hall outlining the project objectives, data collection and coastal analyses, schedule and budget. Discussion points that came up during the meeting included:

Geotechnical Investigation

- Coordinate with CPL regarding the sloping/grading work along the inner harbor shoreline to collect geotechnical data for the Harbor of Refuge project.
- CPL pointed out that there is a lot of trash in the soil and that may impact the geotechnical strength.

Design Considerations

- Rock breakwaters are cheaper and can be sized to function while reef breakwaters allow for more wave transmission. However, reef breakwaters are better suited for oyster colony establishment.
- The rock breakwaters will be designed with gaps to provide navigation and fish passage.
- The groin will be angled appropriately to not interfere with channel navigation.
- The proposed marsh areas will be designed to be used as a beneficial use (BU) site as MM/CHE is not scoped to find a borrow source. The intention is to design and permit the project with the marsh material coming from a federal project while the federal project completes the work required to approve the material for BU placement.
- CPL and GLO expressed concern of the south marsh breaching before placement of BU material.
- CPL is planning to provide public access along the Harbor peninsula.
- The vegetated slope protection along the Harbor peninsula was intended to be constructed of stacked fabric bags filled with soil/seed mix. Figure 1 shows an example of a vegetated slope.



Figure 1. Example of vegetated slope with a stone toe.

2 Site Visit

2.1 Inner Harbor Shoreline



Figure 2. High scarps (estimated to be taller than 5 ft) and trash along the inner harbor shoreline.

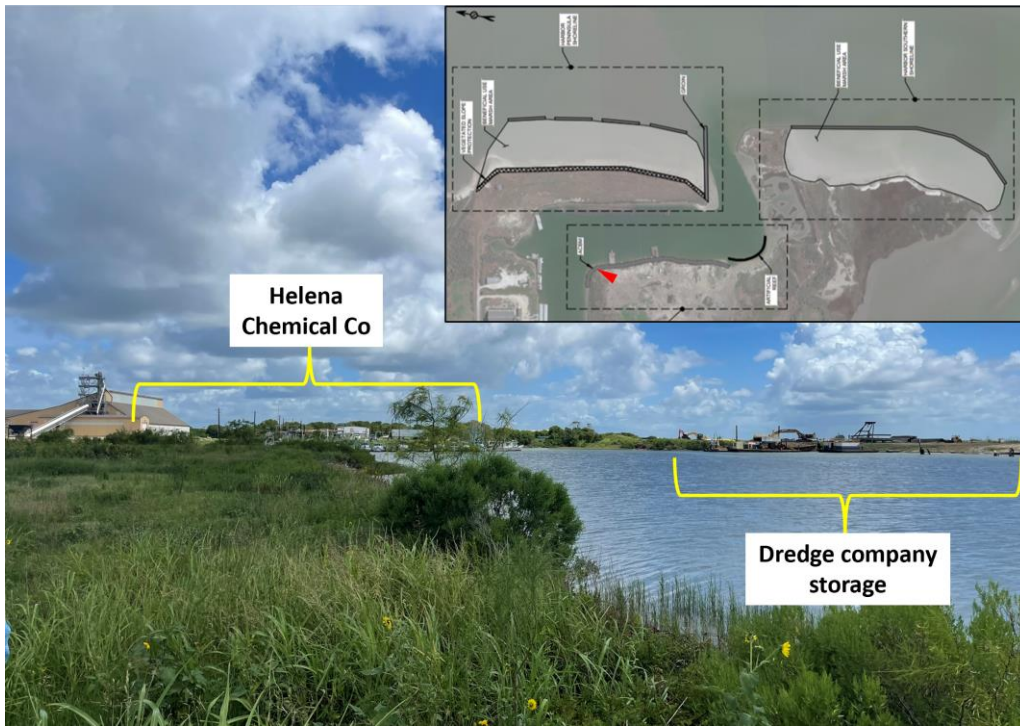


Figure 3. Facilities near the project area.

2.2 Northern Shoreline

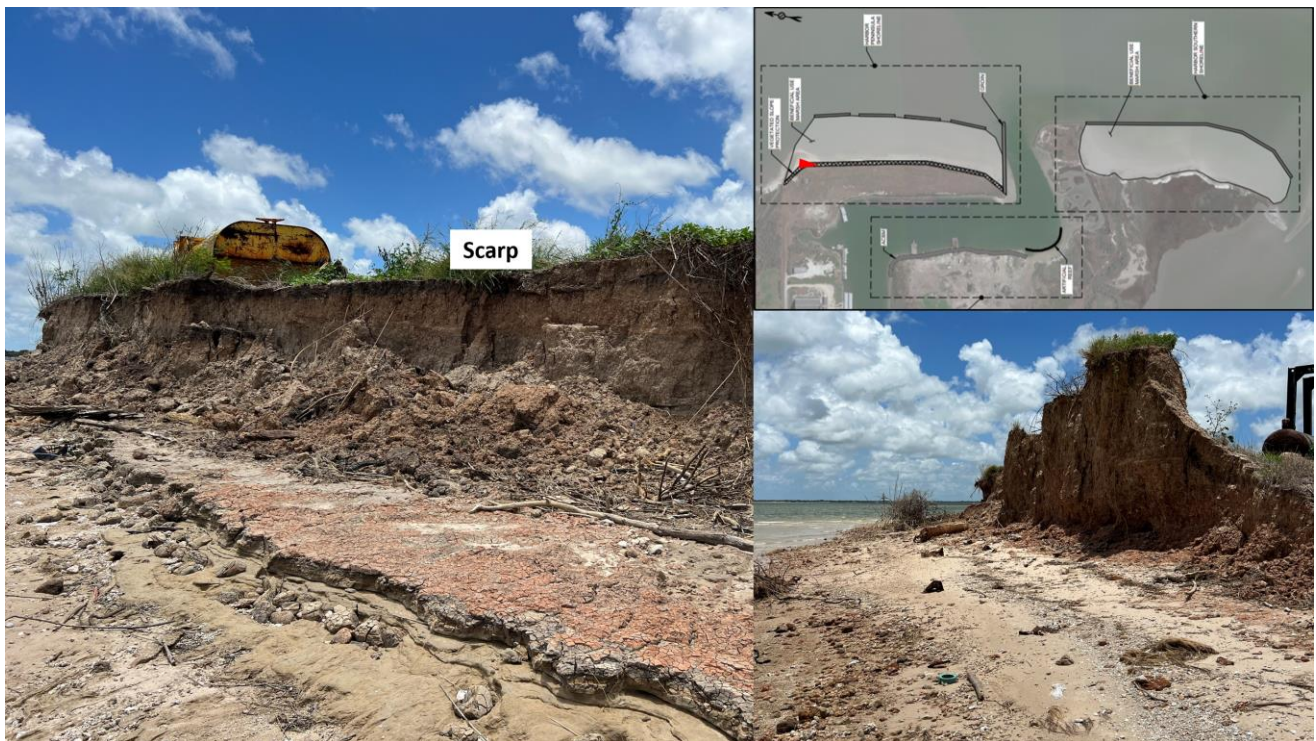
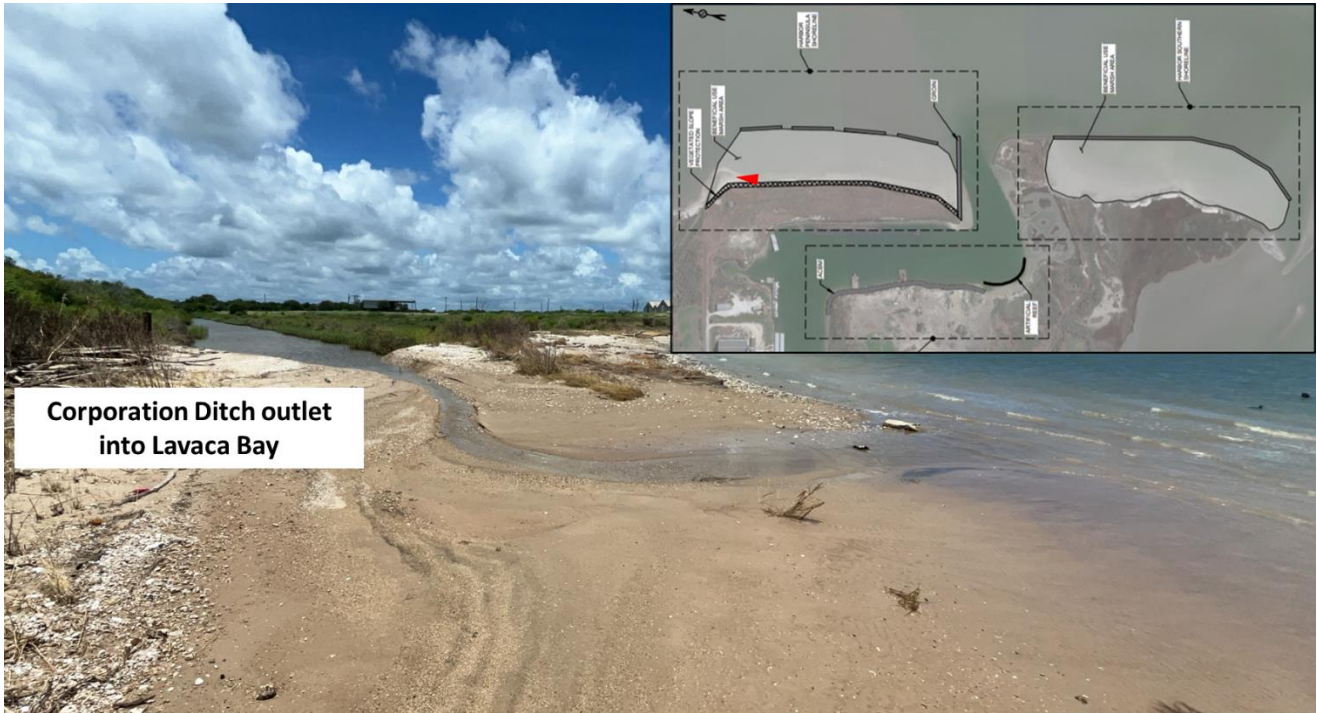
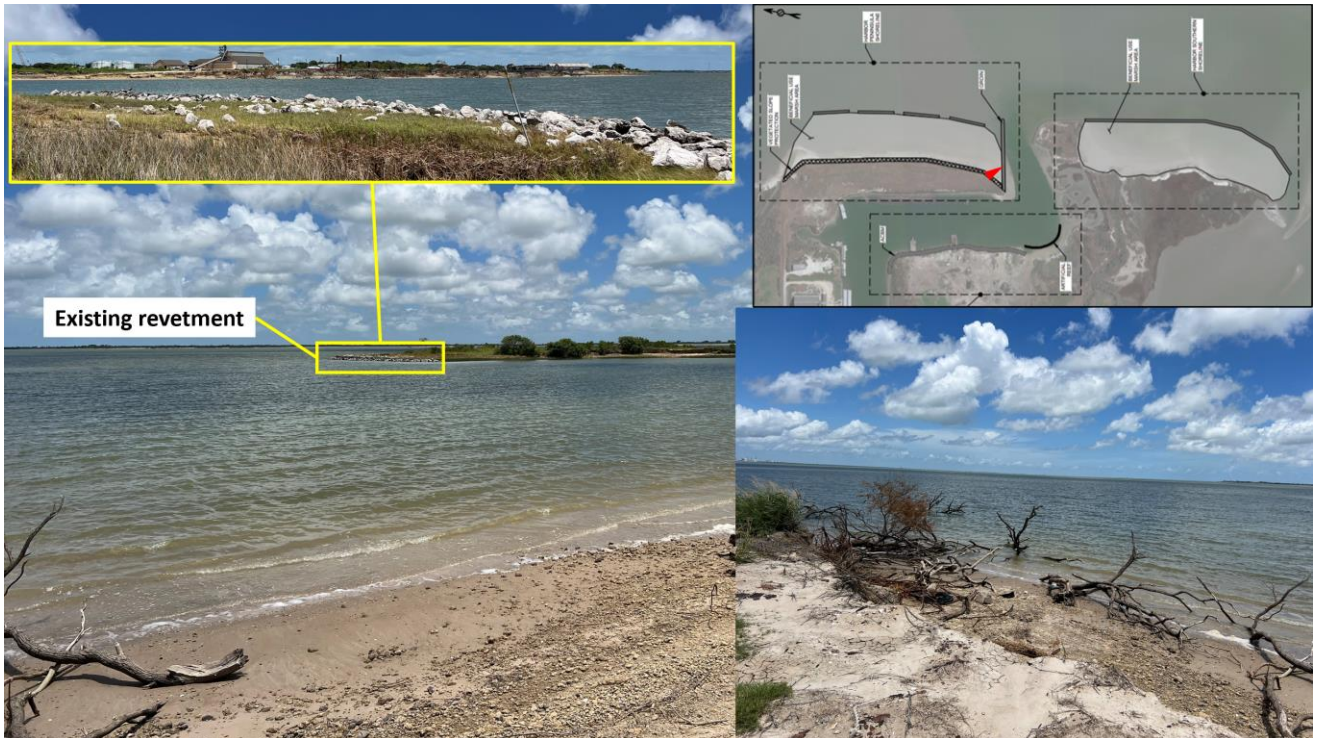


Figure 4. Tall erosional scarp and clay sediment material along the northern shoreline.



Corporation Ditch outlet into Lavaca Bay

Figure 5. Corporation Ditch draining into Lavaca Bay.



Existing revetment

Figure 6. Southern end of the northern shoreline.

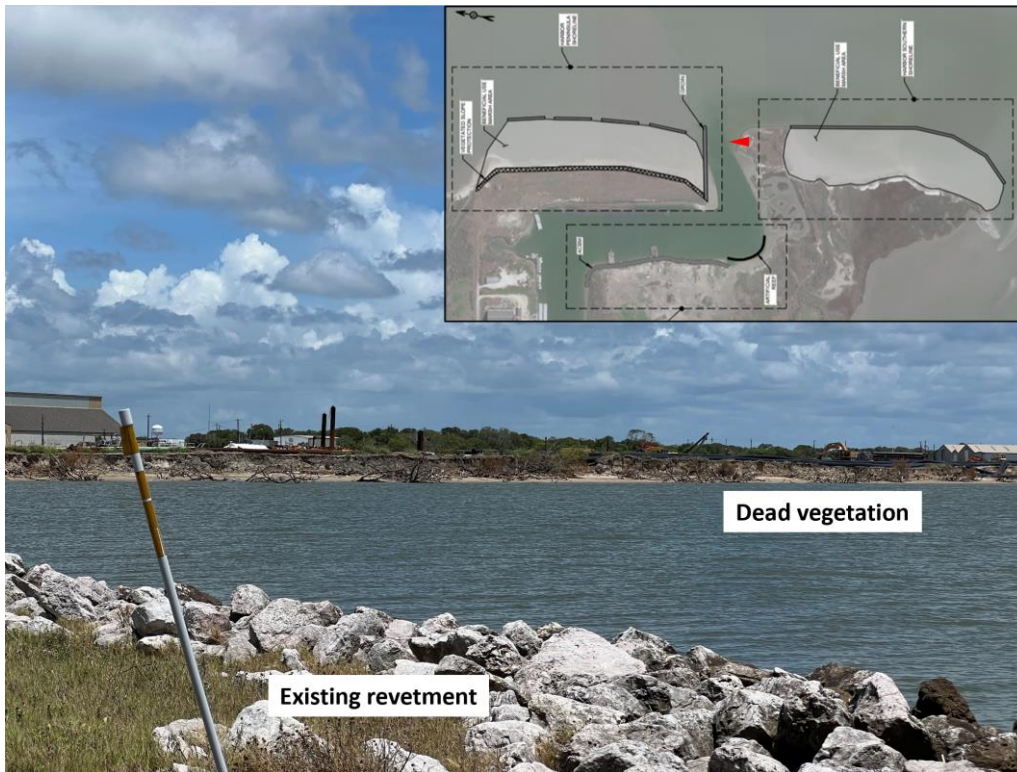


Figure 7. View of the northern shoreline from the southern shoreline.

2.3 Southern Shoreline

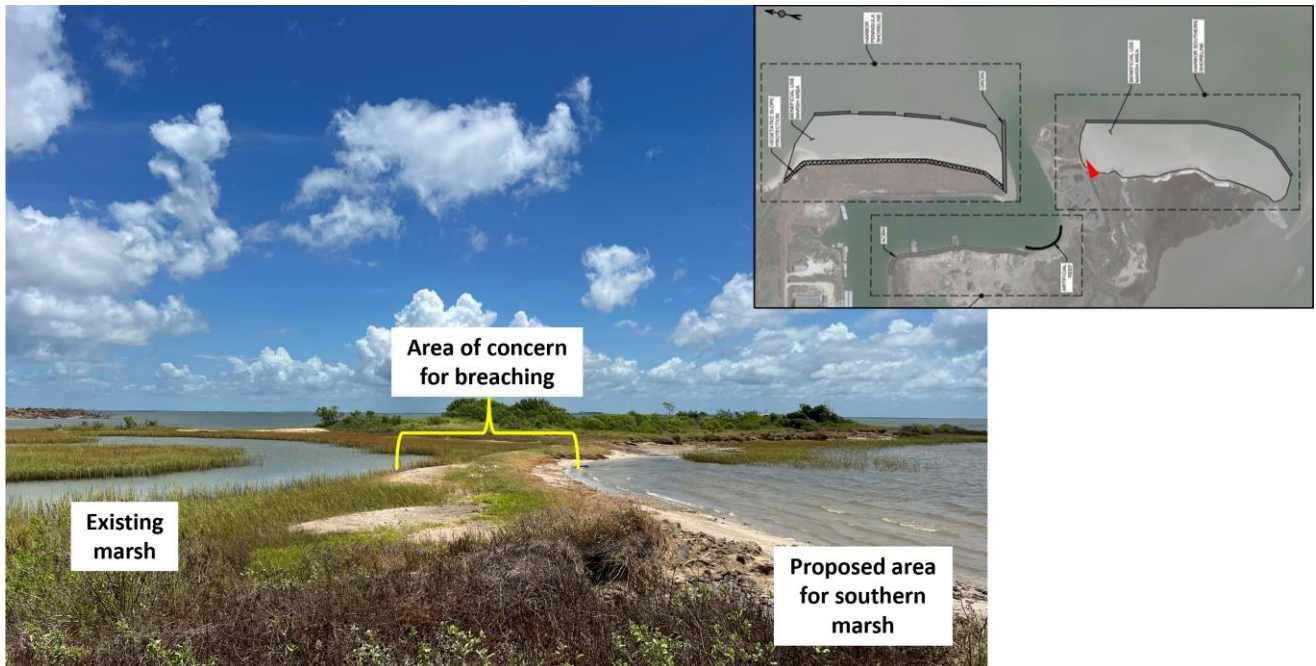


Figure 8. Area where CPL and GLO expressed concern of the south marsh area breaching before placement of BU material.

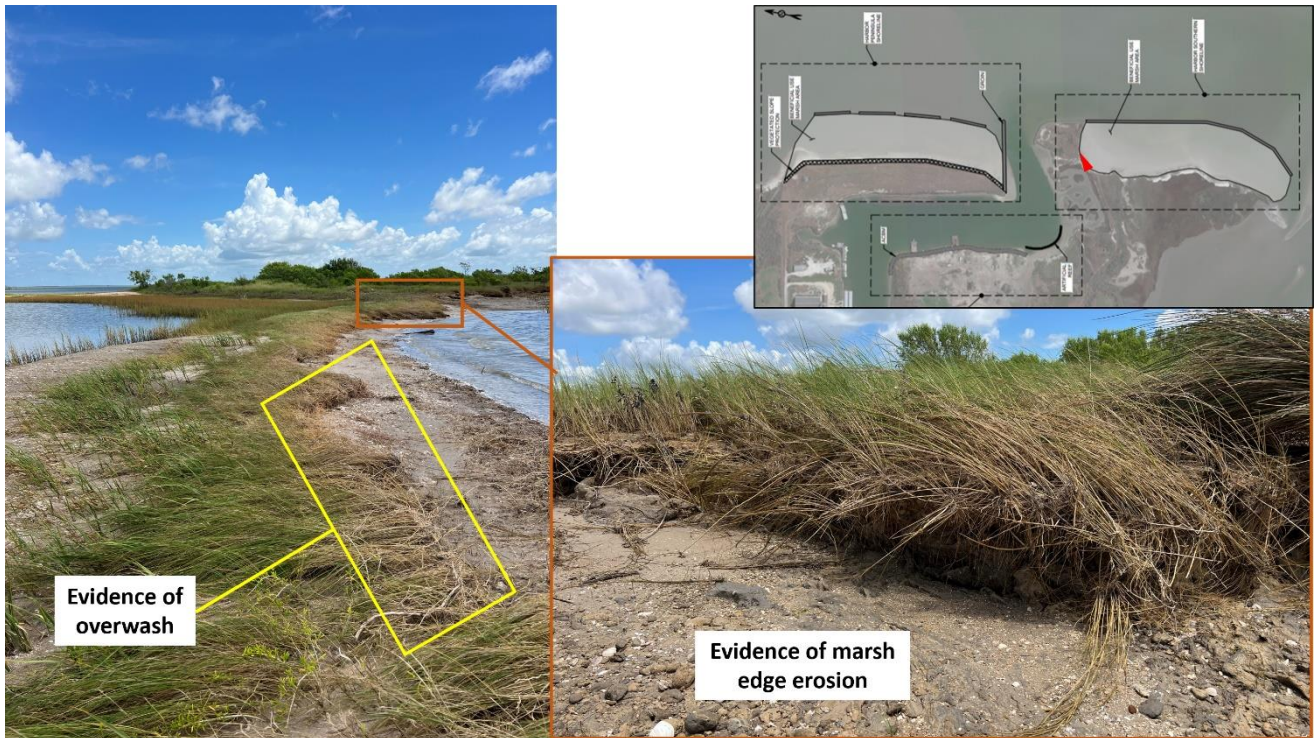


Figure 9. The southern shoreline exhibited signs of overshoot and marsh edge erosion.



Figure 10. Evidence of overshoot and healthy marsh along the southern shoreline.