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# CITY OF PORT LAVACA

**DATE:** 7.02.2021

**PC MEETING**: 7.06.2021

**TO:** PORT COMMISSION CC: J. RUDELLAT

**FROM:** JODY WEAVER, INTERIM CITY MANAGER

**SUBJECT:** **CDBG-MIT GRANT COASTAL RESILIENCY PROJECT / RESTORE GRANT**

Attached is a copy of the Application Summary for the $13.6M CDBG-MITIGATION GRANT project recently awarded to the City of Port Lavaca. We are expecting to receive the contract from the General Land Office very soon.

The third page of this summary provides a conceptual plan of the project. Notice the notation that states "Barge removal activities are expected to occur under the TCEQ RESTORE Act grant already awarded to the City." Progress with respect to the ReStore Act Funding has been very slow and riddled with issues in fine turning the submittal to the U.S. Treasury. In light of the recent award of the CDBG-MIT grant application, we have been in conversation with GLO and TCEQ and we are proposing to name the GLO as the beneficiary of the allocated ReStore Act Funds instead of the City of Port Lavaca. GLO will move forward in short order with the needed barge removal operations and will be reimbursed whenever the funds are released from the federal government.

We will funnel this project through the Port Commission for guidance and recommendations as with other waterfront capital improvement projects.

This is a very exciting project. Engineering and Grant Administration were already procured during the application phase, although a cost proposal for the design work must still be negotiated and signed. The engineering firm is Mott McDonald out of Corpus Christi and the grant administrator is KSBR Admin Services (Katy Sellers).

## Port Lavaca Downtown Environmental Enhancement and Hazard Mitigation Living Shoreline Project for the Coastal Resiliency Program

The City of Port Lavaca would like to submit an application to the Texas General Land Office for funding under the Community Development Block Grant - Mitigation (CDBG - MIT) Coastal Resiliency Program. In particular, the City would seek funding associated with public infrastructure and flood mitigation measures for their Living Shoreline Project. It is vital for the resiliency of the city and its communities that the sustained damage caused by Hurricane Harvey is addressed.

During Hurricane Harvey, several areas in the city flooded with up to 9 feet of water, as registered by the US Geological Survey. High tides, storm surges and energies from Lavaca Bay inundated the city shorelines, which blocked the outflow discharge from the storm-water public sewer system that had been saturated by intense rain. The combination of elevated tides and blocked sewers caused the low-income communities in low areas to flood.

A storm surge mitigation project is needed to reduce the impacts of storm surges on the city's storm-water sewer outfall systems. Limiting surges to at least 6-8 feet would allow the system to control rain runoff and mitigate the impacts from another catastrophic event.

The City developed a Master Plan that identified the city's downtown area as an economic development asset to the region. This project would also protect that infrastructure, the main source of economic benefits for the City. This infrastructure provides employment and other benefits to low-income communities. The project would bring new investments to the protected areas, which will bring new businesses, employment, recreational and educational resources to the low-income population and visitors to the city.

The City is requesting CDBG-MIT funding to mitigate flood and storm impacts through construction of a Living Shoreline. The funding would be used for data collection, design, permitting, preparation of construction specifications and construction of a set of breakwaters that will be resilient enough to function as storm surge mitigation structures. This proposed infrastructure project is expected to significantly mitigate the effects of storm surges and reduce impacts to the storm-water sewer system that discharges to the bay. The project will be one of the main actions needed to mitigate the flooding risks of low-income communities in Port Lavaca. Additionally, the resilient design of this project is considered to be a living shoreline, which will enhance the environmental and recreational conditions in the downtown area.

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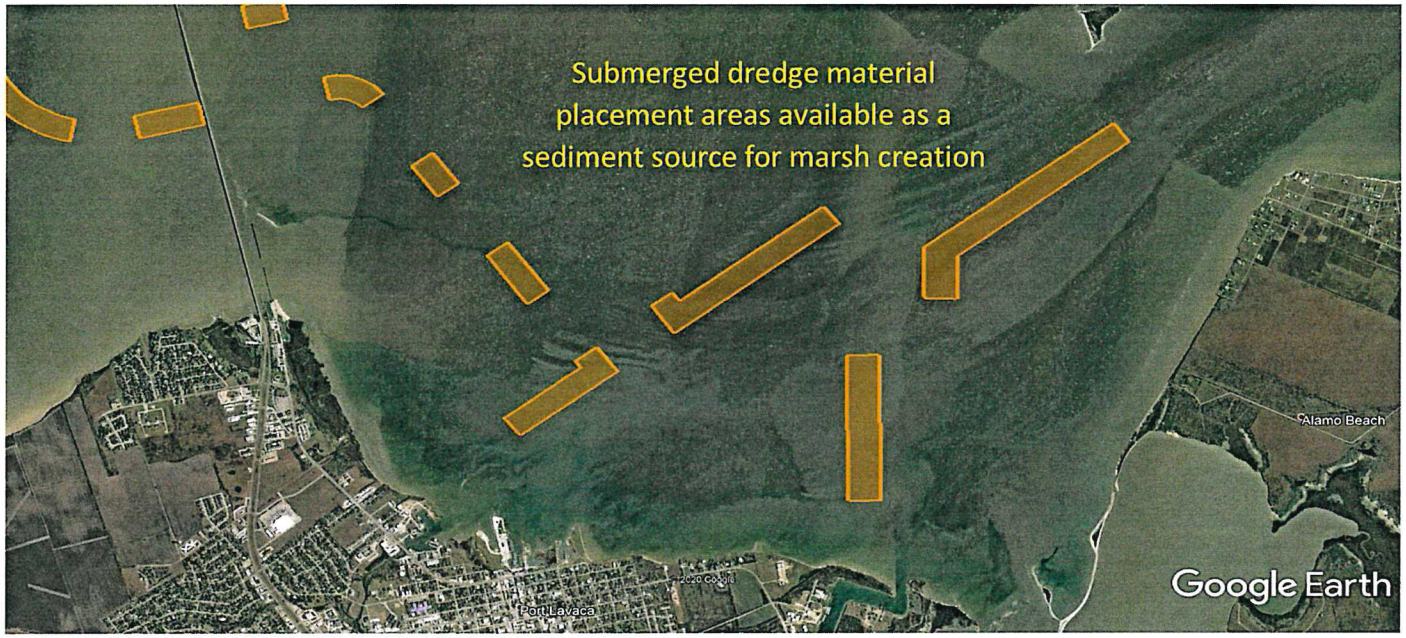
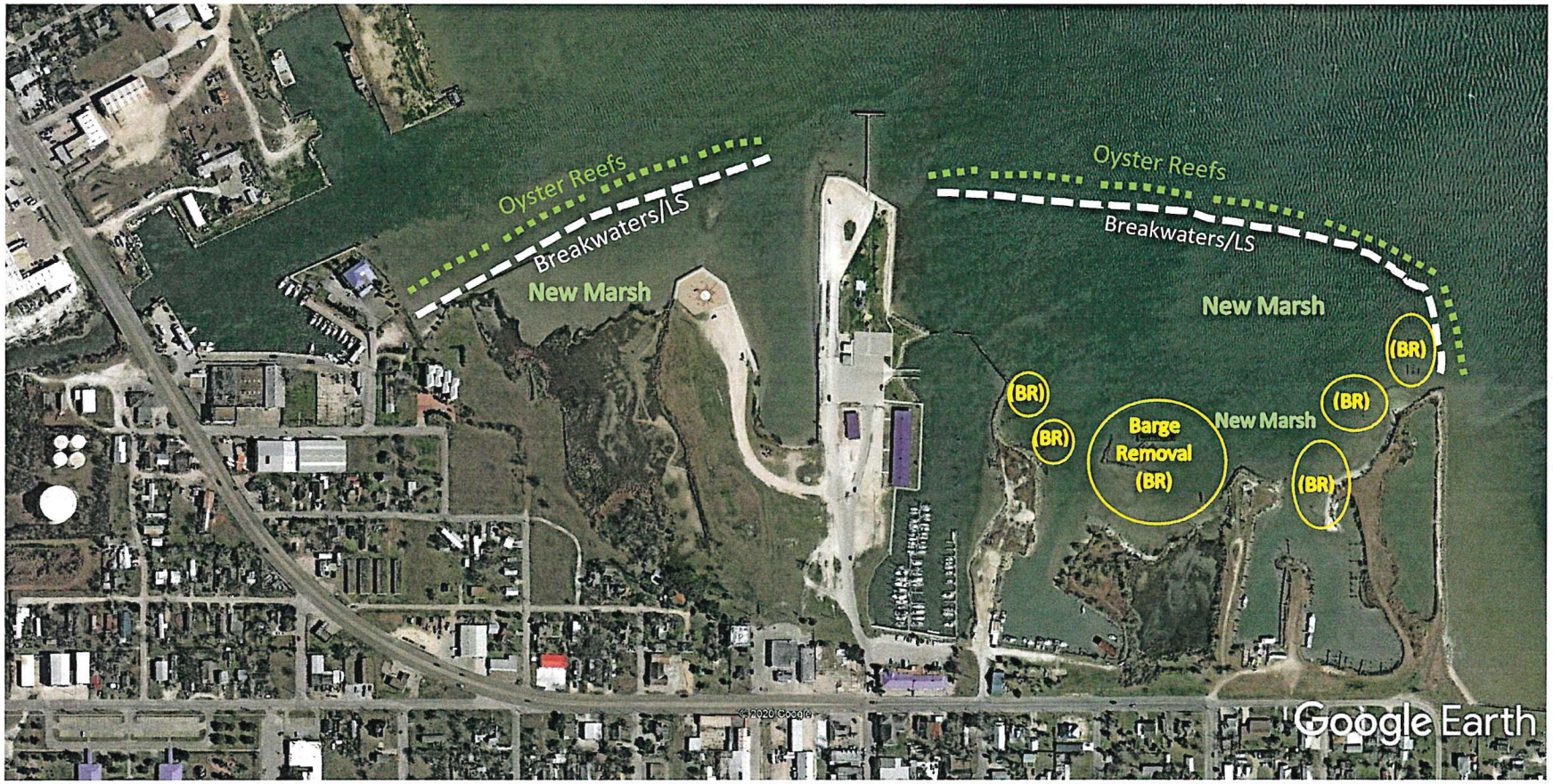
**Goals:**

- Mitigate the impacts of storm surges to the Port Lavaca downtown area through the construction of breakwaters/living shorelines as the main line of defense for storms.
- Protect the stormwater sewer outfalls that discharge into the bay to reduce the flooding of city streets caused by heavy rains combined with high tides.
- Utilize Beneficial Use of Dredge Material (BUDM) opportunities to enhance the shorelines through the creation of marsh habitats that will also serve as a natural line of defense to storm impacts.
- Create a set of oyster reefs-fish habitats to enhance the living shorelines; increase visitation, education and environmental sustainability of the shorelines; and act as an additional line of defense to storms impacts.
- Revitalize the downtown area for economic development and opportunities for the residents.



**Restoration Concepts: Breakwaters/Living Shorelines, Marshes & Oyster Reefs (Fish Habitat) as Different Lines of Defense to Storm Surges and Environmental Sustainability**




Proposed concept of the different lines of defense for storm surges at the Port Lavaca shorelines. The concept includes breakwaters/living shorelines with habitat restoration for environmental sustainability. Barge removal activities are expected to occur under the TCEQ RESTORE Act grant already awarded and will not interfere with the proposed storm protection project.

# Port Lavaca Living Shorelines Engineer's Estimate of Probable Construction Costs

last updated: 8/25/2020

| Item | Quantity | Unit | Unit cost | Living Shorelines with Marsh and Fish Habitats |
|---|---|---|---|---|
| **Marine Components** | | | | |
| Mobilization/Demobilization | 1 | LS | 10% | $1,009,000 |
| Site work/ contractor surveys | 6 | LS | $50,000 | $300,000 |
| Environmental Protection [1] | 1 | LS | $75,000 | $75,000 |
| North Breakwater [2] | 1,260 | LF | $2,250 | $2,835,000 |
| South Breakwater | 1,900 | LF | $2,250 | $4,275,000 |
| North Oyster Reef | 960 | LF | $625 | $600,000 |
| South Oyster Reef | 1200 | LF | $625 | $750,000 |
| North Marsh | 12,000 | CY | $31 | $375,000 |
| South Marsh | 28,000 | CY | $31 | $875,000 |
| **Construction total** | | | | **$11,094,000** |
| Engineering [3] | 1 | LS | 10% | $1,109,400 |
| Construction Administration | 1 | LS | 5% | $554,700 |
| Grant Administration | 1 | LS | 8% | $1,020,648 |
| **Total** | **Total** | | | **$13,778,748** |

**Notes:**

1. Environmental protection for marsh includes silt fencing; for other aspects is environmental monitoring

2. Breakwaters are proposed at elevation +6.0 ft. Average depth at the site ~ -3 ft.
Breakwaters cost based on unit price of $120/ton for armor stone; template requires ~15 tons/ft;
Unit price of breakwaters at +4.5 ft elevation is $933/ft (~7.8 tons/ft)

3. Engineering includes data collection, regulatory permitting and design

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**From:** Suzanne Nelson <suzanne.nelson.glo@recovery.texas.gov>
**Date:** June 8, 2021 at 4:57:00 PM CDT
**To:** jwhitlow@portlavaca.org
**Cc:** Jody Weaver <jweavergoog7117@gmail.com>
**Subject: Approval of Port Lavaca's MIT Costal Resiliency Living Shoreline Project**

Mayor Whitlow,

I am pleased to let you know that the City of Port Lavaca's Living Shoreline project has been approved by the GLO. I will be in touch shortly to discuss next steps.

Project Amount Total: $13,645.005.00
Brief Description of Project: Construction of breakwaters/living shorelines and enhancement to the shorelines by creating marsh habitats, and oyster reefs-fish habitats.

Congratulations!
Suzanne

*Suzanne Nelson*
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