

# Coastal Zone

NEWSLETTER  
AUGUST 2020

## What's inside:

### Mid-Breton Diversion

The Mid-Breton Sediment Diversion, included in the Louisiana Coastal Master Plan, is moving forward. Find out how the state plans to build land with the diversion and what consequences some communities could face.

### St. John the Baptist Parish Updates

Updates on local projects and coastal use permits.

### Legislative Advocacy

Find out how St. John the Baptist Parish is engaging state and federal legislatures to advocate for a healthy Louisiana coast.

### Flood Risk Tool

First Street Foundation, a non-profit research and technology group, recently released *Flood Factor*, a new tool that reassess flood risk in every state. The new data shows that our flood risk may be greater than FEMA maps illustrate. Find out more in this newsletter.

EMBRACE THE  
**GULF**  
2020



## EMBRACE THE GULF 2020

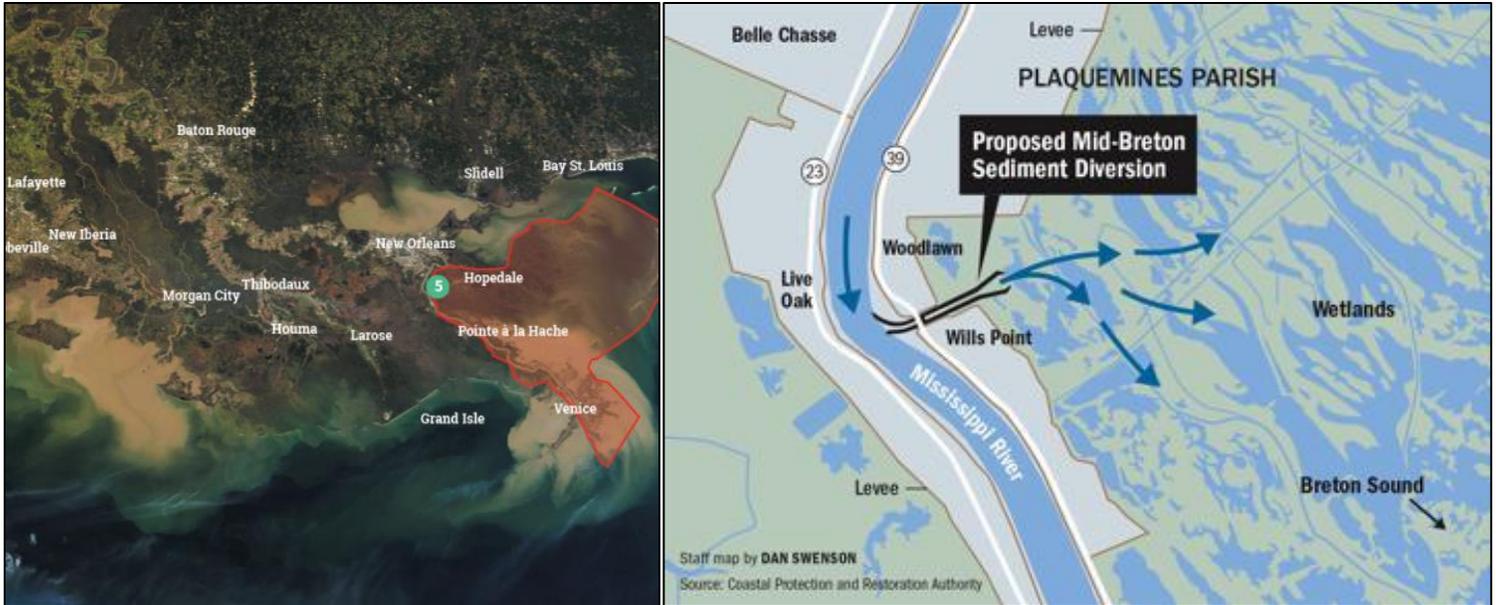
The Gulf of Mexico provides food, shelter, protection, security, energy, habitat, recreation, transportation, and navigation – playing an important role in our communities, states, region, and nation. To highlight the value and the vitality of the Gulf of Mexico region, the Gulf of Mexico Alliance is implementing a Gulf-wide awareness campaign called “Embrace the Gulf” for the entire year of 2020. The awareness campaign will culminate in a multi-stakeholder, cross-sector celebration of the importance of the Gulf of Mexico.

On June 23, 2020, Parish President Jaclyn Hotard proclaimed the year 2020 as *Year to Embrace the Gulf*. With the proclamation, she encouraged Parish citizens to reflect on the vital role the Gulf of Mexico plays in our daily lives and to work towards a more sustainable future.

# Mid-Breton Sediment Diversion



## A CONTROVERSIAL METHOD OF RESTORING THE COAST



The Coastal Protection and Restoration Authority (CPRA) has applied to the U.S. Army Corps of Engineers for permits and permission to construct, maintain and operate the Mid-Breton Sediment Diversion Project on the east bank of the Mississippi River in Plaquemines Parish. This diversion is a part of Louisiana's \$50 billion Coastal Master Plan intended to use the power of the Mississippi River to move sediment and freshwater from the river into nearby wetlands mimicking the way the Mississippi River functioned before it was leveed off. Advocates hope that the diversion will build 16,000 acres of new land during its first 50 years of operation that will restore the range of salinity in the wetlands, improve wetlands, and provide coastal communities a line of defense against storm surge.

However, not everyone views the diversions as a benefit to the region. Fishermen are worried that, in the short term, the project will drastically change the ecosystem they depend upon for their livelihood. Brackish water habitats that support large populations of oysters, brown shrimp, blue crab and many other species of fish will be flooded with fresh water, rendering fishing areas barren. The fishing industry in Louisiana is not only the supplier of a third of the nation's seafood caught in the U.S., but it's also a way of life that has spanned for generations in coastal communities. Many fishermen are worried that their way of life, not just their livelihoods, will vanish. On the other hand, coastal scientist are worried that if new land isn't built soon, the coast will eventually erode away and be lost forever. If that happens, fisherman will still lose their way of life.

St. John Parish has its own diversion project listed in the Coastal Master Plan: the River Reintroduction into Maurepas Swamp. This diversion will also use the power of the Mississippi River to provide freshwater and sediment to existing wetlands in Maurepas Swamp. However, one of the main differences between this project and the Mid-Breton Sediment Diversion is that the Maurepas Diversion will supply freshwater to an already freshwater habitat. It will only enhance the species and ecosystems located there. It is not designed to build new land like the Mid-Breton Diversion.

Tell us your opinions on both the Mid-Breton Diversion and the Maurepas Diversion by taking this short survey. Click this link here: <https://www.surveymonkey.com/r/BN9H7SK>

# St. John the Baptist Parish Updates

## Coastal Project Updates

- **Belle Terre Streetscape and Stormwater Enhancement:** CSRS Inc. currently working on conceptual design for the project.
- **LASAFE Complete Streets:** 95% design phase is complete. Project will go out for construction bid in the coming months.
- **Lake Pontchartrain Shoreline Protection:** HDR Engineering finished 15% preliminary design recommending a design with a light-weight aggregate core. A one pager of the project design is below!
- **River Reintroduction Into Maurepas Swamp:** RESTORE Council voted to approve funding for this project in February 2020.

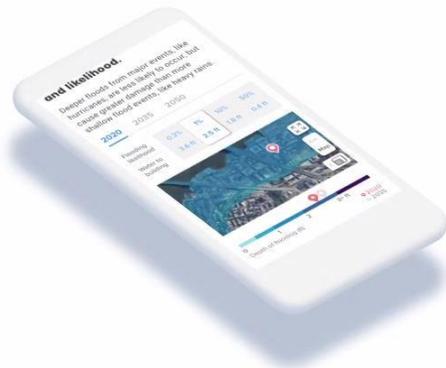
## Coastal Use Permits (CUP's)

- P20181001: Issued with mitigation
- P20190545: On Hold
- P20190156: Issued with Mitigation
- P20191103: Letter of Withdrawal
- P20190136: Issued with Mitigation
- P20191247: Issued NDSI (No Direct or Significant Impact)
- P20191311: Open
- P20191334: Issued with Mitigation
- P20200164: Letter of Withdrawal
- P20200190: Issued with Mitigation

## New Flood Risk Tool

Explore future flood risks

**Flood Factor**   
TM



First Street Foundation, a non-profit flood risk research organization, recently released new flood models suggesting flood risk in the U.S. is a greater risk to many more properties than previously thought. The models nearly double the amount of properties located the 100-year flood plain, the threshold that FEMA maps are based on. A 100-year flood is a flood that has a 1% chance of occurring in any given year. The data takes into account sea level rise and intense rainfall, data that FEMA maps do not include.

Although the data is a useful tool for property owners curious about their flood risk, it is not incorporated into FEMA regulations. Local and federal floodplain regulations, and therefore insurance prices, that guide development in a floodplain are still based on FEMA Flood Insurance Studies and their subsequent maps. If you are curious about this new data, you can search for you own property on the Flood Factor website by following this link: <https://floodfactor.com/>

# Legislative Advocacy

## HOUSE BILL 02

An amendment to House Bill 02 (HB2), proposed in May 2020 in the Louisiana legislature, cut \$117 million of 2019 surplus revenue earmarked for LA's coastal trust fund by Gov. John Bel Edwards intended to aid the construction of coastal projects including the West Shore Lake Pontchartrain levee. Parish President Jaclyn Hotard took action to formulate a collective call of opposition to the bill with the Parish Presidents of St. Charles and St. James Parishes. The three presidents sent a formal letter to the Louisiana Legislature that urged the Louisiana House of Representatives to remove the amendment and re-instate the dollars to their initial cause. The amendment was removed from the bill and the dollars restored. On June 29, 2020, Gov. John Bel Edwards signed House Bill 02 into Law without the amendment taking away money for coastal projects.



## PARISH RESOLUTION: GOMESA

On June 23, St. John the Baptist Parish Council passed a resolution urging the U.S. Congress to include improvement provisions to GOMESA in the Great American Outdoors Act (GAOA) to ensure parity to the Gulf producing states. GOMESA creates revenue sharing provisions for the four Gulf oil and gas producing states. However, the states' share only 37.5% of energy exploration revenues with a total cap of \$375 a year. Louisiana is legally obligated to spend its share on coastal restoration. St. John Parish is using GOMESA funds to design and build the breakwater in Lake Pontchartrain. GAOA allocates energy and exploration revenues to the maintenance of public parks all around the U.S. without including more revenue for Gulf producing states. GAOA was signed into law on August 4<sup>th</sup>, 2020 without improvement provisions for GOMESA.



For more information, please visit [St. John's Planning and Zoning website](#), or contact our Coastal Zone Administrator Devin Foil at (985) 651-5565 Ext. 1300

# Lake Pontchartrain Shoreline Protection Project

## Shoreline Protection Alternatives

Lake Pontchartrain's shorelines have been retreating under the combined impacts of historical logging, soft soils, and wind-driven waves. As the shoreline retreats, flooding risks increase and wetland habitat is lost.

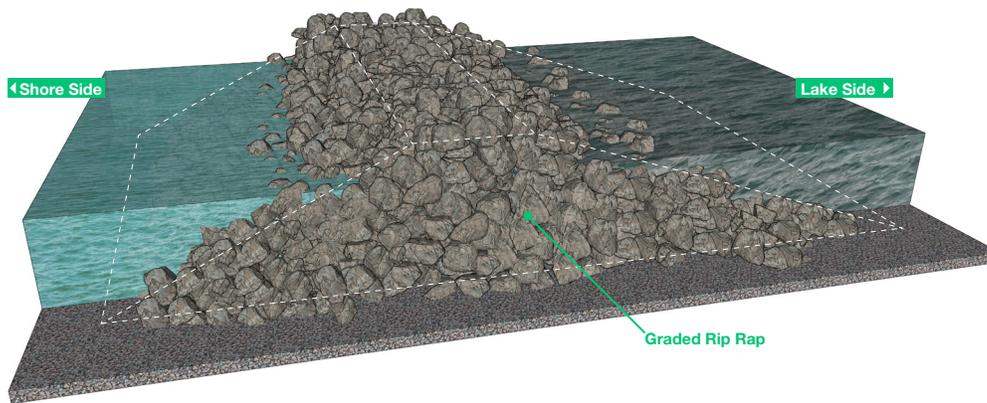
To reduce the impacts of this erosion for its people and infrastructure, St. John the Baptist Parish is designing breakwaters at two locations in Lake Pontchartrain: south of Pass Manchac and south of Frenier Landing.



HDR Engineering, Inc.

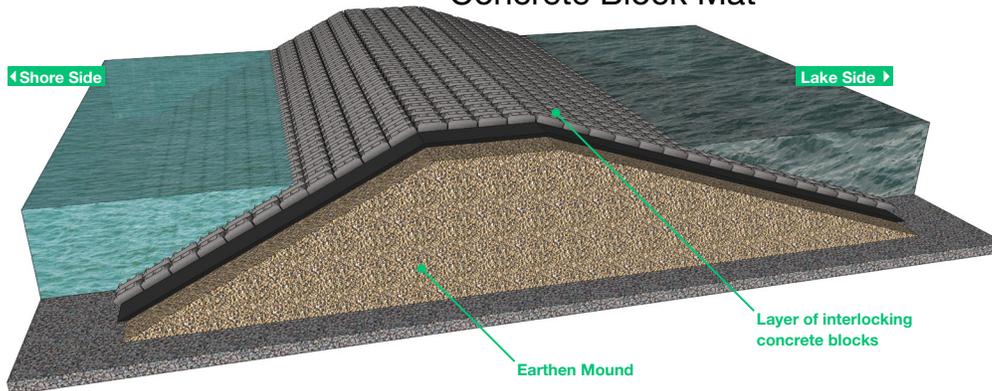
### The Options

#### Tried and True: Graded Riprap



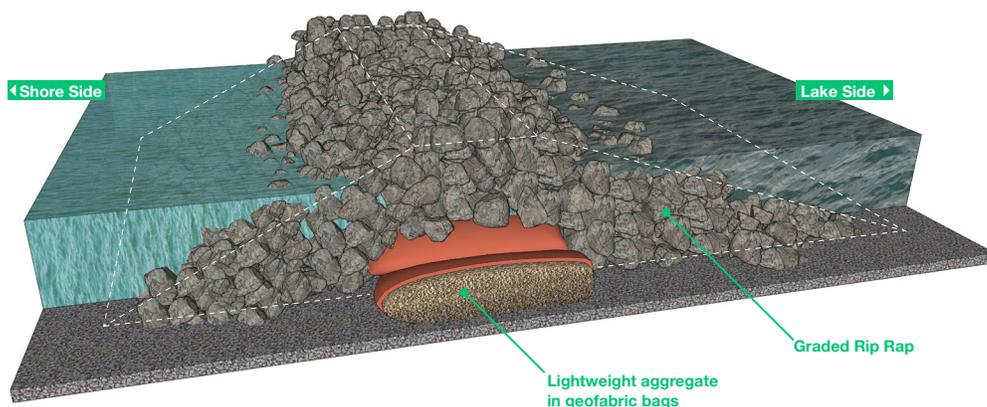
- ✓ Easiest to construct
- ✓ Low maintenance
- ✓ Proven record of success
- Geotechnical drawbacks – heavy structure can challenge underlying soils
- Higher construction cost

#### Lower Cost but Uncertain: Earthen Mound with an Articulated Concrete Block Mat



- ✓ Lowest construction cost
- ✓ Lightweight structure
- Requires stable underlying soil
- Typically used to protect shore slopes – performance as a breakwater less studied
- Nearby soils may not make suitable earthen mound fill material

#### Benefits of Both: Graded Riprap with a Lightweight Core



- ✓ Geotechnical advantage – lightweight core puts less stress on underlying soils
- ✓ Low maintenance
- ✓ Proven record of success
- Moderate construction cost

# Lake Pontchartrain Shoreline Protection Project

## Shoreline Protection Alternatives



HDR Engineering, Inc.

### Detailed Scoring Criteria

Scoring: HIGH MEDIUM LOW

	Traditional Graded Riprap	Riprap with Lightweight Core	Earthen Mound with ACB Mat
Wave Transmission	●	●	●
Constructability	●	●	●
Past Success	●	●	●
Maintenance and Lifespan	●	●	●
<b>Geotechnical Stability</b>	●	●	●
Construction Cost	●	●	●

Recommended Alternative ▲

### Study Findings

Graded riprap and riprap with a lightweight core tied with the highest overall scores.

Those options differed along two dimensions: constructability, where traditional riprap has an advantage, and geotechnical stability, where a lightweight core improves outcomes.

The stability of the breakwaters is more important for the success of this project, so graded riprap with a lightweight core became the recommended alternative.

### Location Map

