# Deepwater Horizon Region-Wide TIG Oyster Restoration Project

Gulf States Marine Fisheries Commission Molluscan Shellfish Subcommittee Meeting 12 October 2021 Eric Weissberger on behalf of the Region-Wide Trustee Implementation Group

#### **Restoration Plan 1**



Deepwater Horizon Oil Spill Regionwide Trustee Implementation Group

Final Restoration Plan/ Environmental Assessment 1: Birds, Marine Mammals, Oysters, and Sea Turtles

September 2021





## **Oyster Workgroup Members**

NRDA Trustee	Representative(s)
Florida	Ryan Gandy, Amy Raker
Alabama	Kelly Swindle, Bethany Kraft
Mississippi	Emily Cotton, Alane Young, Bradley Ennis
Louisiana	Brady Carter*
Texas	Richard Seiler, Ray Newby, Bill Rodney
EPA	Troy Pierce
DOI	Ben Frater
NOAA	Eric Weissberger*
USDA	Mark Defley, Ben Battle, Ron Howard

\* Co-lead

## Screening



## **Preferred Alternative**

#### Improving Resilience for Oysters by Linking Brood Reefs and Sink Reefs

- Foster resilience by building reefs over a range of
  - Habitat types (e.g. intertidal/subtidal)
  - Depths
  - Salinity
- Incorporating larval transport into design
- Restore damaged nearshore-offshore connection
- Estimated cost: \$35,819,974



Photo by Pollack Lab, Harte Research Institute

## **Conceptual Diagram**



#### Locations



**TX:** East Galveston Bay LA: Mississippi Sound and Northern Biloxi Marsh MS: Heron Bay AL: Western shore of mid-lower Mobile Bay FL: Cedar Key to Horseshoe Point (Suwanee Sound)

#### Implementation

#### Site selection

- Habitat suitability indices
- Bottom scanning

 Larval transport modeling
Specific design will vary by state management goals
Follow the depth/habitat/salinity gradients as possible for resilience
Management with shell budget



#### Photo by Florida Sea Grant

# Monitoring

#### To be determined, but may include metrics for

- Oyster habitat created
- Oyster reef salinity and depth gradients
- Oyster reef interconnectivity and recruitment
- Oyster habitat productivity
- Explanatory variables



Photo from https://wec.ifas.ufl.edu/

## Questions



Photo by Erika Nortemann, TNC