



CRCL OYSTER SHELL

— RECYCLING PROGRAM —

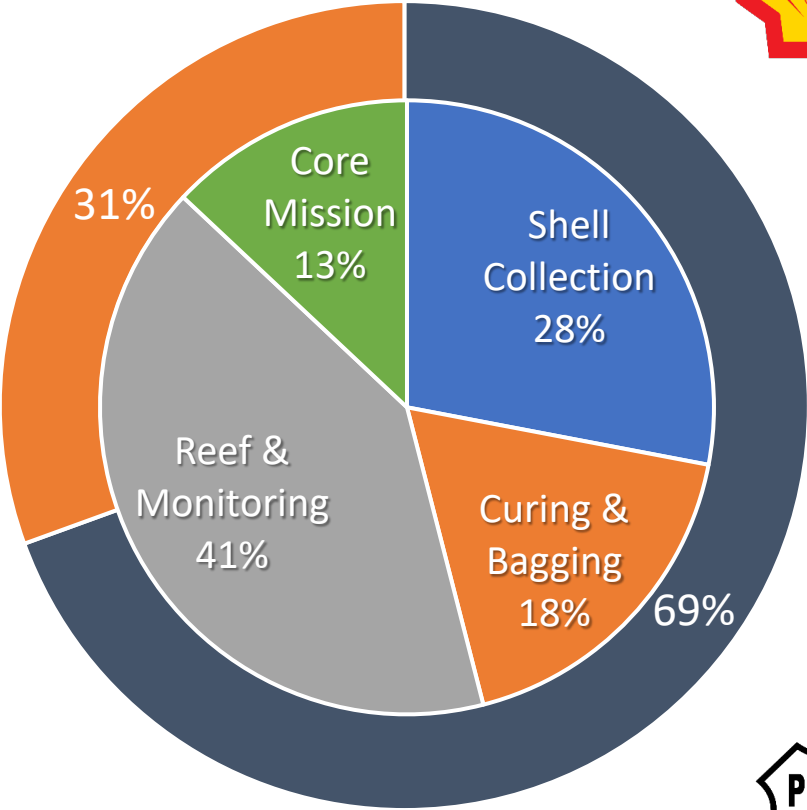
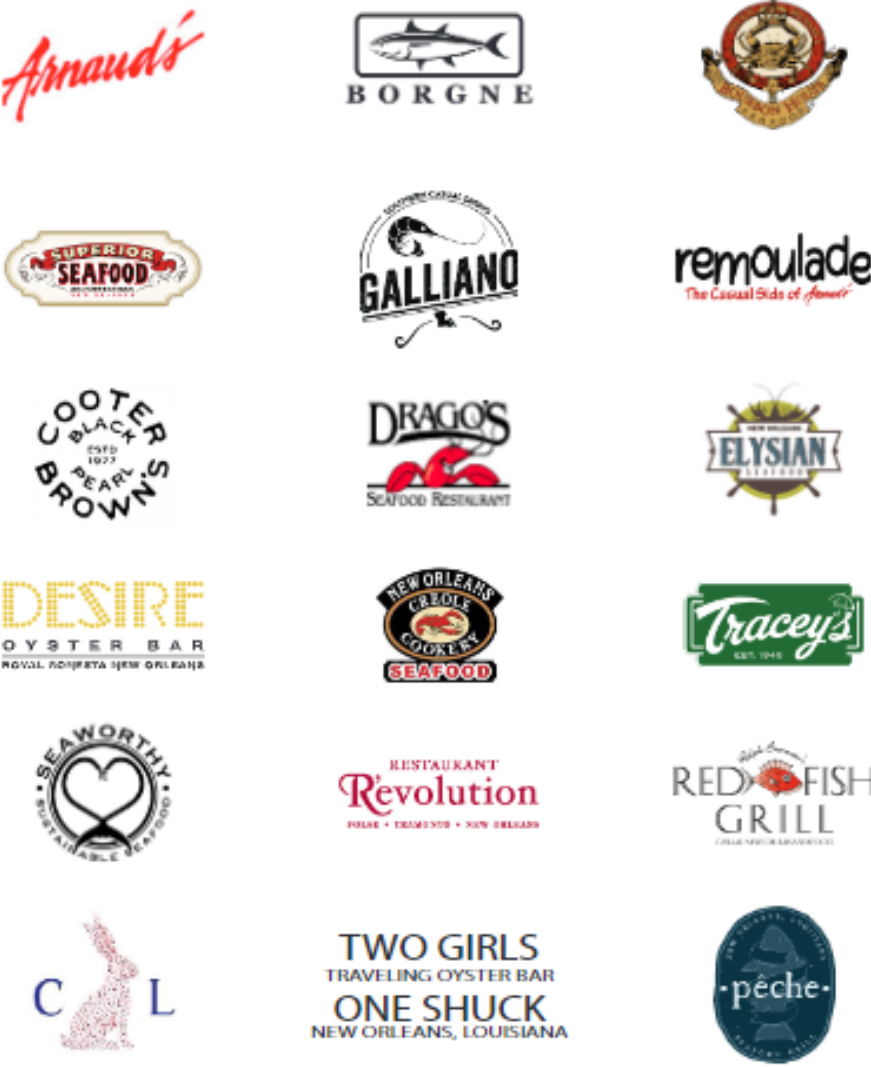
Oyster Shell Recycling Program

- Captures waste shell from New Orleans area restaurants and returns it to Louisiana coastal waters
- Volunteers help bag shell into reef units
- Used to construct living shorelines – reef restoration projects that also serve as shoreline protection
- We monitor our reef projects to assess shoreline change compared to control site, and reef development



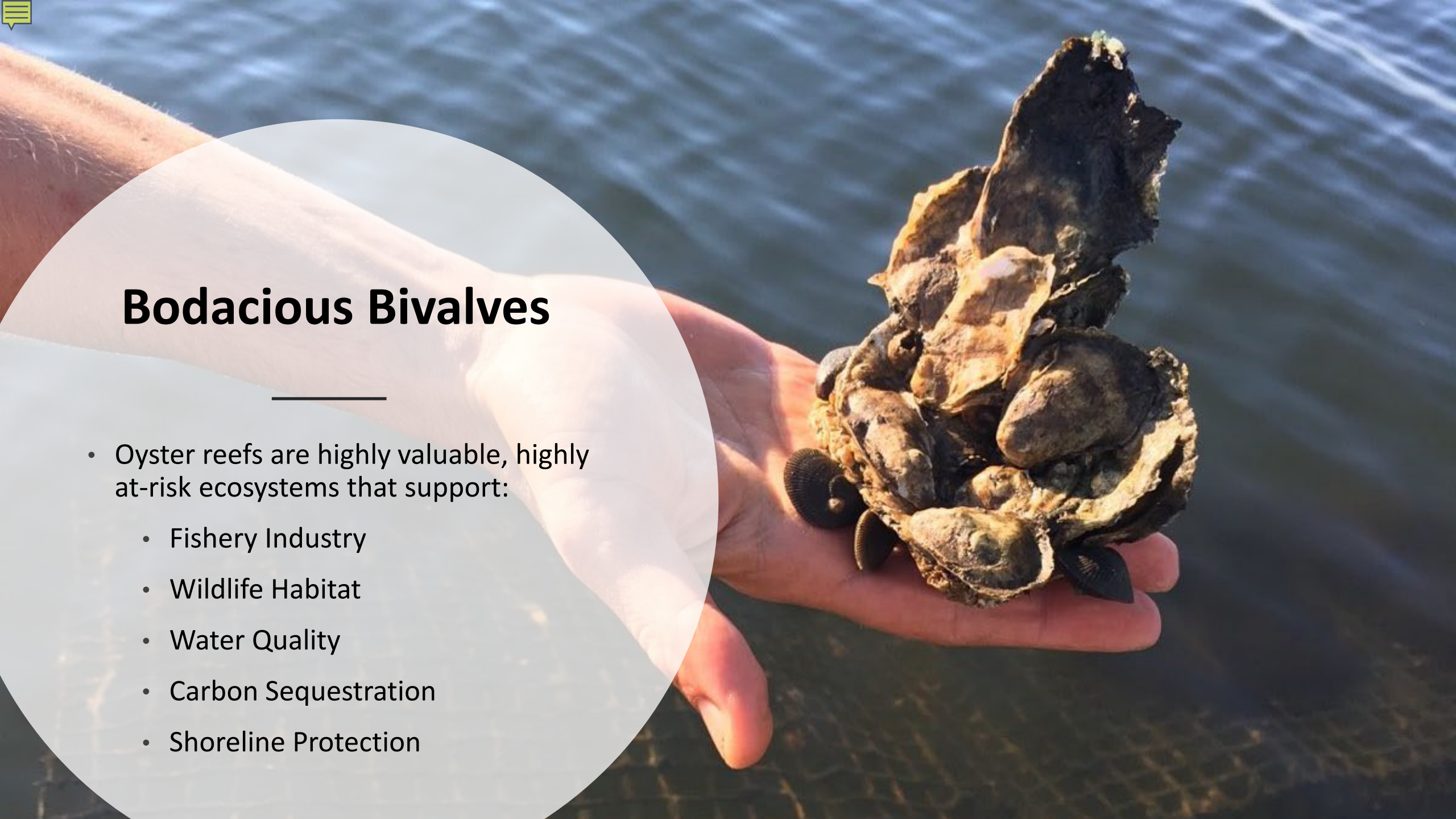


Funding Sources



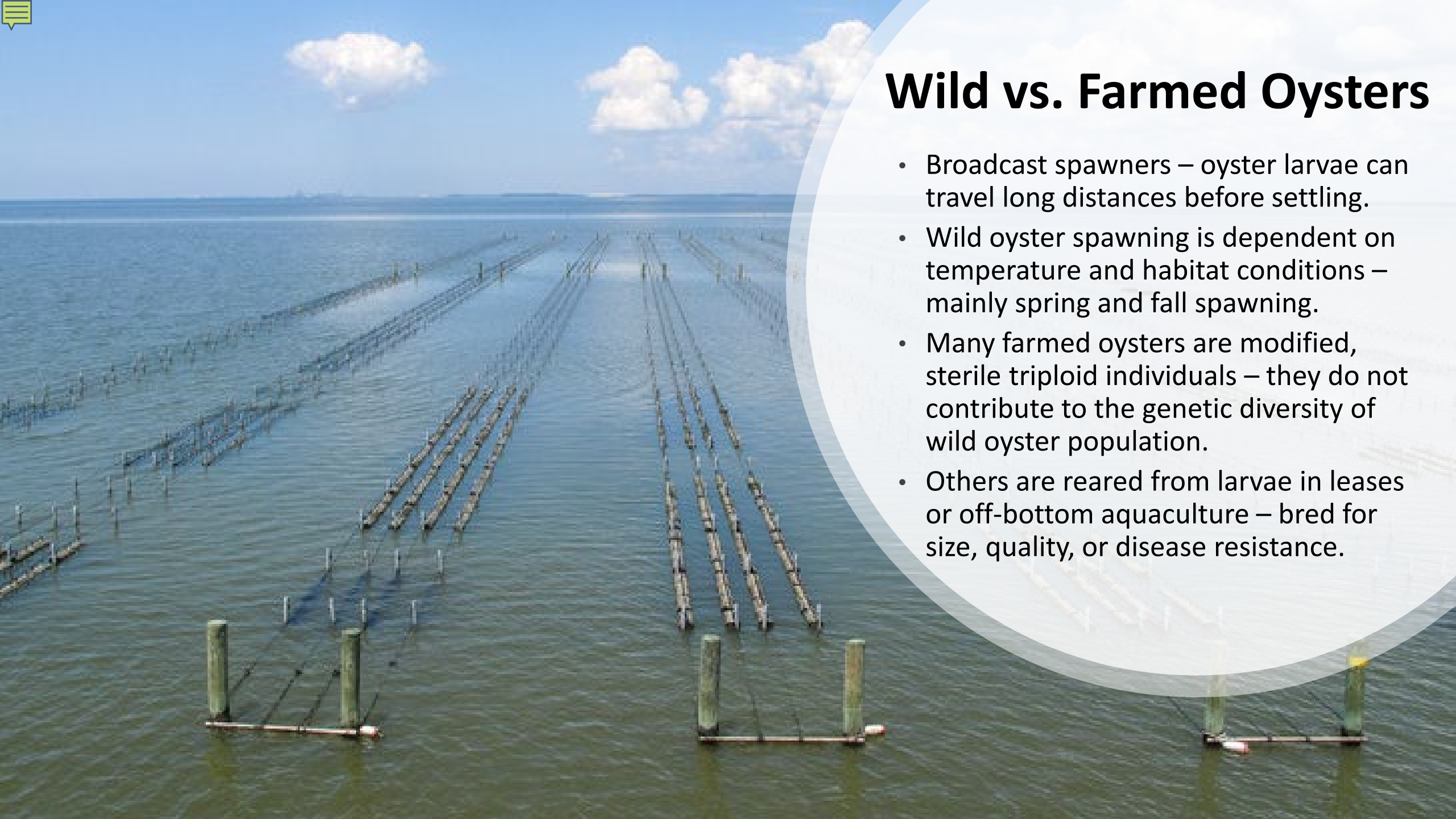
■ Grants & Sponsorships ■ Fees



A hand is holding a large, irregular cluster of oysters. The oysters have dark, rough shells with some lighter, yellowish-brown areas. The hand is positioned in the lower right, with fingers visible. The background is a body of water with gentle ripples. A semi-transparent white circle is overlaid on the left side of the image, containing text.

Bodacious Bivalves

- Oyster reefs are highly valuable, highly at-risk ecosystems that support:
 - Fishery Industry
 - Wildlife Habitat
 - Water Quality
 - Carbon Sequestration
 - Shoreline Protection

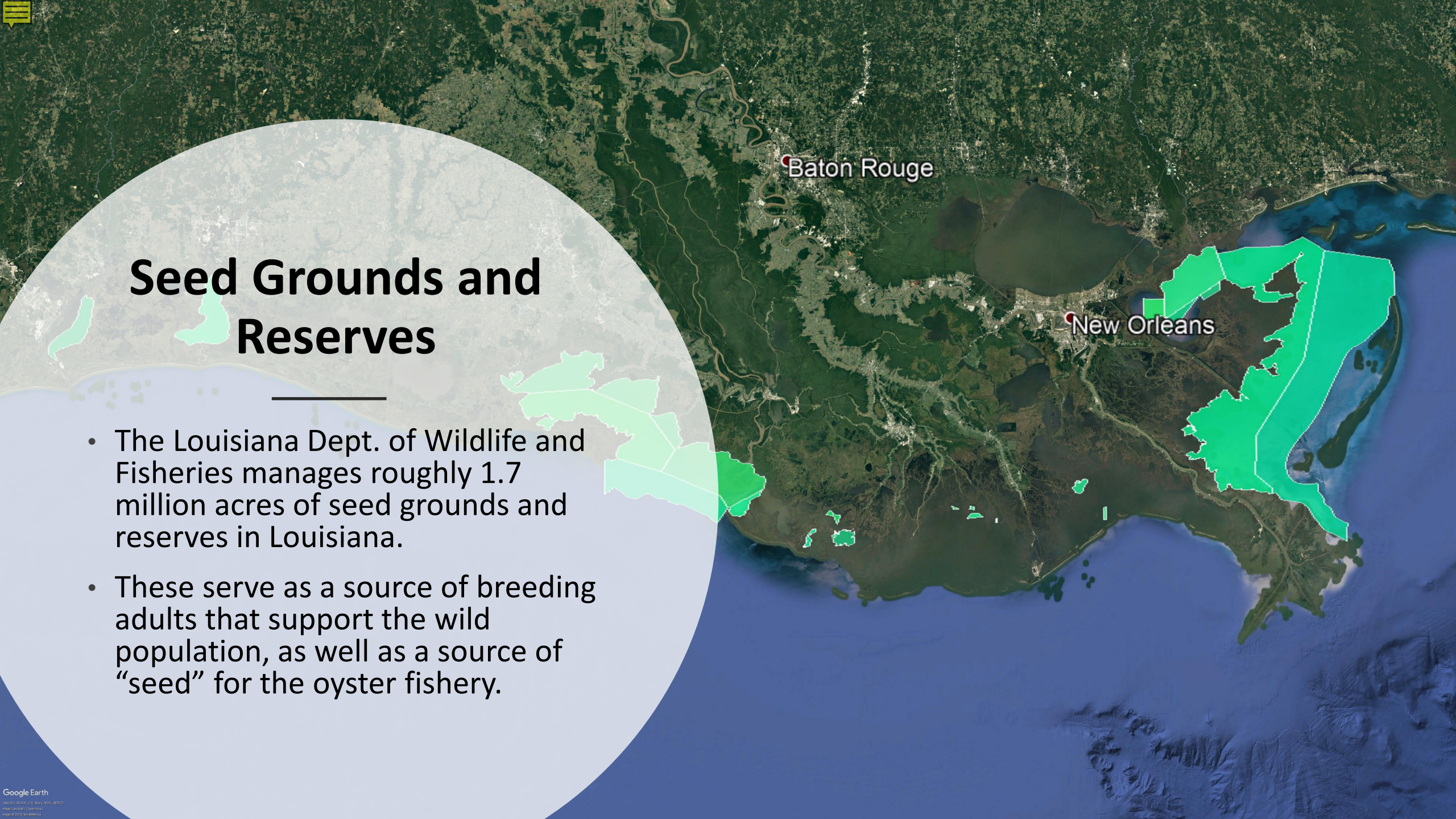


Wild vs. Farmed Oysters

- Broadcast spawners – oyster larvae can travel long distances before settling.
- Wild oyster spawning is dependent on temperature and habitat conditions – mainly spring and fall spawning.
- Many farmed oysters are modified, sterile triploid individuals – they do not contribute to the genetic diversity of wild oyster population.
- Others are reared from larvae in leases or off-bottom aquaculture – bred for size, quality, or disease resistance.

Seed Grounds and Reserves

- The Louisiana Dept. of Wildlife and Fisheries manages roughly 1.7 million acres of seed grounds and reserves in Louisiana.
- These serve as a source of breeding adults that support the wild population, as well as a source of “seed” for the oyster fishery.



A yellow CAT 330E excavator is positioned on a barge in a body of water. The excavator's arm is extended, and it is working with several large wire mesh cages filled with oyster shells. The background shows a clear blue sky and a calm sea. A semi-transparent white circle is overlaid on the left side of the image, containing the title and bullet points.

Reef Restoration

- Our reefs are built to serve dual functions:
 - Reduce shoreline erosion
 - Serve as suitable habitat for larval oyster settlement
- Prioritize projects in areas of need and of cultural interest, where they are likely to persist, and support local population



Biloxi Marsh Living Shoreline

- Constructed November 2016
- ½ mile gabion basket structure, filled with bagged and loose shell
- Monitored annually for reef development and shoreline impacts
 - 50% reduction in shoreline erosion
 - Attracted at least 2 spat sets in first year



Pointe-au-Chien Living Shoreline

- Constructed June 2019
- 400ft fringing reef structure composed of bagged shell.
- Community Partnership with the Pointe-au-Chien Indian Tribe
- Locals testify that reef protected large oaks from Hurricane Ida

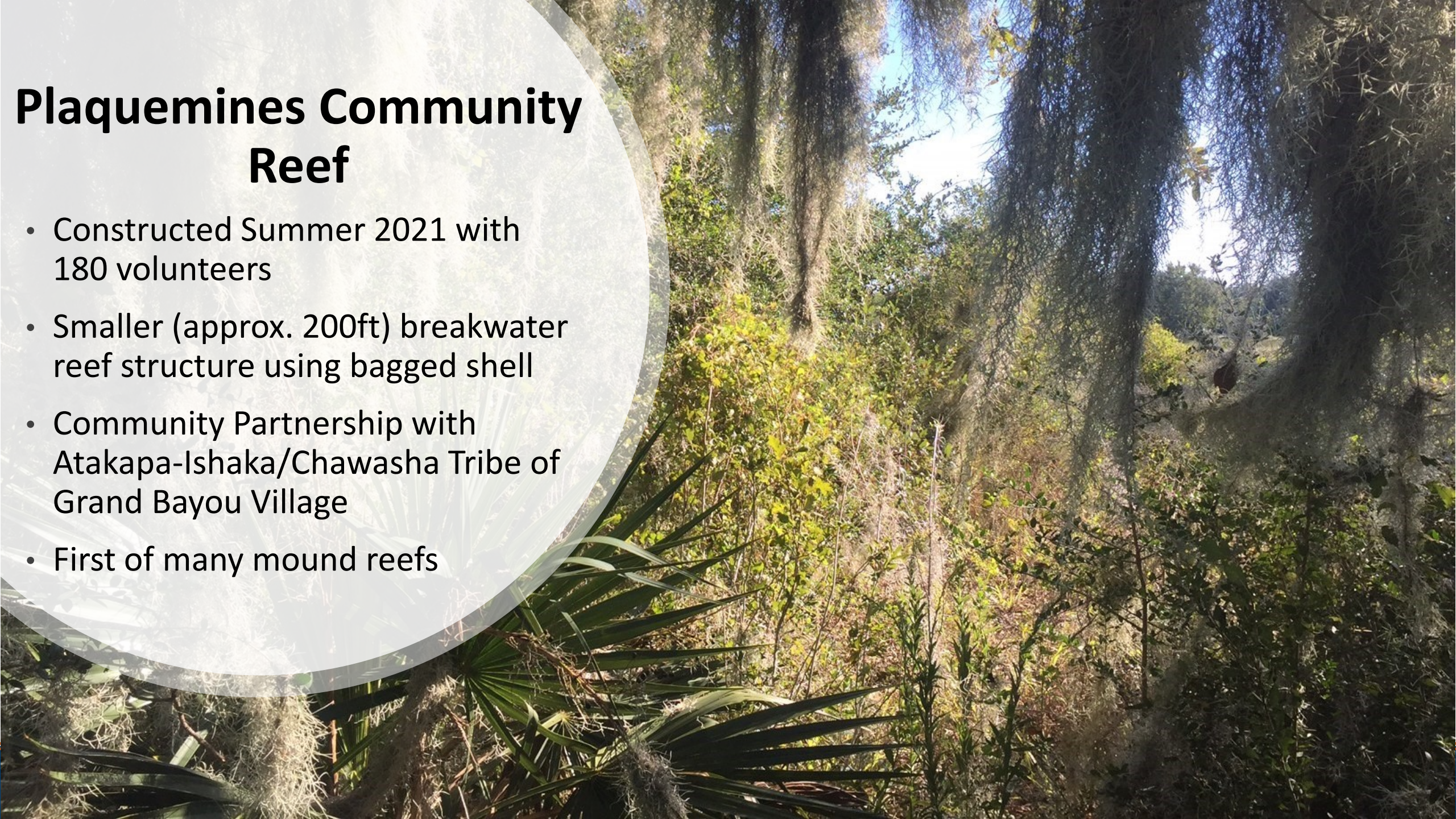


Barataria Bay Reef

- Constructed Fall 2019
- ½ mile gabion mat structure, filled with bagged and loose shell
- Sited to protect marsh area that serves as a protective hydrological barrier for a nearby oyster seed reserve.

Plaquemines Community Reef

- Constructed Summer 2021 with 180 volunteers
- Smaller (approx. 200ft) breakwater reef structure using bagged shell
- Community Partnership with Atakapa-Ishaka/Chawasha Tribe of Grand Bayou Village
- First of many mound reefs



Next Steps

- Expand new shell curing and engagement site in Violet, LA
- Recruit new restaurant partners and work to make service free of charge
- Deploy more community scale reefs to protect cultural heritage sites
- Increase program sustainability
 - Direct sale of shell

