

RESTORATION BY OYSTER



Coalition To Restore Coastal Louisiana's

Oyster Shell Recycling Program

PRESENTED BY SHELL 

Presentation to the Oyster taskforce
5.17.16

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Corey Miller – Outreach and Engagement

Coalition To Restore Coastal Louisiana

CRCL and What We Do

- **Mission**: drive bold, science-based action to rebuild Coastal Louisiana through outreach, restoration and advocacy.
- To accomplish that, we:
 - Restore habitat through volunteer plantings (and now, oyster reef shoreline protection!)
 - Advocate for sound restoration and flood protection
 - Watchdog funding
 - Advance policy recommendations
 - Use scientific analysis
 - Partner with stakeholders across the coast
 - Engage communities and residents living and working on the front lines



Overview

- Purpose of the Program
 - Secondary benefits
- Current stats
 - Who participates, shell collected
- Partnering with LDWF to support the industry
- Our first project with TNC
- The future of the program



Goal of the Oyster Shell Recycling Program

Build oyster reefs to protect eroding shorelines using shell that is otherwise going into landfills

In doing so:

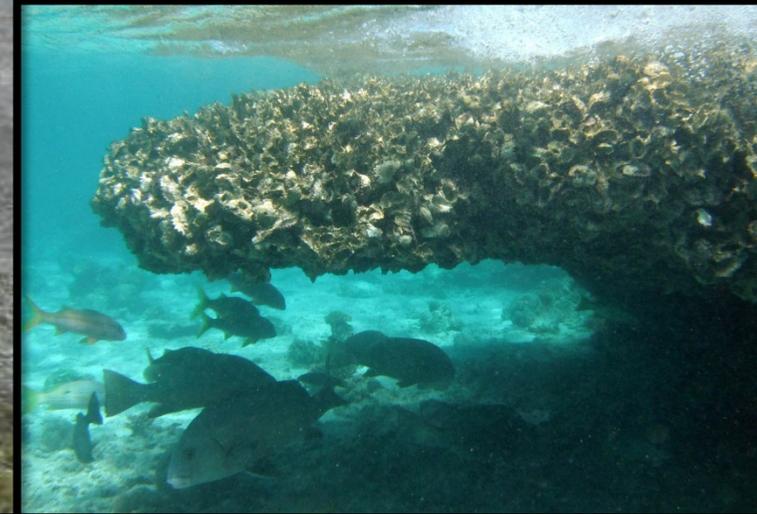
Build support for coastal restoration by:

- a. Engaging volunteers in the coastal restoration process**
- b. Educating consumers about the importance of coastal sustainability**

Demonstrate a pilot process that can be continued and replicated

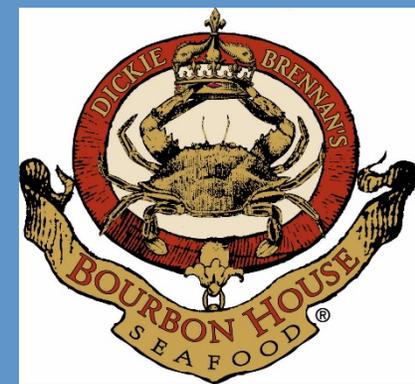
Healthy Oyster Reefs

- **Act as a breakwater**
 - Protect marshes from erosion
 - Reduce storm surge
 - Grow vertically to compete with subsidence and rising seas
- **Improve water quality**
- **Provide Habitat for fish crabs and a diversity of other organisms**
- **Provide a source of spat for new production**
- **Adds new material into the system**



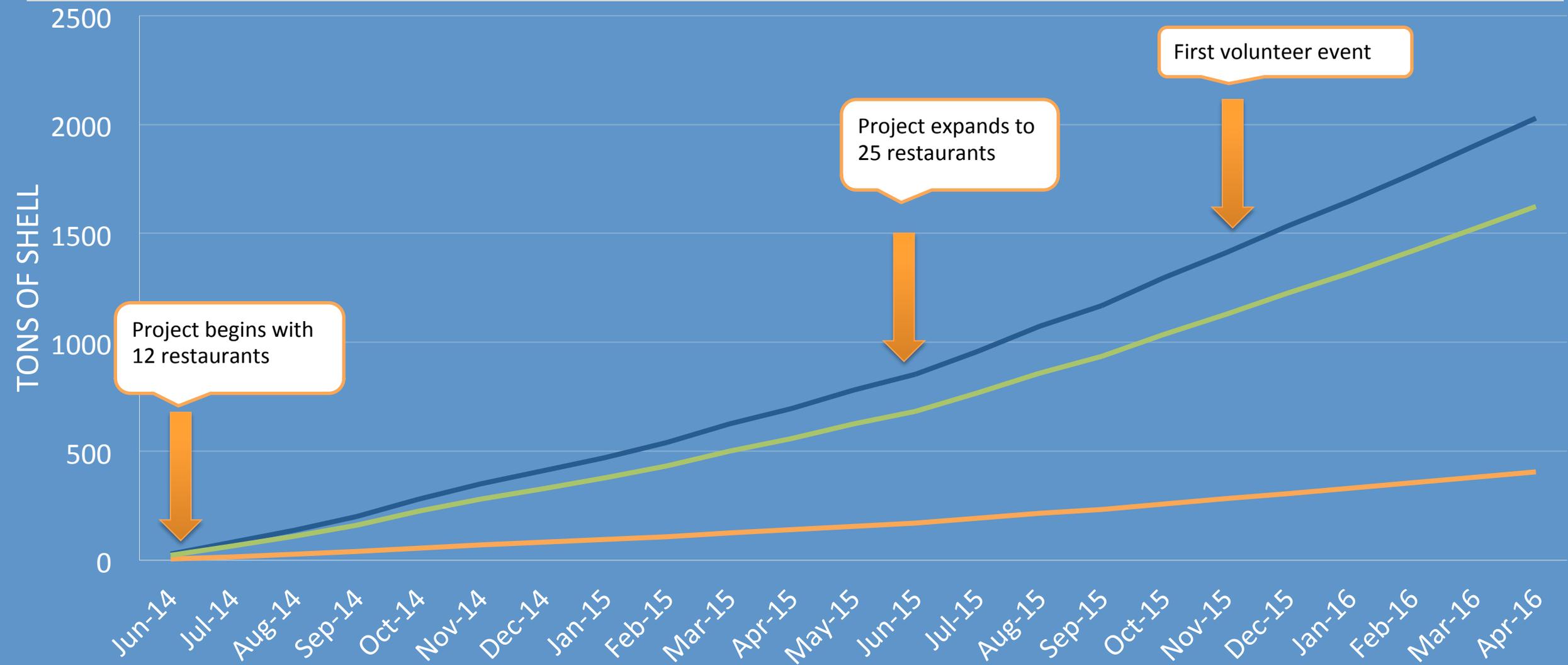
Participating Restaurants: 26 Partners in GNO

- Acme Oyster House (New Orleans & Metairie)
- Arnaud's Restaurant
- Borgne
- Bourbon House
- Café B
- Cooter Brown's Tavern
- Curious Oyster Bar (Dryades Public Market)
- Desire Oyster Bar at the Royal Sonesta
- Drago's Seafood Restaurant (New Orleans & Metairie)
- Elysian Seafood (St. Roch Market)
- Felix's Restaurant and Oyster Bar
- Frankie and Johnny's
- Grand Isle Restaurant
- Le Bayou
- Lüke
- Mr. Ed's Oyster Bar and Fish House (New Orleans & Metairie)
- Pascal's Manale
- Peche Seafood
- Pier 424 Seafood Market
- Red Fish Grill
- Remoulade
- The Royal House Oyster Bar
- Tracey's Original Irish Channel Bar

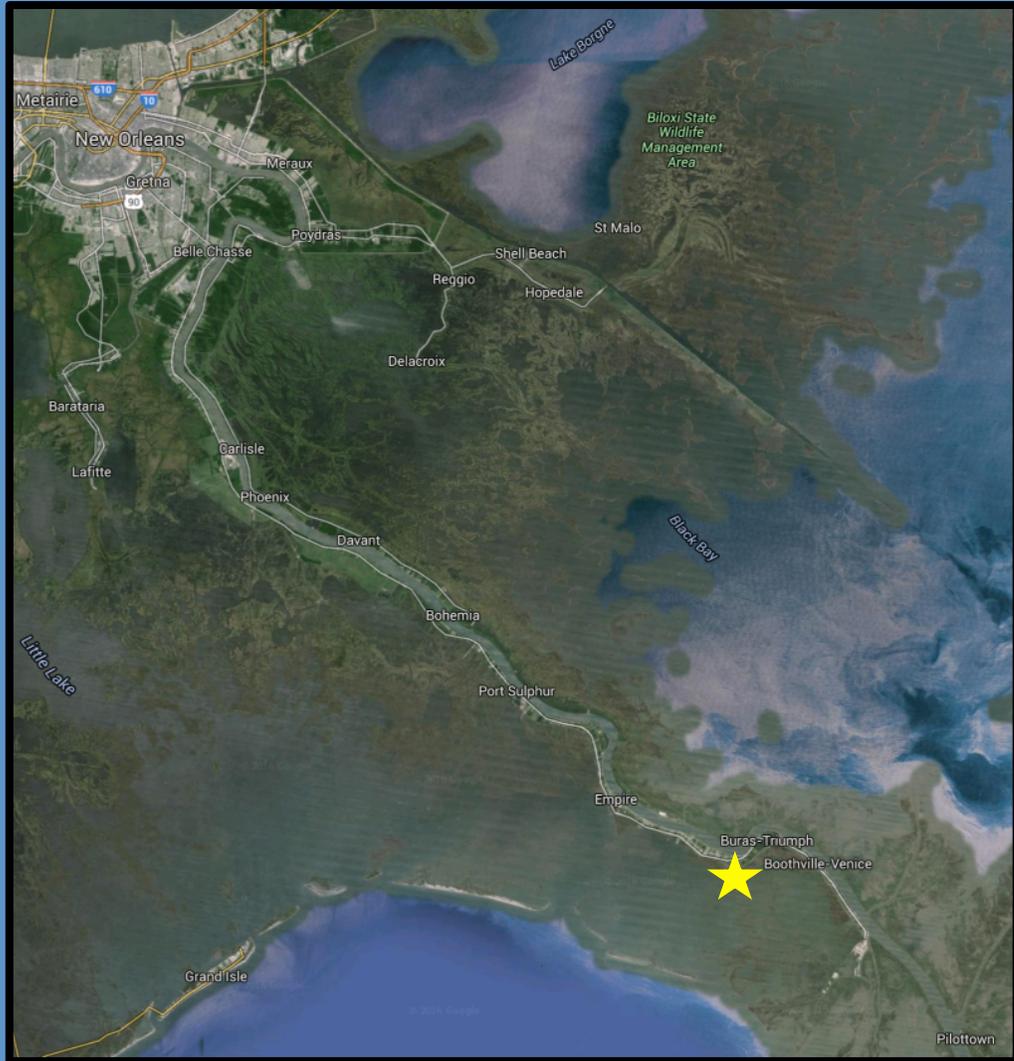


SHELL COLLECTED FOR RECYCLING

— Total Collected — 20% to LDWF — Available for Reef

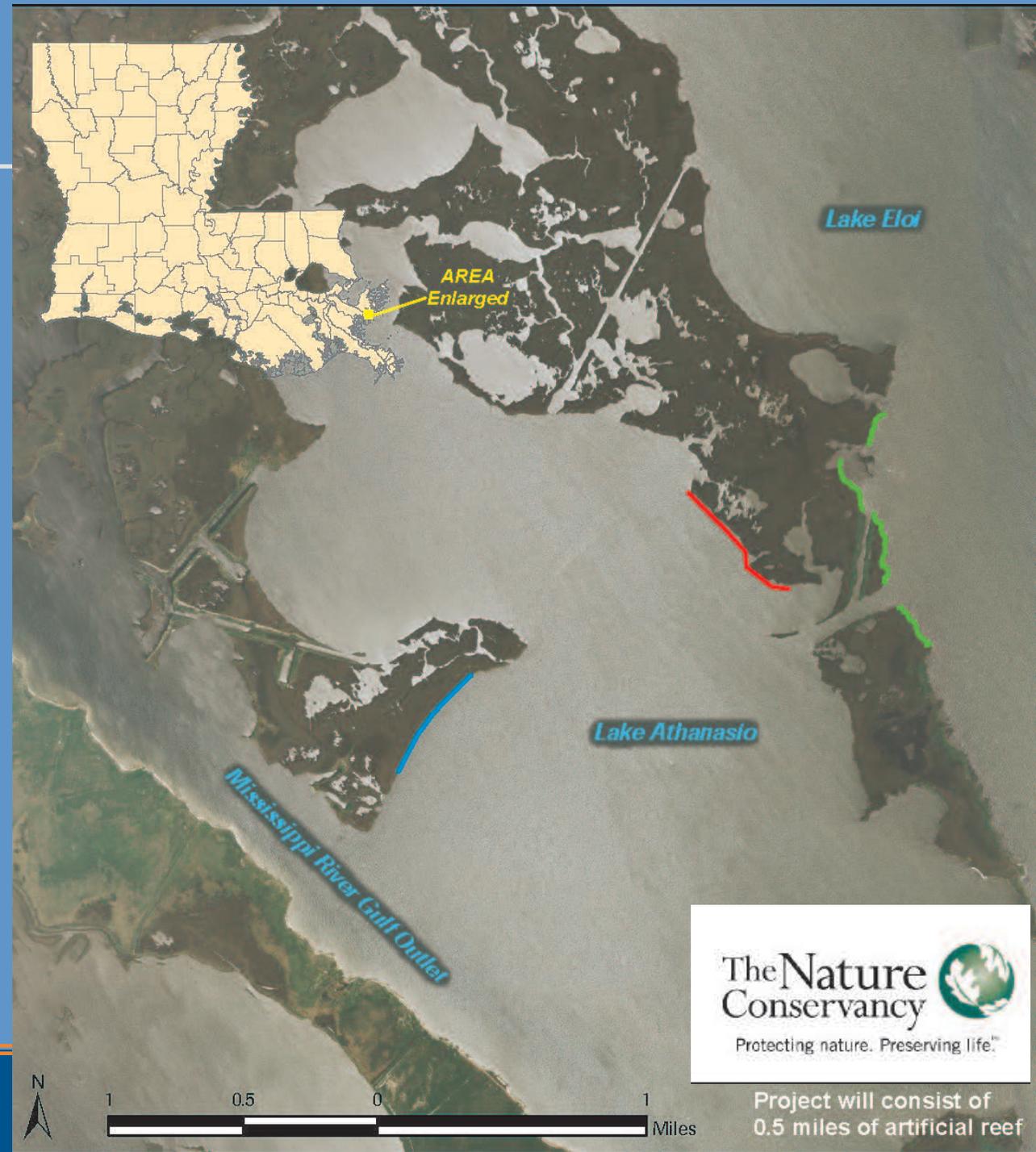


Shell Curing @ LDWF site



Reef Restoration

- 0.5 mile reef in Biloxi Marsh
- 700 tons of shell in Gabion baskets
- Summer 2016



Project will consist of 0.5 miles of artificial reef

Shoreline Protection and Oyster Reef Restoration



Since 2009 The Nature Conservancy has
created with partners over 4.5 miles of
reefs along the Louisiana Coast



Final reef placement TBD ~ 0.80 mi.
Longitude: -90° 0' 33.3864"
Latitude: 29° 13' 54.8634"

Bay Des Ilettes
Fifi Island

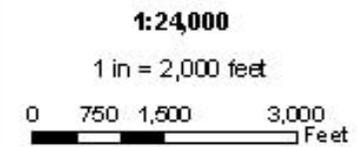
Length of Reefblk Units: 0.23 mi.
Longitude: -90° 0' 29.6244"
Latitude: 29° 14' 1.8558"

Length of Reefblk Units: 0.63 mi.
Longitude: -90° 0' 54.4674"
Latitude: 29° 13' 51.0996"

Caminada Bay

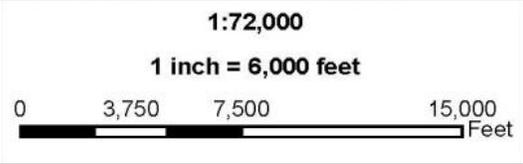
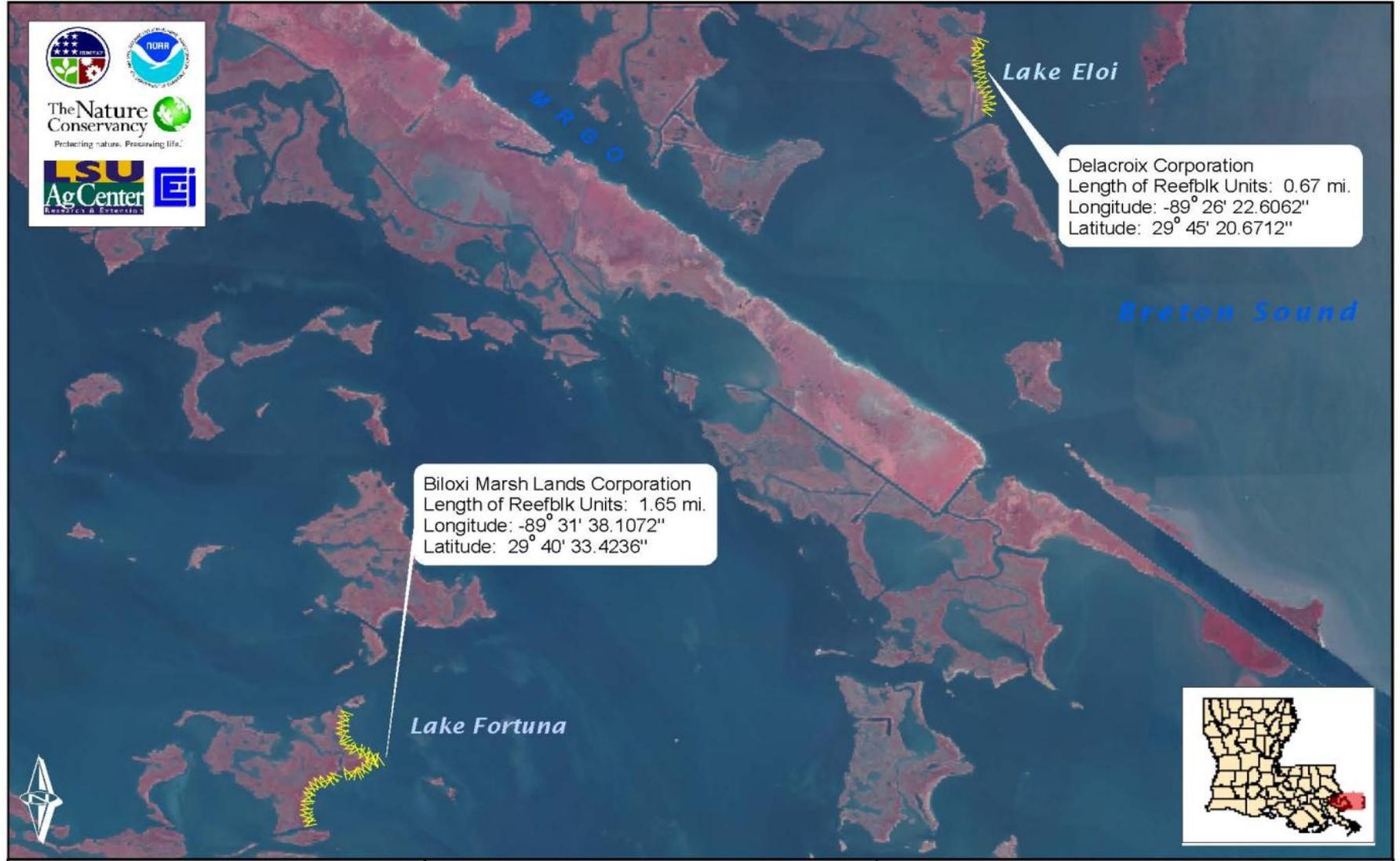
Grand Isle

Gulf of Mexico



Grand Isle and St. Bernard Marsh Shoreline Protection Project - Grand Isle and Fifi Island Project Sites

Legend: Reefblk	Background Image: 2009 USGS Ortho.
Location: T22S R24E S28-S30	Jefferson Parish, LA
Date: March 18, 2010	Drawn by L.C.
COASTAL ENVIRONMENTS, INC. <small>10000 W. BRADLEY BLVD. SUITE 1000 NEW ORLEANS, LA 70126</small>	

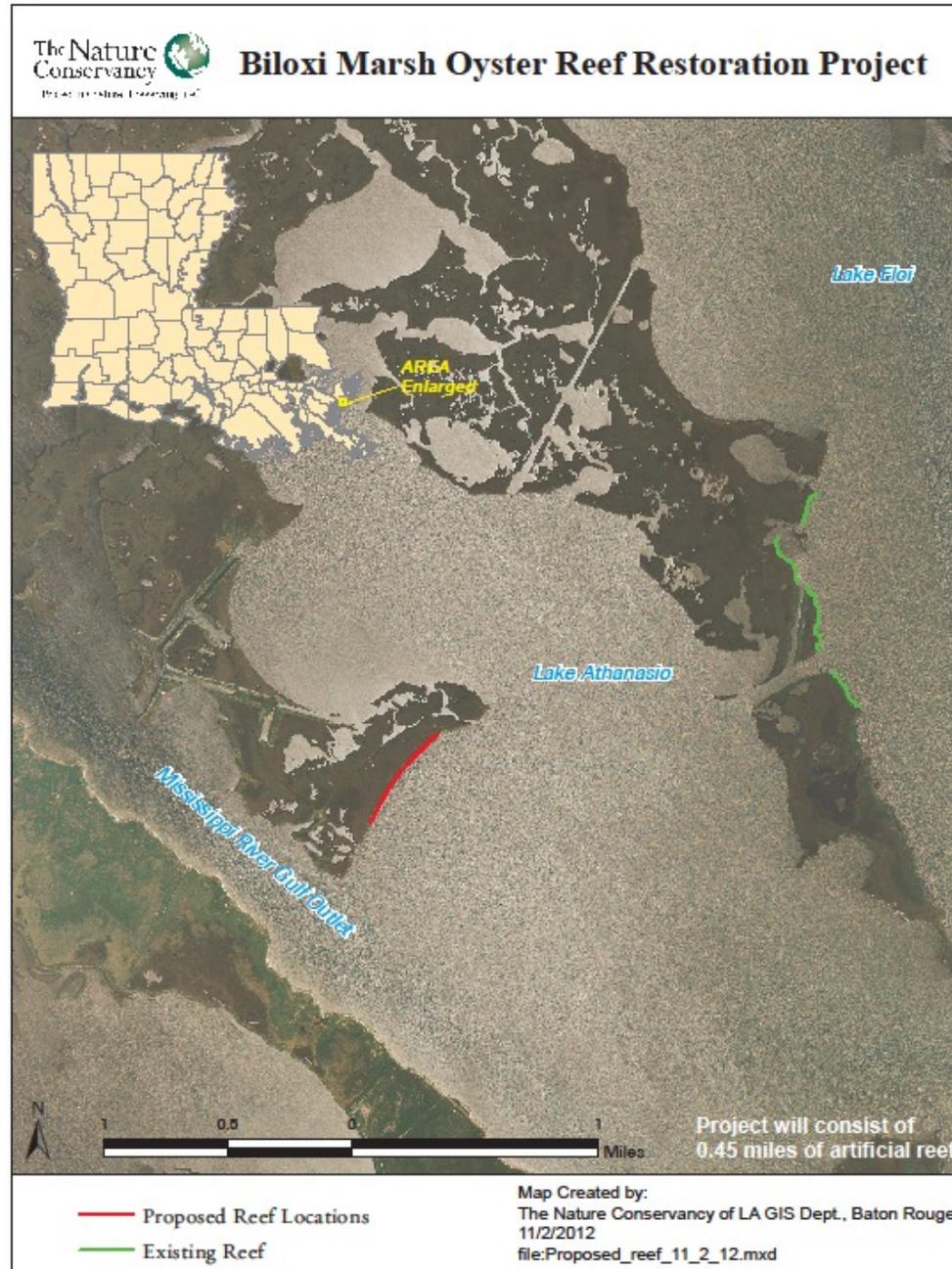


**Grand Isle and St. Bernard Marsh
Shoreline Protection Project-
St. Bernard Marsh Project Sites**

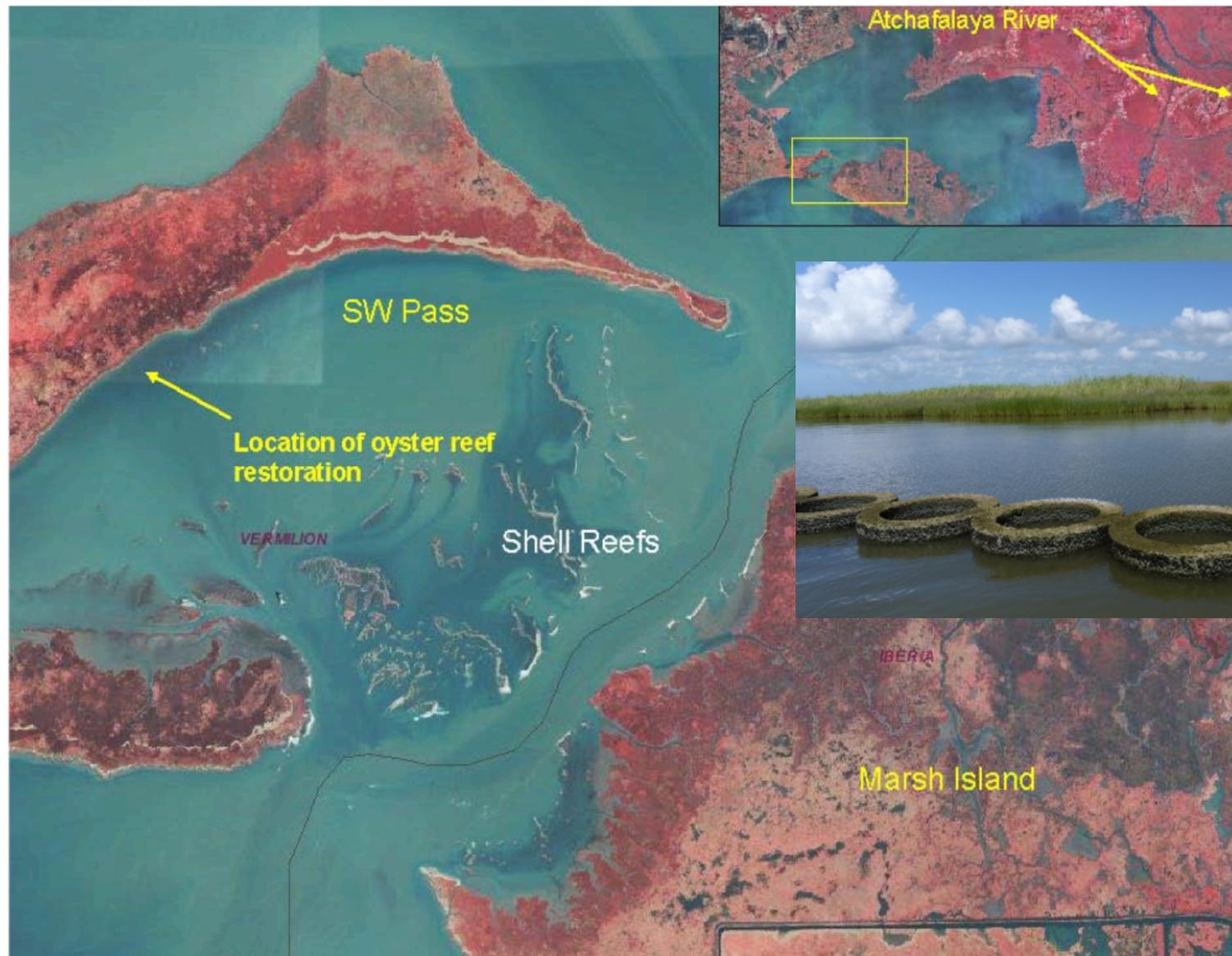
Legend: Reefblk		<i>Background Image: 1998 USGS DOQQ</i>
Sections 7, & 18, T16S R17E	St. Bernard Parish, LA	
Date: March 18, 2010	Drawn by L.C.	COASTAL ENVIRONMENTS, INC. 8475 N. HO. RD., SUITE 100, LA 70002



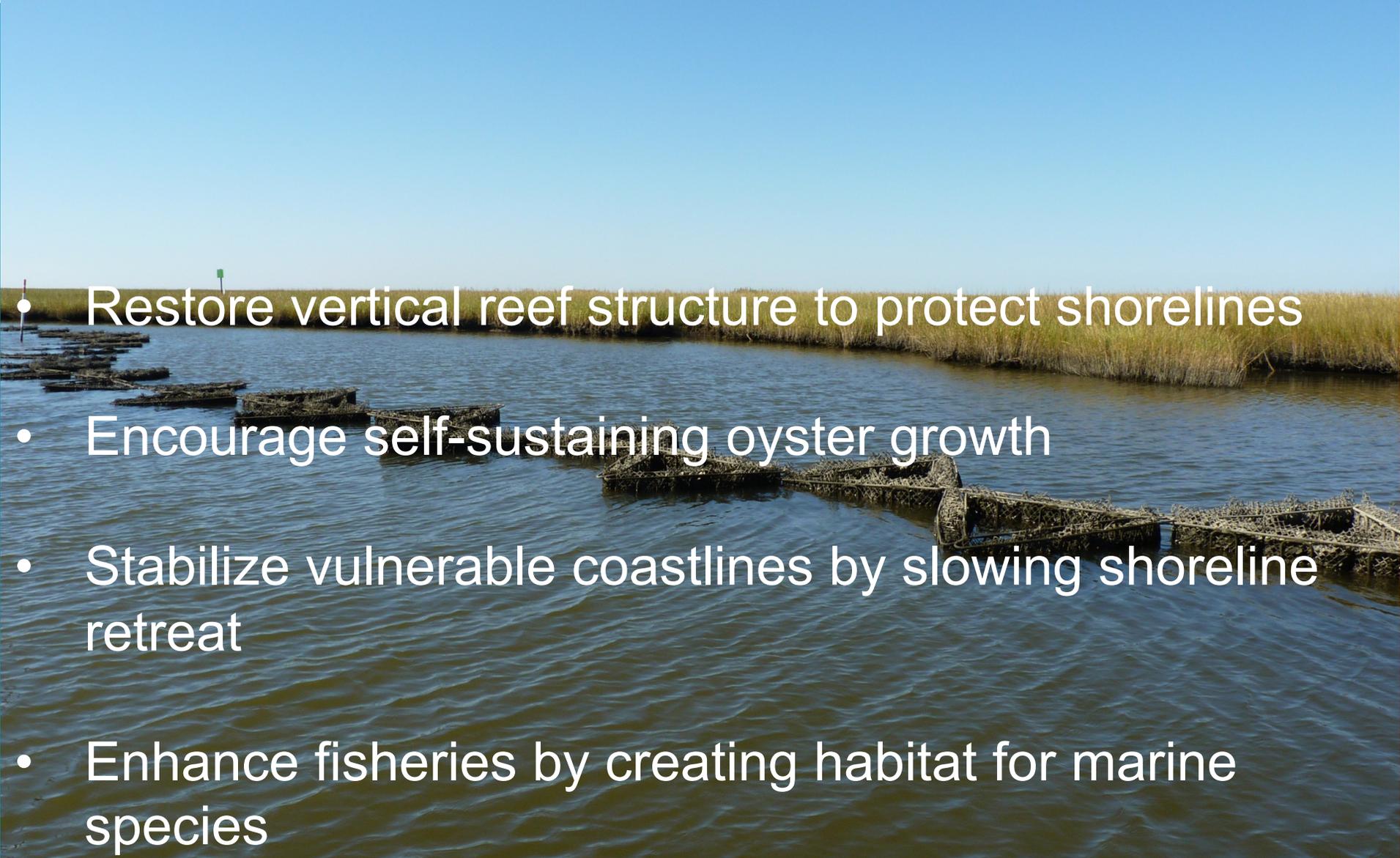
Lake Athanasio



Vermilion Bay Project - .60 miles



Project Goals: To Provide many Ecological & Economic Benefits

- 
- Restore vertical reef structure to protect shorelines
 - Encourage self-sustaining oyster growth
 - Stabilize vulnerable coastlines by slowing shoreline retreat
 - Enhance fisheries by creating habitat for marine species

Project Goals: To Provide many Ecological & Economic Benefits

- Provide sources of spat to adjacent oyster leases and public seed grounds
- Enhance water quality
- Accumulate sediment behind reefs
- Create jobs and invest in local communities
- Gather data to measure project success
- Leverage projects to increase scale of restoration

The future of the program

- **Continuing the program**
- **Expanding to more restaurants and cities**
- **Ways to engage the industry**
- **Others possibilities?**

Upcoming events

- **June 3rd - Restoration on the Half Shell: Presentations in Non-Technical Language**
- **June 4th & 5th – Come see us at the Oyster Fest!**

Thank You!

Fin!



Current Funding

Partner	Award	Project
Shell 2012	\$22,500	Shell Recycling
Shell 2013	\$1,000,000	Shell Recycling
CPRA 2013	\$352,432	Reef Restoration
NFWF 2015	\$249,975	Reef Restoration

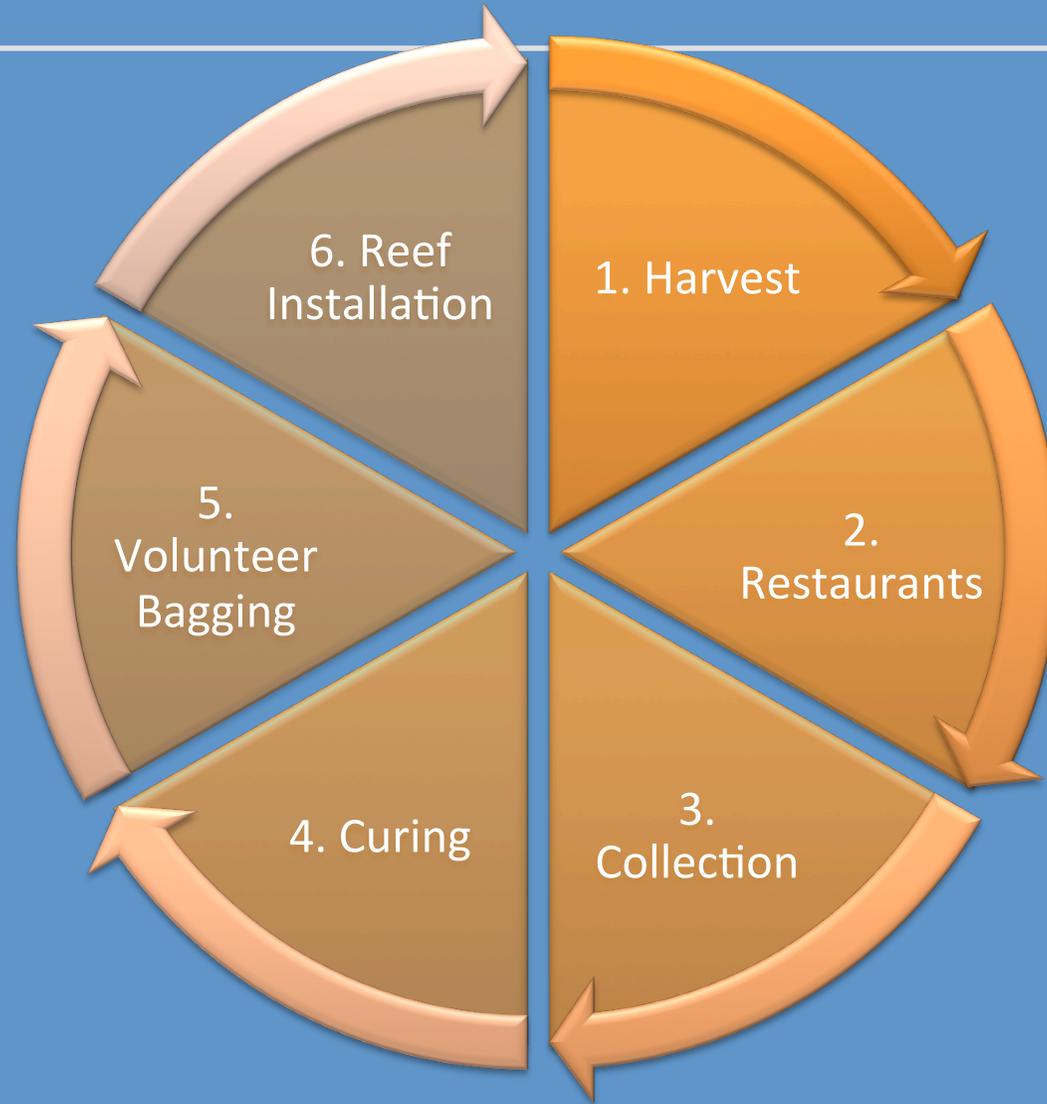


Problem

- 85% of world's oyster reefs lost in past 200 years
- Severe shoreline erosion near MRGO
- We are removing one of our best defenses from the water
 - Oyster shell deficit
- Currently
 - deposited in landfills
 - shipped out of state
 - used to pave roads
 - ground into chicken feed



Process



1. Harvest



2. Restaurants



This restaurant is a proud supporter of:



Coalition To Restore Coastal Louisiana's
Oyster Shell Recycling Program
Presented By Shell 

You can shuck 'em!
Just don't chuck 'em!

Order your favorite oyster dish and the shells from your purchase will be used to help restore Louisiana's coast.

Scan Here to Learn More 

3. Shell Collection

- Phoenix Recycling contracted for collection and transport
 - Provide bins
 - Wash bins and shell
- Restaurant pickup 5 days/week
- Transport to Buras 3 days/week
- **1,650 tons** of oyster shell collected as of Jan, 2016



5. Volunteer bagging events

- 95 volunteers engaged since Nov
- 63 tons bagged as of February
- 7 Groups recruited thus far
 - Dickie Brennan's Bourbon House
 - Shell
 - Coastal Environments, Inc.
 - Nichol's State Biology Department
 - RESTORE the Mississippi River Delta
 - Audubon Institute GULF
 - CRCL board members, family, & friends on March 5th!



5. Volunteer Bagging Events

Groups targeted (see handout)

- Local colleges and universities
- Community service organizations
- Non-governmental organizations
- Alternative spring break groups
- Corporations
- Government Organizations
- Legislators
- Mardi Gras Krewes



Success!

- First shell recycling program in the state
- Largest such program in the country!
- Supported through a \$1 million donation from Shell
 - Additional grants as well
- Media attention



Tons of recycled oyster shells from New Orleans area restaurants ...
Nov 25, 2015 ... Baton Rouge, LA /News/: Restaurant workers and oil company empl
theadvocate.com

Reconsider the Oyster

by Arielle Milkman

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Territorial

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Culinar
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Elizabeth Barroug
Correspondent
Published: Fridau.



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Other Funding Options

- Restaurant fees
 - Saving up to 40% in waste disposal
- Selling shell
 - Going rate is low @ \$30/ton (~\$1,500/mo)
- JP Morgan Chase sustainable financing
- Insert your brilliant idea here!



Potential Funding

Partner	Request	Project	Due	Plan
Shell 2016?	\$150,000-\$600,000	Shell Recycling	Meeting in Feb	3-12 months recycling
NOAA 2016?	\$300,000-\$2M	Recycling & Reef	April 2016	2 yrs recycling & 1-2 reefs
<ul style="list-style-type: none">Baton Rouge Area Foundation?CPRA?	\$250,000	BR Shell Recycling	July 2016	Pilot year recycling

Projected Costs

Activity	Monthly Cost	Annual Cost	Funded until
Shell Recycling	\$48,000	\$576,000	November 2016
Reef Construction	n/a	\$427,000	Reef completion (or April 2017)
Volunteer events	\$5,000	\$60,000	2019