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# GULF STAR

GULF OF MEXICO ALLIANCE

**BUILDING PARTNERSHIPS  
FOR A HEALTHIER GULF**





## Message From Our Executive Director

LAURA BOWIE

*Collaboration brings exponential benefits.* That is the underlying credence of the Gulf of Mexico Alliance. We believe we have found the formula for building relationships, building trust and building inclusive networks of individuals interested in working together to tackle region-wide issues impacting the Gulf and its coastal economies. In our first 14 years, GOMA has grown from a loose network of state and Federal agencies to include nearly 1000 individuals and over 65 agencies and organizations from government, academia, business, and non-profits. GOMA is the only organization in the region that brings together so many perspectives to address regional issues.

GOMA's Gulf Star program is a public-private partnership of agencies, businesses, and non-profits that support the priorities directly tied to healthy ecosystems that impact Gulf economies. In 2016, we awarded \$631,000 to regional projects. In 2017, we are on track to implement more than \$750,000 in regional, on-the-ground projects. We are proud to present an overview of the 2016

and 2017 Gulf Star projects in the next few pages of this report.

This suite of projects was only made possible by the shared vision of our Gulf Star partners: **Shell Exploration & Production, The Nature Conservancy, Freeport McMoRan, Inc., Anadarko, BHP Billiton, National Oceanic and Atmospheric Administration, U.S. Fish & Wildlife Service.** Their recognition that regional collaboration is essential to project success is what makes this program work.

I am proud of the work the Gulf Star partners are undertaking and the impact this work can have on Gulf ecosystems and economies. We have grown significantly this year and our success is built upon the strength of GOMA's collaborative formula and I am optimistic about what's ahead.



## The Partnership

PUBLIC-PRIVATE



- 5 Gulf States \$300,000/year
- Federal Agencies \$50,000 - \$200,000/agency
- Businesses \$25,000 - \$100,000/business
- NGOs/Academics \$10,000 - \$25,000/organization

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### GOAL

**\$1,000,000 ANNUALLY**

Leveraging up to 10:1 for \$100,000/yr commitment





**The Partnership**  
COMMITMENTS TO DATE

Alabama  
Mississippi

Florida  
Texas

Louisiana



STATE

FEDERAL



PRIVATE



## 2016 Projects

### Coastal Resilience



**Regional Coastal Resilience** | Various Gulf Communities  
**Linking Science Communication and Municipal Planning** | University of Texas Marine Science Institute  
**Cross-Sector Snapshot of Community Resilience** | Louisiana Sea Grant

### Water Quality



**Expansion of Harmful Algal Bloom Sensor Network** | Florida Fish and Wildlife Commission  
**Additional Harmful Algal Bloom Gliders** | University of South Florida  
**Nutrient Reduction Social and Civic Engagement Survey** | Mississippi State University

### Education & Engagement



**Tracking Trash** | Dauphin Island Sea Lab  
**Marine Debris Education & Prevention** | Barataria-Terrebonne National Estuary Program  
**Wind Engineering Testing for Optimal Design for Wind Hazards** | Louisiana State University

### Habitat Resources



**Seagrass Assessment** | CNL World Consultants  
**Living Shorelines Site Suitability Modeling** | Florida Fish and Wildlife Commission  
**Urban Youth Conservation Corps** | Limitless Vistas, Inc.

### Data & Monitoring



**Updating and Upgrading GOMAportal** | Harte Research Institute

### Marine Debris



**Marine Debris Dash** | Ocean Hour  
**Plastic Free Gulf Coast in Mississippi** | Gulf Coast Community Design Studio  
**Microplastics Citizen Science Project** | Mississippi State University

### Wildlife & Fisheries



**Connectivity of Sea Turtles in Gulf Habitats** | Inwater Research Group  
**Species Recovery Plan Review** | Ashely Ballou Consultant





**IMPACTS:**  
To People & Communities

Changes in the ecosystem effect our quality of life and there is an explicit interconnectedness between human health and the health of the environment. Through these Gulf Star projects, we are providing training, resources, and educational opportunities that promote awareness of our close ties with the coast and instill a sense of stewardship that benefits all coastal residents. Vibrant communities are the heart of our region and this cannot be achieved without social cooperation and a well-informed public.



Morgan City, LA | Abita Springs, LA | Mobile County, AL | Baldwin County, AL | Rockport, TX | Aransas County, TX | South Padre Island, TX | Covington, LA | Terrebonne Parish, LA | Ocean Springs, MS | Fairhope, AL | New Port Richey, FL | Islamorada, FL | Treasure Island, FL



**Ports Resilience Index training** | Baton Rouge & Morgan City, LA



**Marine Debris removal training** | Mobile and Baldwin Counties, AL



**Microplastics identification training** | Florida, Alabama, Mississippi



**Habitat restoration training** | New Orleans, LA



**PRESENTATIONS**  
**PUBLICATIONS**  
**EVENTS**



**FEDERAL AGENCIES**

**STATE AGENCIES**

**LOCAL GOVERNMENTS**

**ACADEMIC INSTITUTIONS**

**NON-PROFIT ORGANIZATIONS**

**PUBLIC SCHOOLS**

**BUSINESSES**



**MARINE DEBRIS PICK-UP**



**IMPACTS:**  
To the Environment

The Gulf Coast's beaches, swamps, seafood, and wildlife contribute to the sense of place that makes this region our home. Our Gulf Star projects are leading to a better understanding of ways to help threatened and endangered wildlife, how to protect and improve coastal habitats, and on-the-ground stewardship through marine debris removal. Resilient and diverse ecosystems are a critical resource that protects us from storms, provides food and recreation, and improves local economies.



Working In  
**8**

Habitat Types

open Gulf (offshore) | sargassum | seagrass | nearshore hard bottom | mangrove | marsh | forest | beach

**1,045**

Potential Wildlife Recovery Actions Identified

Improving Recovery for

**27**

Threatened & Endangered Wildlife Species



“The Wildlife and Fisheries Team is excited about the completion of the Species Recovery Plan project. The results of this project will support threatened and endangered species management, improve coordination efforts, and better inform restoration activities across the Gulf.”



**ROBIN RIECHERS**  
TEXAS PARKS AND WILDLIFE

**5.7**

Tons of Debris Removed from 2 Sites



**31**

Marine Debris Cleanup Sites Across the Gulf



**2,200** Straws Picked Up

Several Gulf Star projects are focused on marine debris; projects include documenting the types of trash found on beaches and working to keep trash out of the environment through a “Skip the Straw” campaign with local restaurants.





## IMPACTS: To the Economy

Healthy Gulf ecosystems have an enormous impact in the economic health of the region. Our Gulf Star projects are investing in a number of opportunities to support primary industries in the Gulf, including fishing & tourism. Projects that will eventually reduce the annual dead zone allow commercial & recreational fishermen to reap their harvest closer to shore rather than having to travel beyond it each summer. Also, projects that reduce the number of days beaches are closed due to harmful algal blooms provide a boost to Gulf tourism.

### ↓ Decreases

**15**  
States  
Addressing  
Nutrient  
Runoff

#### Reductions in the Annual Dead Zone

Fifteen states are participating in a social survey to determine innovative techniques for reducing nutrient runoff. If reductions in nutrient runoff can be achieved, the annual Gulf of Mexico Dead Zone will decrease, allowing better commercial and recreational fishing conditions.

**3**  
Restaurants  
Reducing  
Single-Use  
Plastic

#### Reducing Beach Litter

Three restaurants along the northern Gulf of Mexico have agreed to join the "Skip the Straw" campaign, one each in Mississippi, Alabama, and Florida. Reducing single-use plastic leads to cleaner beaches and more tourism.

### ↑ Increases

**24**  
Additional  
HAB  
Detection  
Days

#### Number of HAB Detection Days

GOMA is investing in additional harmful algal bloom (HAB) glider surveys by increasing the number of detection days from 14 to 24. Additional surveys for HABs means better detection and prediction ability for beach closures due to HABs.

**31**  
Increasing  
Time That  
Shellfish  
Beds Are Open

#### Time that Shellfish Beds are Safe

HABs can be toxic and non-toxic. Gulf Star projects are investing in ways to identify the difference between the two in order to increase the amount of time that shellfish beds are open and available for harvest.

# 2017 Gulf Star Projects



Wildlife &  
Fisheries



Data & Monitoring



Education &  
Engagement

## Understanding Recovery and Species Use of Restored Habitats

**ABT ASSOCIATES**

Focusing on fish, shrimp, and crab use of restored oyster reefs, this project updates resources analyzes data, and develops a user-friendly guidebook summarizing the key factors that affect their recovery following coastal habitat restoration projects.



9 *Photo Credit: Dan Womack*

## Monitoring and Metadata Catalog

**UNIVERSITY OF SOUTH FLORIDA  
WATER INSTITUTE**

Expanding an intuitive and interactive online mapping interface used to catalog monitoring sites and management areas, this project will begin by expanding the current Florida-focused Terra-CAT and Water-CAT platforms to Alabama, with a vision of growing to cover the entire Gulf region.

## Living Shoreline Data Inventory, Gap Analysis, and Geodatabase

**GULF COAST RESEARCH LAB**

To enhance the success of current and future living shorelines, this project identifies existing shoreline habitat datasets across the Gulf states and gaps in coverage. The data will be compiled into a publically-available geodatabase.



*Photo Credit: Erica Zambello*

## Watershed Monitoring with Underserved High School Students

**MOBILE BAYKEEPER**

This project provides classroom and hands-on training to students at LeFlore High School in Mobile, Alabama, about issues impacting water quality, training them in water quality monitoring, and empowering them to become active environmental stewards in their local watershed.

## Video Case Studies

**MISSISSIPPI STATE UNIVERSITY  
TELEVISION CENTER AND  
DAUPHIN ISLAND SEA LAB**

Outreach videos will highlight coastal community resilience and marine debris projects, emphasizing success stories and providing inspiration for other coastal communities.



# 2017 Gulf Star Projects



## **Citizen Science Water Monitoring in the Florida Panhandle**

**UNIVERSITY OF FLORIDA**

Expanding “Water Watch” to three additional counties in the Florida panhandle will enable the existing community-based volunteer coastal water quality monitoring program to fill data gaps identified by local governments and organizations.

## **Louisiana Inshore to Off-shore Water Monitoring**

**LOUISIANA COASTAL PROTECTION AND RESTORATION AUTHORITY**

This project fills a critical water quality monitoring gap in coastal Louisiana by establishing a new monitoring transect from the coast into the open Gulf. These data will improve understanding of baseline conditions for restoration, water quality dynamics, and changes in the Gulf dead zone.

## **Fostering Resilient Building Practices**

**SMART HOME AMERICA**

This project educates decision-makers on state-based mitigation programs, policies, & tools to promote resilient building practices & train them in the FORTIFIED Home Program, helping homeowners become more resilient by strengthening their homes against severe weather.

## **Pointe-Au-Chien Community Resilience**

**FIRST PEOPLE’S CONSERVATION COUNCIL, LOWLANDER CENTER, AND LOUISIANA SEA GRANT**

Focused on improving community resilience for the Pointe-Au-Chien Indian Tribe in coastal Louisiana, this project assists the community in performing a self-assessment & implementing habitat restoration & resilience projects to address identified vulnerabilities.

## **Seagrass Status and Trends**

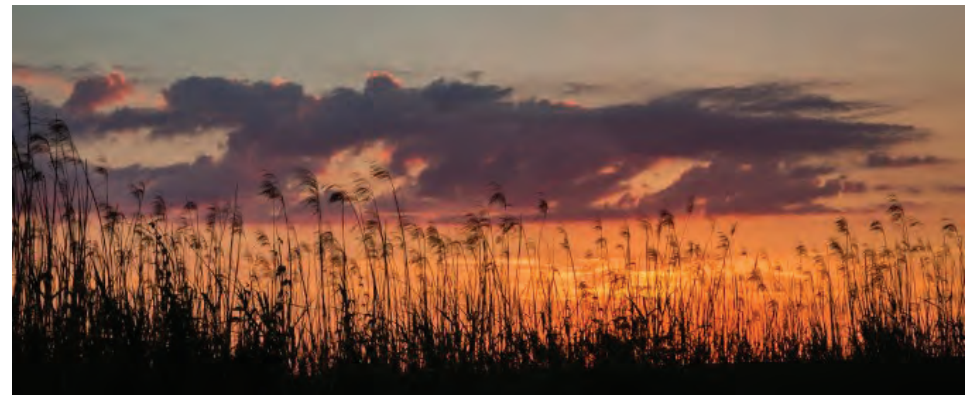
**CNL WORLD**

The last comprehensive seagrass assessment was conducted more than a decade ago and was limited in the type of data that was available at the time. The data pre-dated the destructive tropical events of 2004, 2005, and 2006. Based on recommendations from a recent Seagrass Workshop, HRT recommends an update and re-assessment of seagrass resources across the Gulf.

## **Incorporating Additional Indicators into the Community Resilience Index**

**HARTE RESEARCH INSTITUTE**

This project incorporates socio-economic and ecosystem service indicators into the existing Community Resilience Index (CRI) in order to capture the benefits that communities receive from their natural features and potential projects, such as living shorelines.



*Photo Credit: Dorothy Pierini-Rodgers*



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