

# Gulf of Mexico Alliance Gulf Star Program

## 2016 Awards

### COASTAL RESILIENCE PROJECTS

- **Regional Coastal Resilience** | *Various Gulf Communities*  
This project provides small grants to 10 communities to implement programs that will enhance their coastal resilience. Selected communities are eligible to receive up to \$45,000 in funding assistance as well as technical assistance from state and federal agencies and local knowledge experts.

**Linking Science Communication and Municipal Planning** | *University of Texas Marine Science Institute*

This project brings scientific researchers together with planners, floodplain managers, and other local decision makers to facilitate deeper understanding of resiliency issues along the Texas coastal bend.

- **Cross-Sector Snapshot of Community Resilience** | *Louisiana Sea Grant*  
This project uses the four Resilience Indices (Community Resilience Index, Ports Resilience Index, Tourism Resilience Index, and Fisheries Resilience Index) within the Morgan City, Louisiana community to develop a cross-sector evaluation of overall community resilience.

### HABITAT PROJECTS

- **Seagrass Assessment** | *CNL World Consultants*  
Leveraging against an existing U.S. Geological Survey and EPA project, this project develops a plan to assess additional seagrass resources throughout the Gulf region. The purpose is to inform restoration plans.
- **Living Shorelines Site Suitability Modeling** | *Florida Fish and Wildlife Commission*  
GOMA partners recently concluded the development of a living shorelines site suitability model and pilot tested it on Mobile Bay, Alabama. It was very successful in predicting where natural shoreline restoration techniques will be successful and where they won't. As a continuation of the project, this new project conducts the recently developed living shoreline model on additional sites in Tampa and Perdido, Florida.
- **Urban Youth Conservation Corps** | *Limitless Vistas, Inc.*  
This project increases awareness of the losses and degradation of coastal habitats caused by invasive species. This project also educates and trains students in conservation field techniques that can be used to pursue jobs in the conservation industry and/or generate interest in seeking environmental or conservation college degree.

## WATER QUALITY PROJECTS

- **Expansion of Harmful Algal Bloom Sensor Network** | *Florida Fish and Wildlife Commission*  
This project expands the application of a handheld generic harmful algal bloom (HAB) sensor to other species of HABs. This is important because it allows: (1) more timely confirmation of less toxic or nontoxic species to provide managers with definitive criteria for response decisions, and (2) a rapid, sensitive method for quantifying toxic species which are notoriously difficult to differentiate.
- **Additional Harmful Algal Bloom Gliders** | *University of South Florida*  
This project deploys additional harmful algal bloom (HAB) observation gliders in order to identify, evaluate, and predict the initiation of blooms in northwest Florida, the most common location of initial development. This information is critical for improving the seasonal forecast which can devastate commercial and recreational fishing opportunities. The additional gliders are deployed and retrieved from existing research vessel missions in the area, keeping the costs low.
- **Nutrient Reduction Social and Civic Engagement Survey** | *Mississippi State University*  
This project adds the states of Florida, Alabama, and Texas to an existing social and civic engagement survey being conducted by the Hypoxia Task Force to determine social values associated with reducing nutrients in stormwater runoff. The Hypoxia Task Force is already conducting the survey for the states along the Mississippi River including Louisiana and Mississippi. The information gained from the surveys are important because it can be used to institute incentives to reduce nutrients in stormwater runoff, which are the primary cause of the hypoxic (or dead) zone in the Gulf of Mexico each summer.

## WILDLIFE & FISHERIES PROJECTS

- **Connectivity of Sea Turtles in Gulf Habitats** | *Inwater Research Group*  
This project focuses on neonate sea turtles found in pelagic habitat off of Venice, Louisiana; juvenile and sub-adult sea turtles in nearshore habitat in the Big Bend region of Florida; and sub-adult and adult turtles found on foraging grounds near the Marquesas Keys, Florida.
- **Species Recovery Plan Review** | *Ashely Ballou Consultant*  
This project identifies specific conservation actions that can be prioritized in order to downlist or delist particular threatened or endangered species in the region. Once obtained, the prioritized actions will be included in regional restoration plans developed by state and federal agencies.

## DATA & MONITORING PROJECTS

- **Updating and Upgrading GOMAportal** | *Harte Research Institute*  
This project updates and upgrades the GOMAportal ([www.gomaportal.org](http://www.gomaportal.org)) to better support new metadata standards and interoperability, relocate the entire system to a new server with more storage capacity, and enhances the interface to be more user-friendly.

- **Sediment Resource Database** | *Applied Coastal Research & Engineering*  
Louisiana Coastal Protection and Restoration Authority is developing a budgeting and allocation tool for multiple agencies to coordinate use of sediment sources. This new project adds sediment resource data from other Gulf States into the management system that CPRA is building. The comprehensive database will provide state resource managers with the information needed to beneficially use dredged sediments for restoration, which can significantly reduce the time and cost.

## EDUCATION & ENGAGEMENT PROJECTS

- **Tracking Trash** | *Dauphin Island Sea Lab*  
The goal of this project is to educate middle and high school students and teachers about the marine debris problem in coastal Alabama; show students how technology can be used to study a problem, and develop an engineering/solution-based mindset and instill a sense of stewardship for their local waterway.
- **Marine Debris Education & Prevention** | *Barataria-Terrebonne National Estuary Program*  
This project will engage high school and college students in the data collection and monitoring of marine debris and sediment microplastics on a private beach in Louisiana. Students will spend one day per quarter in the field researching, collecting, and analyzing marine debris data and preparing action items to stop it at the source.
- **Wind Engineering Testing for Optimal Design for Wind Hazards** | *Louisiana State University*  
This project develops and promotes wind engineering tools to help audiences identify opportunities to improve resilience, and to enable the building of smart, resilient, and sustainable infrastructure. The project tests innovative ways to reduce wind-induced loads on flexible structures.

## MARINE DEBRIS PROJECTS

- **Marine Debris Dash** | *Ocean Hour*  
This project works systematically to clean up specific shores in northwest Florida, collecting debris and tracking the items on the NOAA marine debris tracker. Using the data, this project will work with local businesses and government officials to curb their incidence on the shore.
- **Plastic Free Gulf Coast in Mississippi** | *Gulf Coast Community Design Studio*  
This project aims to reduce the use of single-use plastic in the three coastal counties of Mississippi and provide data showing this reduction.
- **Microplastics Citizen Science Project** | *Mississippi State University*  
The purpose of this microplastics project is to demonstrate the type and location of degraded microplastics. This grant is a citizen science project where sediment and water samples are collected and processed for microplastics, then integrated into an existing visualization tool. The data collection and visualization tool is already being used by Florida Microplastic Awareness Project and is being expanded to marine debris programs in other Gulf states.