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. 2016 marked the inaugural year for the Gulf Star Partnership, with a commitment of nearly $635,900 granted to regional projects. We are proud to present an overview of the 2016 Gulf Star projects in the next few pages of this report, as they are foundational to larger regional restoration efforts.

This suite of projects was only made possible by the shared vision of our 2016 Gulf Star partners: Shell Exploration & Production, The Nature Conservancy, Freeport McMoRan, Inc., National Oceanic and Atmospheric Administration, and U.S. Fish and 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 Partnership is undertaking and the impact this work can have on Gulf economies, but there is much more to be done. We are poised to invest an additional $4,000,000 over the next four years. Although we have set an ambitious goal for the future, it’s built upon the strength of GOMA’s collaborative formula and I am optimistic about what’s ahead.

Message From Our Executive Director

LAURA BOWIE

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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

GOAL $1,000,000 ANNUALLY

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

COMMITMENTS TO DATE

STATE
Alabama  Florida  Louisiana
Mississippi  Texas

FEDERAL

PRIVATE

The Nature Conservancy
SHOWS THE LAST GREAT PLACES ON EARTH
OUR GRANT MAKING PROGRAM

- Is competitively selected
- Has a collaborative approach requirement
- Is focused on science-based solutions to management
- Funds projects that address issues identified as critical for decision-making

PROJECT TYPES: SMALL BUT IMPORTANT

Foundation aspects to critical needs identified by the Gulf States:

Sustainable seafood
Loss of critical habitats
Community Resilience
Gulf Hypoxia
Water Quality & Water Quantity
Living Marine Resources
Data & Monitoring

These projects are too small for large restoration investments like RESTORE, MOPA, and NFWF’s Gulf Environmental Benefit Fund, but are important to inform science-based restoration planning.

Coastal Resilience
Water Quality
Education & Engagement
Habitat Resources

Providing small grants to communities; linking science communications and municipal planning; creating a cross-sector snapshot of community resilience using multiple indices; and testing optimal structure designs for wave hazards.

Investigating indicators of social and civic engagement regarding reducing nutrients; deploying gliders to better predict harmful algal bloom outbreaks; expanding the harmful algal bloom sensor network to ensure comprehensive monitoring; and conducting a human health workshop to compile human health parameter monitoring information from existing water programs.

Collecting, tracking, and removing trash and marine debris; starting programs to prevent marine debris; and testing aerodynamics of rooftop systems for resilience.

Assessing nearshore resources; modeling conditions for suitability of living shoreline techniques; and training students in conservation field techniques.

Data & Monitoring
Wildlife & Fisheries
Marine Debris

Updating the user interface of GOMAportal to be more user-friendly and upgrading it to better support new metadata standards and interoperability with other systems.

Studying sea turtles found in various habitats throughout the region; and conducting a species plan review to identify conservation actions that can be prioritized in order to downlist or delist particular species.

Studying microplastics, collecting trash along beaches, and determining effectiveness of reducing the use of plastic bags.

Living Marine Resources

Attaching seagrass resources; modeling coastlines for suitability of living shoreline techniques; and training students in conservation field techniques.

Overview
2016 PROJECT SNAPSHOT

Water Quality
Education & Engagement
Habitat Resources

Coastal Resilience
Water Quality
Education & Engagement
Habitat Resources

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Living Marine Resources

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**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 $35,000 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 conducted the development of a living shorelines site suitability model and plan tested it in 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.

**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 identification 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 excursions in the area, keeping the costs low.

**2016 Gulf Star Projects**

**FUNDING PARTNERS:**

- Alabama: Florida | Louisiana | Mississippi | Texas | NOAA | U.S. Fish & Wildlife Service | Shell | Freeport-McMoRan | The Nature Conservancy
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 | Ashley 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.

Wildlife & Fisheries Projects

Updating and upgrading GOMAportal | Harte Research Institute

This project updates and upgrades the GOMAportal (www.gomaportal.org) to better support new metadata standards and interoperability; requires the entire system to be a new server with more storage capacity, and enhances the interface to be more user-friendly.

Sediment Resource Data | 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.

Data & Monitoring Projects

Tracking Trash in Alabama | 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 in Louisiana | 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.

Wild Engineering Testing to Determine Optimal Design of Structure for Wind | 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.

Education & Engagement Projects

Marine Debris Dash in Florida | Ocean Hour

This project works systematically to clean up specific shores in southwest 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.

Microplastic Citizen Science Project | Mississippi State University

The purpose of the microplastic 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 exciting visualization tool. The data collection and visualization tool is already being used by Florida Microplastics Awareness Project and is being expanded to marine debris programs in other Gulf states.

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Marine Debris Projects

2016 Gulf Star Projects

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