



# GOVERNORS' ACTION PLAN III

For Healthy and  
Resilient Coasts

2016 - 2021





## Contents

---

Letter from the Governors of the Five Gulf States	<b>2</b>
Gulf of Mexico Alliance: Building Partnerships for a Healthier Gulf	<b>3</b>
The Power of Partnerships	<b>4</b>
Gulf of Mexico Alliance Organization – Time Line	<b>6</b>
Gulf of Mexico Alliance Organization	<b>8</b>
Our Priorities	<b>10</b>
Coastal Resilience	<b>12</b>
Data and Monitoring	<b>16</b>
Education and Engagement	<b>20</b>
Habitat Resources	<b>24</b>
Water Resources	<b>28</b>
Wildlife and Fisheries	<b>32</b>
Ecosystem Services Assessment – Cross-Team Initiative	<b>37</b>
Marine Debris – Cross-Team Initiative	<b>38</b>
Conservation, Restoration, and Resilience Planning – Cross-Team Initiative	<b>39</b>
A Path Forward Toward A Healthier Gulf	<b>40</b>



Governor Robert Bentley, Alabama



Governor Rick Scott, Florida



Governor John Bel Edwards, Louisiana



Governor Phil Bryant, Mississippi



Governor Greg Abbott, Texas

## *Dear Gulf Residents and Visitors,*

We, the Governors of the five U.S. Gulf States, recognize that the quality of life for citizens and visitors is culturally bound to the benefits provided by our natural resources. As the most productive body of water in the United States, the Gulf of Mexico has natural resources like no other, including rich and bountiful estuaries that provide 78% of our nation's shrimp landings; white sandy beaches that provide nearly \$10 trillion in annual wages; working waterfronts encompassing 13 of the nation's 20 leading ports by tonnage; and a rich outer continental shelf and deep canyon area that provide 50% of the Nation's oil reserves.

In order to maintain these valuable energy resources, abundant seafood, and extraordinary recreational activities of the Gulf of Mexico, the adjacent states assume great responsibility. Therefore, eleven years ago, the U.S. Gulf States formed the Gulf of Mexico Alliance, a regional collaborative effort with a goal of improving the health and sustainability of our coastal areas and the lives of millions of people that live within and visit this region every year.

On the heels of devastating natural disasters, the Alliance issued our first Action Plan in 2006, challenging our partners in the region to come together to form a collaboration capable of identifying regional Gulf issues that are a priority for the ecological and economic health of each state. In 2009, we issued a second Action Plan to address those priorities that advanced the goal while maintaining a strong alliance between the Gulf States and our regional partners. The 2010 Deepwater Horizon oil spill tested the strength of the Alliance, creating unprecedented challenges and opportunities to work together toward Gulf restoration. Going forward, this third *Governors' Action Plan* addresses coastal resilience; habitat resources; water resources; wildlife and fisheries; data and monitoring; and education and engagement. This plan reinforces the Alliance's commitment to effective regional collaboration and coordination, addressing issues common to all five Gulf States in a voluntary way.

We understand that by working together we can improve our resource management and leave a lasting legacy for Gulf coastal residents and visitors alike. Therefore, as the executives of the five Gulf States, we pledge our full support of and solicit your help toward implementing the actions detailed in this *Governors' Action Plan III for Healthy and Resilient Coasts*.

*Robert Bentley*  
Governor of Alabama

*Rick Scott*  
Governor of Florida

*John Bel Edwards*  
Governor of Louisiana

*Phil Bryant*  
Governor of Mississippi

*Greg Abbott*  
Governor of Texas

# *Building Partnerships for a Healthier Gulf*

The Gulf of Mexico Alliance is a partnership of the five U.S. Gulf States, federal agencies, academic organizations, businesses, and other non-governmental organizations. *Our mission is to enhance the environmental and economic health of the Gulf of Mexico through increased regional collaboration.* This *Governors' Action Plan III* for Healthy and Resilient Coasts is the third in a series of collaborative work plans for the Gulf of Mexico Alliance focusing on priority issues determined by the Gulf States themselves:

- Enhancing Coastal Community Resilience*
- Improving Data Access and Baseline Monitoring*
- Increasing Stewardship through Education and Engagement*
- Conserving and Restoring Habitat Resources*
- Improving the Health of Wildlife and Fisheries*
- Improving the Quality of Water Resources*

The overarching goal of the Gulf of Mexico Alliance is to address the region's priorities by:

- providing forums for collaboration on priority issues,
- developing and modifying tools to address regional issues,
- tracking restoration efforts,
- identifying and expanding opportunities for comprehensive monitoring,
- expanding the Alliance network to enable strategic partnerships, and
- continuing to administer a large oil-spill research program.

## **History**

The Gulf of Mexico Alliance was established in 2004 in response to the U.S. Ocean Action Plan. On the heels of Hurricanes Katrina and Rita in 2005, the five U.S. Gulf State Governors signed the first *Governors' Action Plan for Healthy and Resilient Coasts* in March 2006. Realizing the mission could only be achieved through diverse partnerships, the Alliance began recruiting federal, non-governmental, and academic partners to be members. The Gulf of Mexico Alliance came together and achieved ninety-nine percent of the original *Action Plan* objectives in just three short years. Building on the tremendous success of the first plan, the Gulf of Mexico Alliance released its second plan, *Governors' Action Plan II* in 2009. This five-year plan was more aggressive with solutions to address the challenges of the time. Approximately one year later, however, the Deepwater Horizon oil spill occurred, and restoration became one of the Gulf's largest challenges to date.

During the course of Action Plan II, the Gulf of Mexico Alliance formalized as a non-profit organization, managed six priority issue teams, and began to administer a large oil spill research program. The Alliance's accomplishments resulting from *Action Plan I* and *Action Plan II* are detailed in the *Gulf of Mexico Alliance's Ten Year Summary Report: 2004-2014*.





# The Power of Partnerships

*Heidi Stiller, National Oceanic and Atmospheric Administration*

The Gulf of Mexico Alliance is a network of partners that collaborate to address our identified priority issues in ways that a single entity cannot. Our partners provide the talent and resources needed to realize on-the-ground efforts.

## State Partners

Leadership from the five Gulf States forms the foundation of the Gulf of Mexico Alliance and each of the Gulf States has committed time and resources to its successful implementation. State scientists, technical experts, and resource managers work collaboratively to address regional matters of shared concern. Each state leads a team focused on making progress on a particular issue;

- Alabama leads the [Education and Engagement Team](#);
- Florida leads the [Data and Monitoring Team](#);
- Louisiana leads the [Habitat Resources Team](#);
- Mississippi leads both the [Coastal Resilience](#) and [Water Resources Teams](#); and
- Texas leads the [Wildlife and Fisheries Team](#).



## Federal Partners

The success of the Gulf of Mexico Alliance is based not only on the dedication of the five Gulf States, but also on commitment from our federal partners. Thirteen federal agencies support the Alliance through a federal work group under the leadership. The goals of the federal work group are to support the Gulf States and to coordinate an integrated federal response to priority regional issues identified by the Alliance. The federal work group brings diverse expertise and established experience. By integrating these capabilities, the impact of federal resources is fully maximized.



## Academic Partners

The academic community is a critical partner for addressing Alliance priorities in the Gulf region. In addition to expertise, innovation, and science capacities, universities educate the next generation of scientists and engineers required to support a healthy, sustained Gulf environment and economy. The Gulf of Mexico Alliance works closely with academic partners who actively support and participate in Priority Issue Teams, co-sponsor Alliance meetings, and share our news.

## Non-governmental Partners

Non-governmental organizations are another important sector to the Gulf of Mexico Alliance. Many non-governmental organizations participate in the Priority Issue Teams and work together on Alliance-sponsored projects. Non-governmental organization partners include organizations that focus on:

- natural resource conservation, restoration and protection;
- social and environmental justice;
- environmental advocacy;
- coastal resilience;
- education and outreach; and
- workforce development.

These partners bring to the Alliance a stronger link to local communities and a variety of skills such as research and monitoring capabilities, project implementation, communication expertise, and funding opportunity development.

## Business Partners

Business and industry involvement are important to successfully achieving the Alliance's goal of healthy ecosystems and economies. The Gulf of Mexico Alliance Business Advisory Council facilitates communication between Alliance Management and the diverse group of industries that are dependent upon the common resources of the Gulf of Mexico. The Alliance established the Business Advisory Council to partner with business members on priority issues and regional initiatives as well as to deepen a sense of stewardship in the Gulf of Mexico. The Business Advisory Council consists of representatives of the following industries:

- agriculture
- commercial and recreational fishing
- manufacturing
- oil and gas
- seafood processing
- tourism
- transportation (including shipping and harbors)
- utilities/energy (including power generation and alternative sources)

## Role of Mexico and Cuba

The Gulf of Mexico Alliance recognizes that the five U.S. Gulf States are not the only residents of this important ecosystem. Our neighboring countries also utilize and protect the resources of the Gulf of Mexico. To be truly successful in improving the ecological health of this region, we must collaborate when possible to address our shared concerns. The Alliance has a working history with partners in Mexico and intends to maintain that valuable relationship. As the political relationship evolves between the United States and Cuba, we will explore partnerships as appropriate.



With *Action Plan III* comes expanded opportunities for growth and collaboration. Gulf Star is a new Alliance public-private initiative designed to increase the region's ecosystem health and resilience by supporting implementation of *Action Plan III*.

Gulf Star is actively working to secure \$5 million over the next five years. Founding private members of this initiative are Shell, the Gulf of Mexico Foundation, and The Nature Conservancy. These three members are setting a course for supporting regional collaboration to address challenging Gulf issues. Gulf Star is also supported by the five U.S. Gulf States and federal agencies.



**2000**  
Oceans Act of 2000

**2004**  
Gulf Governors' Agreement  
and Call to Action

**2006**  
*Governors' Act*

**2003**  
Pew Oceans Commission Report  
calling for regional collaboration

**2005**  
Priority Issue Workshops;  
Hurricanes Katrina & Rita

**2009**  
*Governors' Action Plan II*

**2011**  
Primer on Hypoxia in the Gulf of Mexico;  
Comparing Mexican & US Conservation Frameworks

**2012**

**2010**  
Deepwater Horizon Incident;  
Gulf of Mexico Research Initiative

GOMA Business Advisor  
Ecosystem Services Assessments; S



ion Plan I

2007

Expanding HAB Detection with Mexico;  
Gulf Hypoxia Summit

2007

Environmental Education Network;  
Regional Sediment Management Plan

2008

Gulf Geospatial Assessment of  
Marine Ecosystems (GAME)

2008

Sea Grant Regional  
Research Plan

# Gulf of Mexico Alliance Through the Years

2013

Homeowner Handbook for Natural Hazards;  
Primer on Harmful Algal Blooms

ory Council;  
Smart-Yard Healthy Gulf

2014

Sea-Level Affecting Marshes Modeling

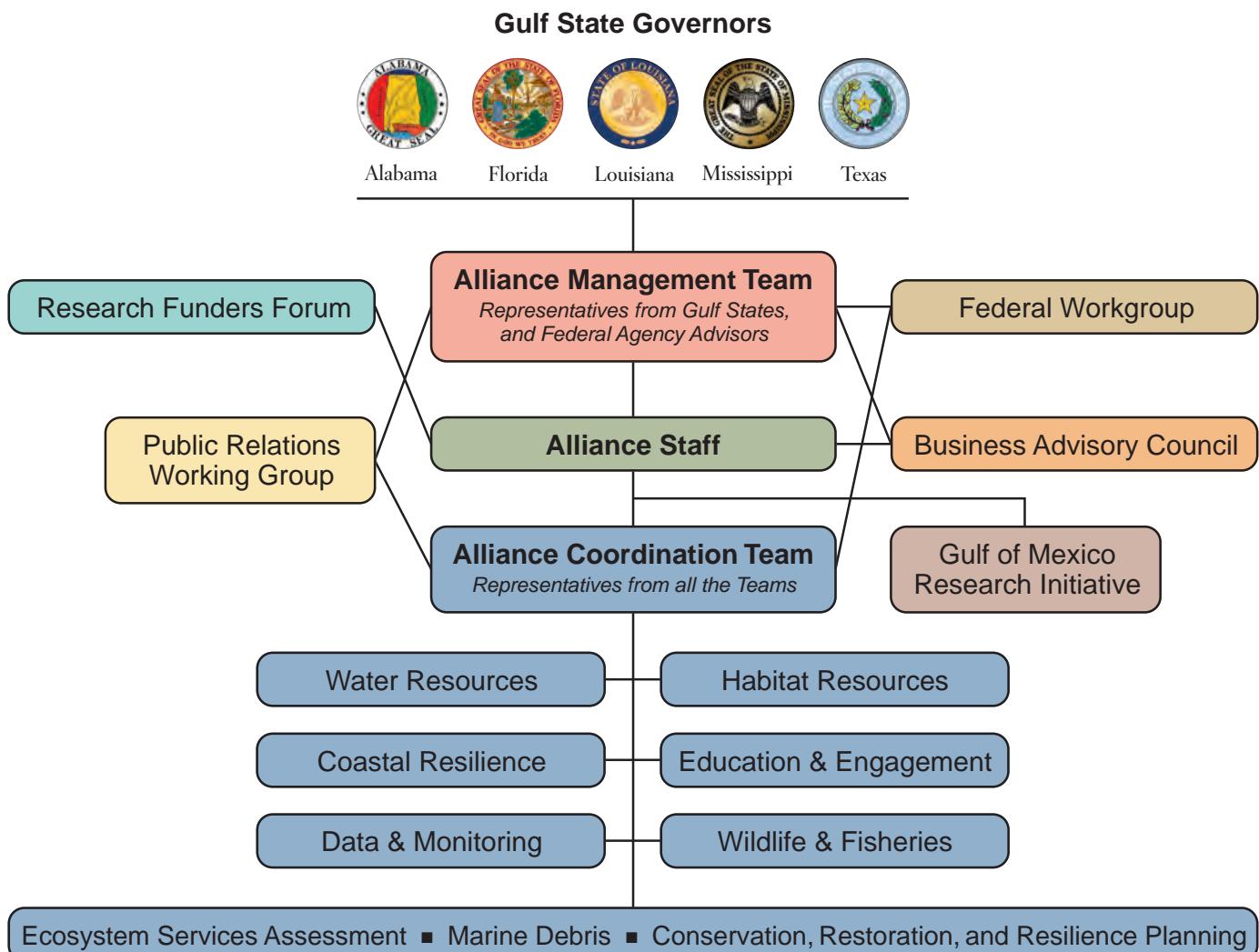
2015

Deepwater Horizon Project Tracker;  
*Regional Collaborative Blueprint*

## Organization of the Gulf of Mexico Alliance

Gulf of Mexico Alliance partners believe collaboration brings exponential results. Our broad network includes state and federal agencies, academic organizations, businesses, and other non-governmental organization in the region who work together to address the region's priorities.

Early on in the formation of the Gulf of Mexico Alliance, the Alliance's governing body adopted a constitution to document how our partnership network functions. While our organization has grown through the years, the basic structure has remained the same. Today, the Gulf of Mexico Alliance's organization also includes a small staff and several supporting committees as shown below.



*"We greatly value the partnerships developed through the Gulf of Mexico Alliance. It is a truly unique organization in the region dedicated to the power of collaborative work to reach common goals. These collaborative efforts will continue to become even more important with time. We are glad to be a part of the Alliance since its beginning and as it embarks on this current Action Plan."*

– Kristen Laursen, Gulf of Mexico Regional Coordinator  
National Oceanic and Atmospheric Administration



**Alliance Management Team** is made up of the representatives of the five Gulf State governors with Federal Agencies and other organizations serving in advisory capacity.

**Alliance Staff** administers two primary programs, the Priority Issues Programs and the **Gulf of Mexico Research Initiative**.

**Alliance Coordination Team** is made up of representatives from each of the Priority Issue Teams, including state chairs, coordinators, and federal liaisons that meet on a regular basis to coordinate across the teams, as well as to plan organization-wide meetings.

**Priority Issue Teams** are a hallmark of the Gulf of Mexico Alliance. These state-led teams, focused on well-defined issues, are the key to our success. They are composed of region-wide partners who collaborate on a regular basis to achieve individual team objectives. Specific actions associated with addressing the priority issues are developed and implemented by the voluntary members of the teams, with approval from the Alliance Management Team. In addition to specific projects, the teams build relationships among stakeholders with common interest or expertise.

**Federal Working Group** is made up of thirteen federal agencies that bring diverse expertise and established experience to the Alliance.

**Public Relations Committee** promotes the identity of the Alliance, its mission, and the Priority Issue Teams to our stakeholders.

**Business Advisory Council** provides advice and input to the Gulf of Mexico Alliance from industries operating in and around the Gulf of Mexico region.

**Regional Research Funders Forum** is an open platform for all funding programs that support science and research in the Gulf of Mexico to increase collaboration and coordination.

**Gulf of Mexico Research Initiative** is a ten-year oil spill research funding program with a goal to improve society's ability to understand, respond to, and mitigate the impacts of petroleum pollution and related stressors of the marine and coastal ecosystems. The Alliance administers the Gulf of Mexico Research Initiative outside the scope of the *Governors' Action Plan*.





# Our Priorities

*St. George, SKME Blitch*

The strength of the Gulf of Mexico Alliance is bringing together the stakeholders in the Gulf States in a shared vision for a healthy and resilient Gulf of Mexico. The Alliance focuses on a suite of issues determined by the Gulf States as those common to all five. This targeted approach has provided a strong foundation for long-term regional collaboration. The Gulf of Mexico Alliance addresses six priority issues:

- **Coastal Resilience**
- **Data & Monitoring**
- **Education & Engagement**
- **Habitat Resources**
- **Water Resources; and**
- **Wildlife & Fisheries**

The Alliance's six priority issues offer the framework for defining all its goals and actions. The issues in the *Governors' Action Plan III* are slightly different than those in *Action Plans I and II* to reflect alignment with other efforts in the Gulf region. After 10 years of successful joint effort, the Alliance Management Team reevaluated our priorities. This resulted in reorganized to address ongoing coastal issues, and new teams are pursuing emerging issues related to regional data and monitoring as well as wildlife and fisheries. What remains the same is the Gulf States' commitment of time and resources to the Alliance's priority issues.

## Priority Issue Teams

Each state leads a cross-state and multi-discipline team focused on making progress in a specific area. These teams are the vital component of the Gulf of Mexico Alliance organization. Teams focus on the issues through a collaborative approach with scientific, technical, and resource management experts who have deep understanding of Gulf issues and broad practical experience, including the ability to maximize the impact of funding. The teams are comprised of Alliance members from state and federal agencies, non-governmental organizations, academia and businesses. The teams work together to develop specific actions to address priority issues, with the Alliance Management Team providing high-level review and final approval.

As it has been since the beginning, involvement in the Gulf of Mexico Alliance's Priority Issue Teams is open and voluntary, and participation by wide-ranging Gulf stakeholders is highly encouraged. The Alliance serves as a forum for exchanging information about the Gulf and the issues that impact its ecological health. Robust participation on the teams improves the quality of our actions and leads to the most beneficial outcomes for a healthy and resilient Gulf of Mexico.

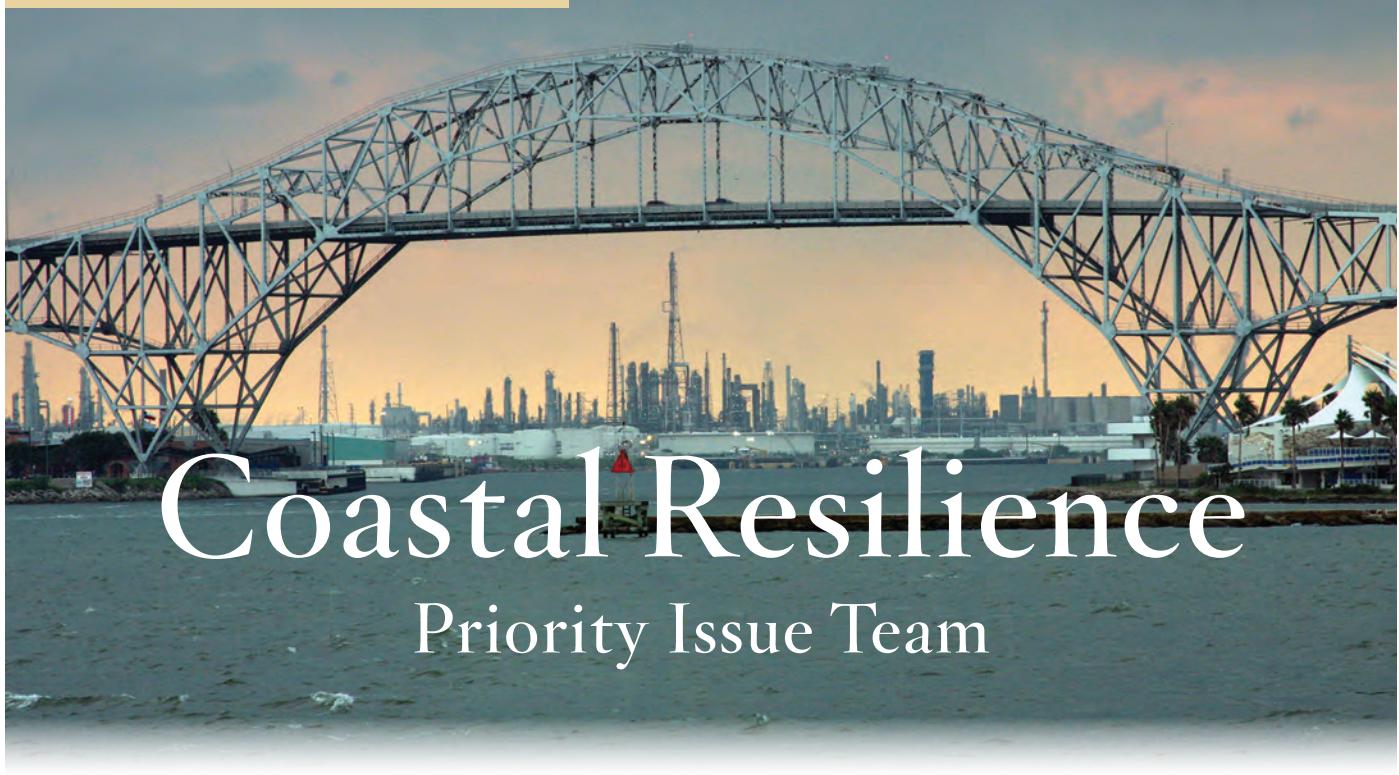
## Cross-Team Initiatives

Teams have set a high standard for effective coordination and cooperation within their membership. Although each team has its own goals and focus areas, they also assist in achieving the objectives in other priority areas. In the *Governors' Action Plan III*, we have identified three initiatives as opportunities for cross-team cooperation.

- **Ecosystem Services**
- **Marine Debris**
- **Conservation, Restoration, and Resilience Planning**

Participants of the cross-team initiatives represent specific Priority Issue Teams, bring alternative perspectives, and address problems with a different approach. The teams will leverage their expertise and resources beyond their own issues to produce results. This is an exciting new venture for us and is further evidence of the commitment of our partners.





# Coastal Resilience

## Priority Issue Team

*Jeanne Allen, US Environmental Protection Agency*

Over 60 million people in the U.S. call the Gulf of Mexico their home and about a third of those live in the coastal counties and parishes. Our warm climate, low cost of living, and natural beauty continue to attract people to the region. The population of the five Gulf States is expected to increase by an additional 14 million people by 2030. With these population increases, homes, businesses, and infrastructure are at a greater risk of damage from hazards such as hurricanes, coastal storms, and flooding. Communities that prepare for short and longterm impacts and consider hazard risks in land use planning, development, and management of natural habitats are able to recover from disasters more quickly. Resilience is the capacity of human and natural/physical systems to adapt to and recover from change, such as a natural disaster.

The Gulf of Mexico Alliance Coastal Resilience Team will focus its actions on our regional ability to respond to natural and manmade hazards, including risk communication techniques and resilience assessments as well as a variety of coastal adaptation and planning methods. The Coastal Resilience Team is developing strategies and tools that, when implemented, can create safer, more resilient communities.

### Team Goals

- Increase awareness and knowledge of tools and resources to assist coastal stakeholders in becoming more resilient and sustainable
- Promote the understanding of coastal risks and the availability of resilience and restoration tools for those who live, work, visit, and do business in the Gulf of Mexico
- Promote adaptation, mitigation, and restoration as strategies to preserve heritage, conserve natural resources, and support the economic viability of the coast

## Focus Areas

### Risk and Resilience Communication

Provide information to Gulf Coast communities about the risks and vulnerabilities associated with coastal hazards and provide access to the tools and training necessary to increase resilience and inform restoration and adaptation decisions

#### Actions

- Conduct resilience workshops across the Gulf States, targeting local government representatives and land use managers, and teach them to access coastal hazard and climate change information and tools and use this information to make decisions about community planning and resource management
- Distribute English versions of state-specific resilience handbooks to residents of coastal communities
- Translate state-specific resilience handbooks for non-English speaking populations and distribute widely to non-English speaking residents of coastal communities
- Promote the StormSmart Coasts Network to residents and visitors in the Gulf region to communicate pertinent resilience information, tools, and data
- Share sea level rise modeling results from the Gulf region via the StormSmart Coasts Network, with other efforts around the Gulf
- Update resilience tools with the best available science and expand the scope of these tools to reach broader audiences

#### Why Do This?

Connecting residents, businesses, and local governments to relevant tools and resources is an essential step on the path toward resilience. Communication about the tools available will encourage the community to utilize this knowledge when making preparedness, response, recovery, mitigation, and development decisions.

#### Expected Results

- Coastal stakeholders have increased awareness of resilience knowledge, tools, resources, and areas for improvement
- Communities understand incentives for engaging in risk reduction and resilience activities
- Human, environmental, and economic vulnerability of the coast is reduced as coastal stakeholders become more engaged in adaptation, mitigation, and restoration initiatives

Melissa Schneider, Mississippi-Alabama Sea Grant Consortium



*"Gulf of Mexico resources are required to be managed and conserved for sustainable uses, suggesting an integrated approach. The GOMA Business Advisory Council is an opportunity to build consensus with government, industry and science to achieve such an approach."*

– Mike Colby, Florida Coast Charters, Clearwater, FL



*Melissa Schneider, Mississippi-Alabama Sea Grant Consortium*

## Risk and Resilience Assessment

Provide resilience assessment tools to assist Gulf Coast communities in understanding the risks and vulnerabilities associated with the impacts of coastal hazards and climate change so they can be prepared for and bounce forward from these events

### Actions

- Assess the gaps to quantify and reduce risks within the natural, built, socioeconomic, and human health systems of Gulf Coast communities
- Expand the resilience index to include additional sectors
- Develop and promote tools to help audiences identify opportunities to improve resilience
- Support community implementation projects to improve resilience and document best practices to be shared across states
- Assist additional coastal communities with using the Resilience Index to self-assess their vulnerabilities and track progress towards greater resilience

### Why Do This?

Communities that identify the nature of potential disruptions and their preparedness posture relative to these threats can be better prepared for and bounce forward from these events.

### Expected Results

- Communities better understand the risks to the natural, built, social, and human health systems of Gulf Coast and as well as the resilience and restoration tools available to help them
- Residents and visitors who live, work, visit, and do business in the Gulf of Mexico utilize available resilience and restoration tools for self-assessment to reduce coastal risks and vulnerabilities
- New sectors of the community are more resilient because they have used resilience tools to assess vulnerabilities and identify opportunities to improve resilience

## Resilience Planning and Adaptation

Build planning capacity among Gulf Coast communities to prepare for and adapt to a changing environment to protect human life, preserve heritage, and conserve natural resources

### Actions

- Utilize the resilience toolbox techniques and strategies to provide resources to help communities implement resilience planning and adaptation
- Develop case studies on lessons learned and/or best practices on implementing resilience, adaptation, and/or restoration planning for each Gulf State and communicate the information using a variety of methods

### Why Do This?

Incorporating resilience into their planning process empowers communities to strengthen their built environment, their socioeconomic status, and the human health aspect as they pertain to resilience.

### Expected Results

- Communities explore necessary changes in policy, by incorporating suggested planning and adaptation steps to increase resilience of communities
- Communities leverage coast-wide knowledge, tools, and resources to identify and implement solutions that increase coastal resilience
- Participating communities in the Gulf improve their Community Rating System (CRS) score and additional communities embrace and participate in the CRS to enhance floodplain management
- Gulf States meet planning requirements for Federal Emergency Management Agency Hazard Mitigation Grant Program



*Heidi Stiller, National Oceanic and Atmospheric Administration*

*Texas Sea Grant*





# Data and Monitoring

## Priority Issue Team

Monitoring is the systematic process of collecting, analyzing, and using data and information to track a program's progress toward reaching its objectives and to guide decision making. In the Gulf of Mexico, monitoring programs span a range of environmental, ecological, geomorphological, and socioeconomic topics. Many monitoring programs have been in place for years, and provide not only real-time data to support decisions like beach closures and products like hurricane predictions, but these observations also allow for assessment of long-term trends of the environment. Existing and newly emerging monitoring programs in the Gulf are necessary for evaluating Gulf restoration efforts and enhancing coastal resiliency. Programs such as these can generate a vast amount of data and information required to assess and respond to changes in the health of the Gulf ecosystem. Our ability to coordinate efforts and exchange data and information across local, state, and federal programs is critical to decision makers at all levels in the Gulf of Mexico region.

The Gulf of Mexico Alliance's new Data and Monitoring Team incorporates the monitoring efforts of the former Water Quality Team and many of the data management efforts of the former Ecosystem Integration and Assessment Team. The Data and Monitoring Team provides guidance for the coordination of monitoring efforts to discover, use, and preserve data in support of decision making for Alliance priorities. The Data and Monitoring Team will focus its actions on improving the comparability of data, developing a community of monitoring practitioners, and establishing a framework for improving how data and information are delivered to coastal managers and the public.

### Team Goals

- Improve decision making through coordination and provide guidance for monitoring, mapping, and data sharing collaborations
- Enable data and monitoring integration to support Alliance priorities

## Focus Areas

### Data Framework

Establish and implement a Data Management Framework for the Alliance

#### Actions

- Create a Data Management Plan to facilitate access to data and products from Alliance funded projects that will include meta data standards, data transparency, data sharing practices, and data quality guidance
- Use the Data Management Plan to establish and implement the Data Management Framework overseen by the Data and Monitoring Team

#### Why Do This?

A Gulf of Mexico Alliance Data Management Framework, implemented via a data management plan and overseen by the Data and Monitoring Team, will provide searchable metadata that describes Alliance datasets and will also rely on making the best use of data and information that already exists in numerous, distributed databases housed at government agencies, academic institutions, and non-governmental organizations.

#### Expected Results

A Gulf of Mexico Alliance Data Management Framework will ensure Gulf of Mexico Alliance partners and constituents have trusted, reliable, and timely access to critical regional data and metadata on a mutually agreed uniform data standard/format. The data management framework will allow people to think holistically about their project and data design, data needs, methodology, computational and analytical needs, data storage/archiving, and product delivery.

### Monitoring Community of Practice

Improve coordination, accessibility, and comparability of data and information from existing and future monitoring programs across the Gulf of Mexico through the establishment of a Monitoring Community of Practice, and, with an emphasis on Gulf ecosystem restoration, leverage this broad base of expertise in the region to standardize monitoring practices and protocols at multiple scales through consensus.

#### Actions

- Evolve Gulf Monitoring Network into a Monitoring Community of Practice to support Alliance priority issue team and other regional monitoring activities including: identifying and providing input and feedback on minimum monitoring standards and protocols; monitoring needs and indicators; baseline data, gap analysis/inventories, and assessments.
- Assess the feasibility of the Gulf-wide Water Quality Monitoring Network design report recommendation
- Provide access to information about monitoring activities and monitoring resources
- Explore the possibility of providing online tools to facilitate coordination of resources and activities

*Christina Mohrman, Grand Bay National Estuarine Research Reserve*



## Why Do This?

Bringing together practitioners actively involved in monitoring the Gulf environment is key to developing a shared pool of acceptable protocols and standards needed in order to objectively assess the state of the Gulf. This work also supports the establishment of mechanisms to illustrate to the public the progress being made toward reaching comprehensive restoration and ecosystem recovery. Increased coordination among and across monitoring programs maximizes information gain at a minimum of cost.

## Expected Results

A community of monitoring practitioners is established that provides expertise and input for monitoring programs especially in areas related to Gulf restoration and ecosystem recovery. The Monitoring Community of Practice facilitates the identification of standard monitoring practices and protocols and provides increased coordination among and across monitoring programs and their respective sponsors.



*Weeks Bay National Estuarine Research Reserve*

## Gulf of Mexico Master Mapping Plan

Development of an overarching master mapping framework in the Gulf of Mexico that supports state information needs for resource management

### Actions

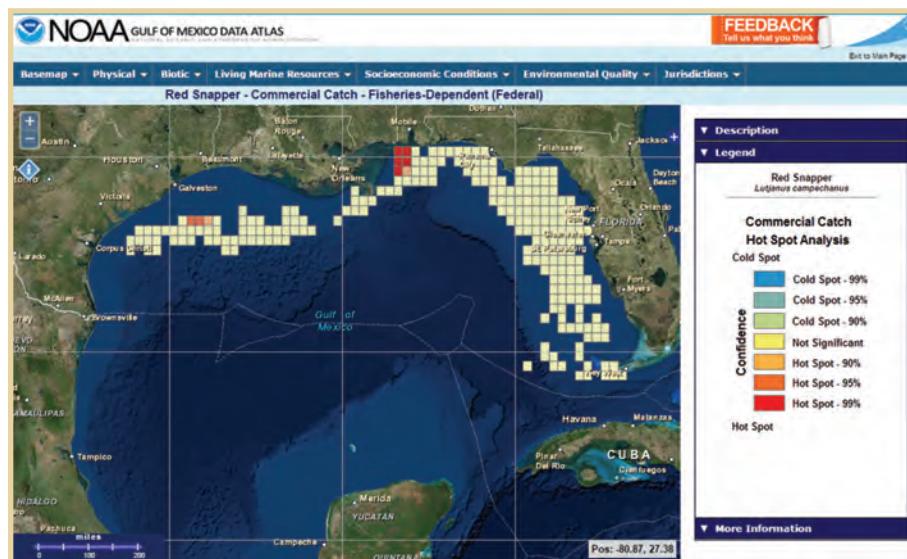
- Ensure Alliance participation in existing Gulf-wide governance frameworks that evaluate the quality of existing maps, assess gaps in coverage, and prioritize areas for habitat and water quality mapping
- Use priority areas for habitat and water quality mapping as a reference from which the Data and Monitoring PIT can make recommendations for support and actively apply for funding

## Why Do This?

Implementing the Gulf of Mexico Master Mapping Plan will provide a transparent and participatory framework for sharing information related to mapping efforts, identifying, and filling gaps in existing map coverage, and enabling the use of collected data. This information is essential for determining baseline conditions, subsequently detecting change over time, and informing the work of multiple priority issue teams. The Master Mapping Plan will facilitate access to actionable data products and be a bridge between information and application.

## Expected Results

The Master Mapping Plan will provide a roadmap to baseline information on landscape, seascape, and waterscape habitats, as well as water quality, in the Gulf of Mexico region to evaluate changes through time. To this end, the Master Mapping Plan will leverage governance structures in the emerging community of practice, facilitate a mapping consortium, and provide a forum for sharing schedules of mapping campaigns in order to increase efficiency.



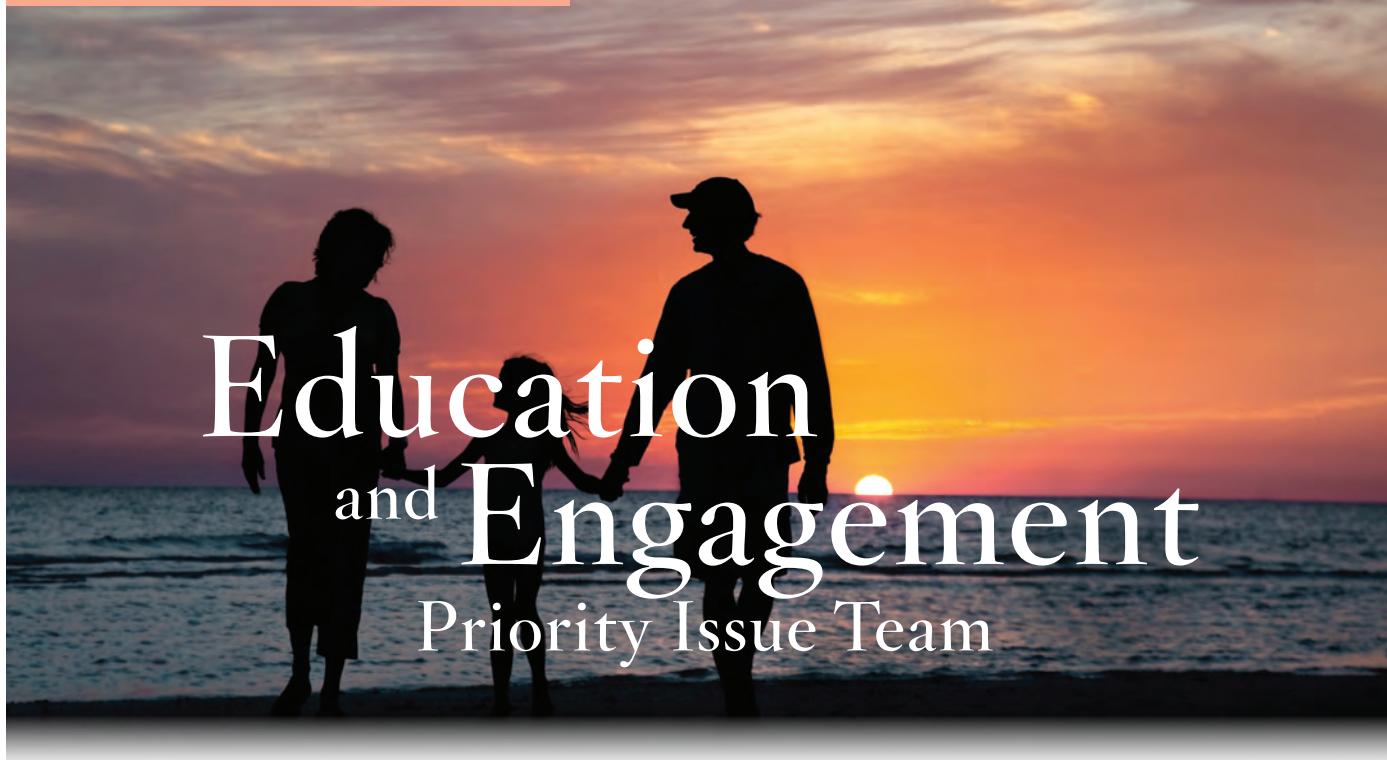
NOAA National Centers for Environmental Information

*"The Gulf of Mexico Alliance has been key to the success in addressing complex regional issues affecting the Gulf, by bringing together a broad array of agencies and programs including Sea Grant to foster collaborative issue identification and problem solving."*

– Karl Havens, Director, Florida Sea Grant College Program Professor  
University of Florida IFAS

Renee Collini, Dauphin Island Sea Lab





# Education and Engagement

## Priority Issue Team

The Gulf of Mexico is fortunate to have many environmental education resources including expertise from local, state, and federal governments; non-governmental organizations; and academic institutions. These organizations have been vital partners of the Gulf of Mexico Alliance throughout the past 10 years, allowing for diverse education, outreach, and engagement resources on regional priority issues.

Because stewardship and improved science-based decision making are relevant to all Alliance activities, the Gulf of Mexico Education and Engagement Team will focus on providing support to the other five priorities and three cross-team initiatives. Team members will use a broad spectrum of environmental education approaches to expand the public's environmental literacy and stewardship of the Gulf of Mexico. The Education and Engagement Team is committed to engagement that leverages resources, builds partnerships, and results in measurable impacts.

### Team Goal

- Engage and educate people to become stewards who enhance the environmental, ecological and economic health of the Gulf of Mexico

*"GOMA continues to do an excellent job of integrating research and development with resource management agencies, non-governmental organizations, and coastal communities to communicate a resource based approach for the stewardship of the Gulf of Mexico ecosystem."*

– Steve Ashby, Co-Director  
Northern Gulf Institute

## Focus Areas

### Communicate Alliance Priority Issues

Assist Priority Issue Teams and cross-team initiatives with their education and engagement efforts to improve communication and collaboration

#### Actions

- Expand coordination of cross-team themes
- Share Priority Issue Team products with internal and external audiences
- Standardize Gulf of Mexico Alliance branding and delivery of Alliance team products
- Expand partnerships and provide assistance to other Gulf of Mexico Alliance teams
- Create audience-specific educational products or programs that translate Alliance Priority Issue team information into understandable messages to increase awareness of the value of Gulf natural resources

#### Why Do This?

Integrating education and engagement into all Alliance goals enables translation, consistency, and effective Alliance programming. Informed and involved audiences better understand the significance of projects and are likely to be more supportive of future priority issue activities.

#### Expected Results

Informed and involved audiences better understand the value of Gulf natural resources, and exhibit behaviors that conserve those important resources.



Simona Duque, Siesta Key Beach



## Promote Public Awareness

Support public awareness and stewardship activities that include various approaches for creating a conversation with Gulf communities

### Actions

- Create public awareness and stewardship opportunities for audiences within the Gulf of Mexico and broader Gulf watershed
- Support partner workshops as well as community and volunteer events
- Distribute parallel messages across the states with uniform public awareness campaigns
- Promote Gulf environmental literacy on Alliance social media, website, and through traditional media outlets
- Explore new and unique ways to disseminate Alliance messages and to receive feedback from Gulf communities

### Why Do This?

The key to successful stewardship is connecting quality of life to a healthy Gulf of Mexico. In a changing world, information must be shared using an increasing number of methods as people are communicating in both new and traditional ways.

### Expected Results

Audiences within both the Gulf region and broader Gulf watershed are aware of the importance of the natural resources within our region and of the actions they can take to conserve and protect those resources.



## Education and Engagement Network

Increase education and engagement network collaboration to reduce duplication, leverage resources, and expand local, regional, and national opportunities

### Actions

- Create an opportunity for a face-to-face Gulf of Mexico educators conferences and meetings
- Improve team communication and peer-to-peer learning
- Expand partnerships with education and engagement organizations, including non-governmental organizations
- Develop Alliance educational partnerships with non-educational organizations, such as business, non-profits and industry

### Why Do This?

The multiplier effect of partnering with other organizations that have similar or complementary interests is very important. In addition to powerful reinforcement when people hear the same message from different sources, these partnerships provide synergy that often leads to new projects and programs that could not have been accomplished by any one organization.

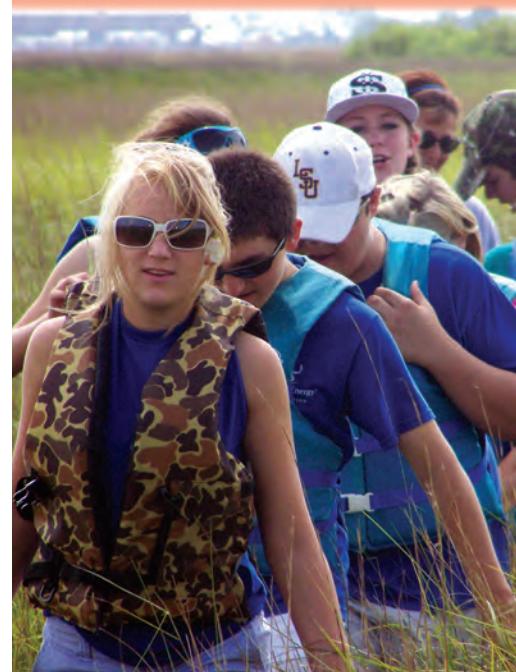
### Expected Results

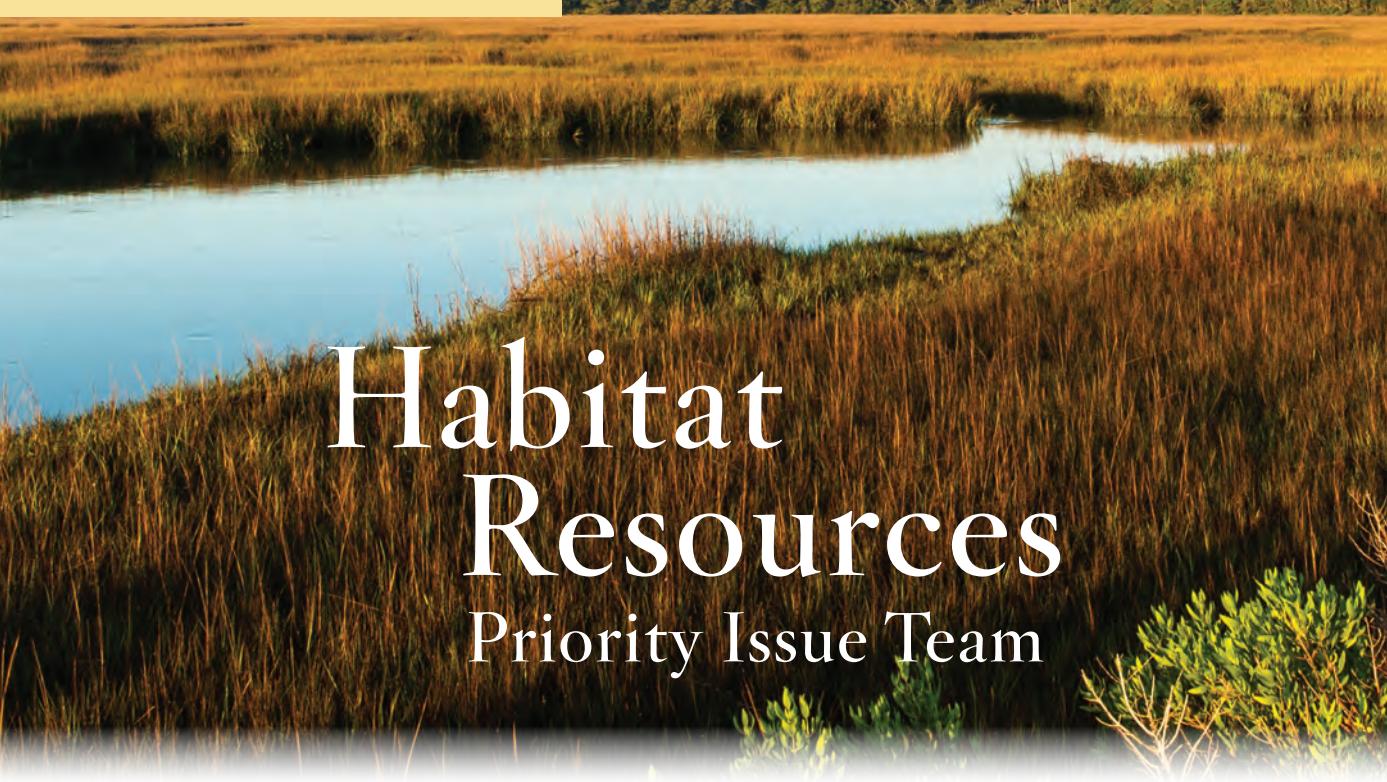
Education professionals work together on a regular basis to reduce duplication, leverage resources, and build capacity to communicate with their target audiences about the economic and ecological health of the Gulf.



Mark Berte, Alabama Coastal Foundation

Louisiana Universities Marine Consortium





# Habitat Resources

## Priority Issue Team

Gulf of Mexico coastal areas have more than half of the coastal wetlands within the adjoining 48 states, and 97% (by weight) of the commercial fish and shellfish landings from the Gulf of Mexico are species that depend on estuaries and their wetlands at some point in their life cycle. Our region is rich in habitats that provide critical structural integrity to our coasts, nourish and sustain fisheries and wildlife populations, protect the health of our bays, and sustain local and national economies. Riparian buffers, fresh-water and tidal marshes and swamps, mangroves, oyster reefs, seagrasses, and intertidal flats located along our coastal bays, beaches, and rivers provide essential habitat for fisheries and wildlife, protect water quality, sequester carbon, and help stabilize shorelines. Coastal habitats have suffered significant losses and degradation over the past several decades and are continually threatened by increasing coastal population, development, changing climate conditions, erosion, and sea level rise.

The Gulf of Mexico Alliance Habitat Resources Team will focus its actions on developing tools and data regarding habitat assessment, living shorelines, sediment management, and sea level rise. This team will also take the lead on the Comprehensive Restoration and Resilience Planning and the Ecosystem Services Assessment Cross-Team Initiatives.

### Team Goals

- Increase the availability and utilization of habitat assessment data and information to coastal stakeholders
- Increase awareness and implementation of living shoreline alternatives in coastal communities
- Support the development of robust regional sediment management and beneficial use programs at the local, state, and regional scale
- Promote understanding of the capabilities and uses of sea level rise and storm surge models

## Focus Areas

---

### Habitat Assessment

Increase the availability of habitat data and information to coastal stakeholders to better inform coastal management decisions, improve disaster response, and develop comprehensive restoration and protection action strategies

#### Actions

- Identify priority Gulf habitats to be assessed through consultation with the resource management community and Gulf stakeholders
- Coordinate and conduct priority habitat assessments and trend analyses across the U.S. Gulf coast
- Disseminate priority habitat assessment and trend data and summary findings to Gulf stakeholders to inform management and restoration actions

#### Why Do This?

Updated status and trends data on Gulf coastal habitats are important to inform responsible site-specific and regional coastal management decisions to maintain and restore our regional natural resources and the goods and services we derive from them.

#### Expected Results

A broad range of coastal stakeholders and managers utilize priority habitat assessment and trend data to inform management decisions to maintain our regional natural resources and the goods and services we derive from them.

### Living Shorelines

Develop and disseminate information and tools for the planning and implementation of living shorelines projects, specifically restoring vegetated shorelines and/or placing rock or other materials in a way that preserves natural coastal processes and enhances shoreline habitats while addressing erosion, to Gulf coast stakeholders interested in alternatives to traditional armoring for shoreline protection and restoration

#### Actions

- Directly advance and coordinate the development of living shoreline information, project planning, and implementation tools
- Work with federal and state agencies to facilitate implementation of living shoreline options as the generally preferred, least-damaging, and practicable alternative to traditional shoreline armoring for erosion protection
- Develop recommendations for standardized metrics of living shoreline projects to ensure consistent monitoring of projects
- Coordinate the transfer of living shoreline information and tools to Gulf stakeholders, including resource managers, federal and state agencies, contractors, and homeowners
- Work with the U.S. Army Corps of Engineers to propose a new streamlined nationwide permit for living shorelines

Sea Oats, Donna Lum



### **Why Do This?**

Property owners seeking to protect real estate from coastal erosion tend to rely upon the installation of structures which displace or damage coastal habitats. Fortunately, nature based living shoreline techniques provide effective erosion control. The Alliance can help protect and restore coastal habitats by providing increased access to information about living shoreline techniques and successful projects and by encouraging regulatory and non-regulatory incentives.

### **Expected Results**

Natural shoreline habitats and the ecosystems services they provide are protected and restored through increased utilization of living shoreline techniques.



*Chip Worley, US Army Corps of Engineers*

## **Regional Sediment Management**

Promote the widespread adoption of regional sediment management activities across the Gulf Coast through the development of information and tools that inform stakeholder management of sediment resources

### **Actions**

- Conduct studies of policy and technical challenges to the implementation of regional sediment management and beneficial use of dredged materials and promote the implementation of regional sediment management practices
- Conduct outreach and education of regional sediment management and beneficial use of dredged material information and technology transfer to Gulf stakeholders

## **Why Do This?**

Sustainable and effective ecosystem restoration and improved coastal resiliency requires more effective use of sediment resources. Between 2004 and 2014, the Habitat Resources Team completed an advisory framework for sediment management and several local/regional data development and planning efforts. We will continue regional collaboration and practical support of improved sediment management practices around the Gulf to catalyze and advance Gulf restoration.

## **Expected Results**

Sediment resources are more efficiently and effectively managed across the Gulf coast in a manner that, to the maximum extent possible, balances the costs of management decisions with the benefits of wise use of those resources to the natural and human environment.

## **Sea Level Rise**

Serve as a coordination point for understanding sea level rise models currently used across the Gulf Coast

### **Actions**

- Compare the capacities of the suite of sea level rise-driven landscape change models currently used across the Gulf Coast
- Provide stakeholders with information about the models currently being used to predict environmental change for sea level rise across the Gulf Coast
- Support and/or implement research and development actions on technical improvements for input datasets to sea level rise models in order to increase their utility to Gulf coast resource managers (commissioning and coordinating secondary analyses based on available sea level rise-driven habitat change models)
- Facilitate dissemination and understanding of the ever-improving set of sea level rise models and tools between researchers, managers, and stakeholders

## **Why Do This?**

Adoption of sea level rise predictive models for decision-making purposes should ideally be based on multiple criteria such as model capacity, cost, model domain and resolution, and computational needs. Incorporation of more accurate sea level rise information should increase the effectiveness, longevity, and resilience of habitat restoration actions.

## **Expected Results**

Stakeholders will understand what sea level rise models are most useful for their needs, and the availability, accuracy, and utilization of sea level rise data and modeling will be increased to inform coastal habitat restoration, conservation, and resilience investments.

*"The Teams are the strength and value of GOMA,  
serving as a mechanism to help partners better  
communicate priorities with state and federal agencies."*

– Quenton Dokken, Executive Director  
Gulf of Mexico Foundation





# Water Resources

## Priority Issue Team

*Ben Mieremet, NOAA*

The Gulf of Mexico region, both a popular residential area and an incredible destination for tourists, provides beautiful beaches, exceptional seafood, and numerous recreational activities such as boating, fishing, swimming, and snorkeling. It is estimated that tourism supports 1.7 million jobs within the region. In addition, commercial fishing in the Gulf is a tremendous asset worth over \$900 million. As we struggle to deal with water resource challenges at local, regional, national, and even global scales, experience continues to demonstrate how issues such as water quality, water quantity, water sustainability, human health risks, and aquatic health are all connected. Furthermore, we realize how these water resource issues ultimately affect the Gulf economy.

The Water Resources Team will focus its efforts on a wide range of key water resource concerns that affect the region. These may include pathogens, harmful algal blooms, nutrient pollution, hypoxia, freshwater inflows, water resource sustainability, and additional emerging water resource issues in the Gulf. The team will work to explore and advance the understanding of the connections among these topics. In addition, the team will seek solutions to provide improved protection of human health and aquatic life. Team efforts will also aim to increase awareness of how water resources (quality, quantity, and sustainability) are directly related to both human and aquatic health within the region, and how all of these influence the economic health of the region. Understanding the relationships among these issues is essential for enhancing and sustaining this vital resource.

### Team Goals

- Protect human health, aquatic health, and economic health within the Gulf of Mexico by applying and advancing science and technology, improving education and overall environmental awareness, and enhancing partnerships
- Identify, prioritize, and pursue additional data and research needed to better characterize, understand, and reduce potential threats to human health or aquatic life
- Identify linkages between water quality, water quantity, water resource sustainability, human health, aquatic health, and economic health
- Support ongoing local, regional, national, and international efforts related to protecting and/or improving water resources within the Gulf of Mexico

## Focus Areas

---

### Human Health

Increase protection of human health by identifying the linkages between water resources and potential exposure to health risks (from either natural or anthropogenic sources) and by exploring and implementing better methods of detecting, characterizing, preventing, controlling, and mitigating these risk

#### Actions

- Explore the development of improved methods for the detection of potential hazards that pose a threat to human health
- Implement projects to reduce risks to human health associated with either natural hazards or anthropogenic sources
- Increase awareness of health risks associated with water resources by targeting various audiences across the region, which could include Gulf Coast residents, local communities, local governments, and/or local businesses
- Promote community engagement through local stewardship activities
- Support collaboration at each level (local, state, regional, and international) to reduce risks to human health within Gulf waters
- Explore opportunities for collaboration with Mexico and other nations bordering the Gulf related to shared human health concerns

#### Why Do This?

Before potential threats to human health can be effectively managed, linkages between exposure and susceptible water resources must be explored and understood. Clarifying these linkages supports the development of improved methods to provide better protection of human health.

#### Expected Results

The relationship between water resources and potential human health risks will be better defined, allowing for the development of improved methods to prevent, detect, and manage these risks.

### Aquatic Health

Improve protection of aquatic health by identifying the linkages between water resources and aquatic life and by developing tools and implementing projects to characterize, assess, and decrease negative effects (from either natural or anthropogenic stressors) on aquatic life in Gulf ecosystems

#### Actions

- Improve existing tools or develop new tools to better characterize and assess aquatic health in Gulf ecosystems
- Implement projects to reduce impacts from stressors on aquatic life in Gulf ecosystems
- Increase awareness of the benefits of healthy aquatic life in Gulf ecosystems
- Promote community engagement through local stewardship activities
- Support collaboration at every level (local, state, regional, and international) to protect and restore aquatic health within Gulf waters

Mississippi Department of Marine Resources



### **Why Do This?**

To protect aquatic health in Gulf ecosystems, the linkages between water resources, potential stressors, and how these stressors affect aquatic life must be established. Defining these relationships will lead to the development and implementation of more effective efforts to restore and protect aquatic health.

### **Expected Results**

A better understanding of the effects of stressors on aquatic life will support the implementation of more effective efforts to restore and protect aquatic health.



*Julie Dennis, Florida Department of Economic Opportunity*

## **Economic Health**

Protect the economic health within the Gulf of Mexico by identifying and understanding the linkages between healthy water resources and a healthy Gulf economy

### **Actions**

- Explore how water quality, water quantity, water sustainability, threats to human health and negative effects on aquatic life ultimately impact the Gulf economy
- Target a variety of audiences to increase awareness regarding the connection between healthy water resources and a healthy Gulf economy
- Explore opportunities for pilot projects to demonstrate how improvements to water resources can positively affect economic drivers

### **Why Do This?**

The Gulf of Mexico is a tremendous asset to the region and to the nation. To protect Gulf economies and maintain this vital resource, it is essential to acknowledge the connections between human health risks, impacts to aquatic life, and a healthy economy.

### **Expected Results**

The fundamental connections between water resources and the Gulf economy will be characterized allowing Gulf stakeholders better understand how water quality, water quantity, water resource sustainability, human health, aquatic health, and a healthy economy are interrelated. Demonstrating that improvements to water resources can be directly linked to economic benefits will provide further support and justification for restoration and protection efforts in the Gulf of Mexico.



*“Water quality is a primary concern for us as well as other states, and GOMA allows us to build relationships and leverage knowledge and expertise in that area.”*

– Toby Baker, Commissioner  
Texas Commission on Environmental Quality





# Wildlife and Fisheries

## Priority Issue Team

Sherry Halbrook, Mission-Aransas National Estuarine Research Reserve

The Gulf of Mexico is the ninth largest body of water in the world and is home to over 15,000 species of marine wildlife. From its extensive salt marshes, bays and estuaries, coral reefs, and deep waters found off the continental shelf, the Gulf provides habitat and sustenance to all components of the ecosystem. Many of the species are both recreationally and commercially important including shrimp, red snapper, oysters, crabs and menhaden. It is also home to 29 marine mammal species, five species of sea turtles, and supports over 400 species of birds that depend on the Gulf region for breeding, migrating, and wintering.

The Gulf of Mexico Alliance Wildlife and Fisheries Team will focus on identifying gaps in existing research and restoration efforts; work with other Alliance Teams to integrate wildlife and fisheries data, information and priorities; and coordinate and support regional efforts to protect and conserve Gulf wildlife and fisheries.

### Team Goals

- Work to understand and support diverse wildlife and fisheries populations to sustain a resilient Gulf of Mexico ecosystem
- Inform conservation and policy decision makers through collaboration with the other Gulf of Mexico Alliance teams

*"The Gulf of Mexico Alliance serves as a model of inclusion and leveraging. A forum that brings together decision makers, scientists and practitioners to address gulf-wide restoration priorities. Over the last decade, our relationship with GOMA has enhanced our efforts to achieve healthy and sustainable populations of fish and wildlife across diverse Gulf landscapes and administrative boundaries. We are proud to be a part of Action Plan III and look forward to continued collaborative restoration in the Gulf of Mexico."*

– Linda Walker, Senior Advisor for Gulf Restoration, US Fish and Wildlife Service

## Focus Areas

### Status and Trends

Provide tools and information regarding the status and trends, threats, and habitat linkages of wildlife and fisheries species to better support decision-making across the Gulf of Mexico region

#### Actions

- Compile and synthesize existing information regarding status and trends, threats, and habitat linkages of wildlife and fisheries species to identify key data gaps
- Prioritize research and monitoring needs based on proven methods and identified key data gaps
- Identify priority short and long-term monitoring programs
- Identify and characterize linkages among focal species and their habitats

#### Why Do This?

Effective resource management is dependent on access to data resources and on the ability to design and implement future data collection efforts in a rational and cost effective manner.

#### Expected Results

Status and trend results should help develop baseline conditions that will direct research and monitoring activities and inform management decisions. Wildlife and Fisheries managers will have a better understanding of wildlife and fisheries populations and an ability to improve future management.

### Collaboration

Collaborate with other Gulf of Mexico Alliance teams and partners to share knowledge and inform actions that impact wildlife and fisheries

#### Actions

- Establish communication with other teams as well as regional restoration efforts related to wildlife and fisheries priorities
- Work with the Education and Engagement Team to translate data and information into easily understood formats for multiple audiences
- Work with the Habitat Team to develop information and tools for the planning and implementation of habitat related projects
- Work with the Data and Monitoring Team to coordinate monitoring to provide a better understanding of wildlife and fisheries population status

US Department of Transportation



#### Why Do This?

Wildlife and fisheries management does not occur in a vacuum and as such it is vital that we collaborate with the other Gulf of Mexico Alliance teams, state and federal partners, non-governmental organizations, and other conservation minded groups.

#### Expected Results

By collaborating with others, we expect to reduce duplication, leverage assets, and improve the flow of information between groups.

## Conservation

Support and enhance efforts to protect and conserve wildlife and fisheries in the Gulf of Mexico

### Actions

- Identify relevant Gulf-wide conservation issues and coordinate planning
- Identify key areas for conserving priority species, focusing resources on where the greatest results can be achieved
- Engage key partners that work with wildlife and fisheries, and assist them to overcome institutional barriers
- Identify multi-jurisdictional needs and act as a broker to align projects to find economic and ecological benefits
- Utilize data and information to inform management practices and priorities that support conservation needs.

### Why Do This?

Wildlife and fisheries populations do not begin and end at state and national borders. To effectively conserve and manage Gulf of Mexico species that have economic, cultural, or aesthetic values, there needs to be coordination across political boundaries.

### Expected Results

Wildlife and fisheries management is founded in solid science and meets stakeholder needs. Partners comprehensively manage wildlife and fisheries across state and federal boundaries.





*US Fish and Wildlife Service*



*National Oceanic and Atmospheric Administration*

*Lee Yokel, Dauphin Island Sea Lab*







# Ecosystem Services Assessment

## Cross-Team Initiative

The Gulf of Mexico is a bountiful provider. The Gulf of Mexico Alliance wants people to realize the true value of the Gulf ecosystem. The Alliance therefore has established the Ecosystem Services Assessment Cross-Team Initiative to enhance the use and communication of ecosystem services science and tools for citizens, scientists, and practitioners. Ecosystem services are the benefits people obtain from the natural environment, including food, recreation, and storm protection.

### Cross-Team Goal

The goal of this cross-team initiative is to advance the identification, measurement, and communication of coastal and marine ecosystem goods and services for better management of regional resources and the building of resilient communities.

### Actions

- Develop a stronger understanding of the connections between the natural environment, ecosystem services, and human well-being
- Enhance the communication of ecosystem services science and tools
- Use ecosystem services knowledge to inform the decision-making process

### Why Do This?

Due to the increasing natural and anthropogenic pressures on our coastal and marine environments, today there is a greater call to understand the relationship between environmental and human well-being through the lens of ecosystem services for the formulation and implementation of effective management and policy directives. Ecosystem services provide a way to communicate the impact of our investment in conservation and restoration efforts on the community, thus bridging the gap between science and application.

### Expected Results

Citizens, scientists, and decision makers will understand ecosystem services and begin to utilize available tools and knowledge to make informed coastal resource management decisions that ultimately enhance individual and community well-being.



# Marine Debris

## Cross-Team Initiative

*Kim Albins, NOAA Marine Debris Program*

Marine debris is any persistent solid material that is manufactured or processed and directly or indirectly, intentionally or unintentionally, disposed of or abandoned into the marine environment or the Great Lakes. Marine debris can be small, like a cigarette butt tossed on the beach, or large, like an abandoned vessel. While marine debris is a global problem requiring international cooperation, the Gulf of Mexico Alliance can help address a broad range of issues and coordinate on the local, state, and regional scale to help alleviate negative impacts of marine debris.

### Cross-Team Goal

The goal of this initiative is to assess, reduce, prevent, and eliminate marine debris and aquatic trash in the Gulf of Mexico and its watershed for the benefit of habitats, wildlife and fisheries, humans, and the Gulf economy.

### Actions

- Assess and reduce the impacts of marine debris and aquatic trash through research, monitoring, and innovative solutions
- Support the removal of marine debris and aquatic trash to reduce impacts to habitats, wildlife and fisheries, navigational safety, humans, and the economy
- Prevent the introduction of marine debris and aquatic trash through raising awareness and improving individual stewardship through promoting local, regional and national coastal and river cleanups
- Work across Gulf of Mexico Alliance Priority Issue Teams to ensure maximum collaboration and holistic approaches to marine debris and aquatic trash projects and programs

### Why Do This?

Marine debris is harmful to the Gulf of Mexico's ecosystems and economy, and affects fishing, navigation and even human health. Because marine debris is often the result of deliberate or accidental actions by people on land or at sea, it is a problem that each individual citizen can help prevent.

### Expected Results

Marine debris is significantly reduced as a result of greater public education and outreach; partnerships with local governments, communities, and industry; and enhanced research, monitoring, and source identification.



# Conservation, Restoration, and Resilience Planning

## Cross-Team Initiative

The interdependencies between the human and natural environments are rarely accounted for in the development of plans or planning tools, which have historically focused on one or the other. To help facilitate better communication between the activities, the Gulf of Mexico Alliance will serve as a coordination point around which relevant conservation, restoration, socio-economic, and resiliency data and tools can be developed and managed to inform the decision-making of the wide array of stakeholders across the Gulf Coast.

### Cross-Team Goal

The goal of this cross-team initiative is to foster greater integration among planning aspects of restoration, conservation, and resiliency to increase the efficiency and effectiveness of on the ground efforts.

### Actions

- Coordinate existing conservation, restoration, and resiliency datasets to assist Gulf stakeholders in the drafting of a comprehensive adaptation and resilience plan
- Deliver priority datasets of landscape drivers and response actions to resiliency, conservation, and restoration planning managers
- Host workshops and practitioners forums for local communities on the application of science-based criteria to identify and prioritize conservation, restoration, and resiliency projects
- Use wetlands dynamics models to demonstrate the ecological impacts of projected sea level rise on estuarine systems to communities
- Promote consistent outputs from local community tools to assist regional planning and assessment

### Why Do This?

There is a strong relationship between human activities in the Gulf coastal zone that underlie both human and natural system resiliency planning. Human resilience, natural habitat conservation, and restoration planners need a platform to discuss integrating natural habitats with human use so that the interdependencies of both are realized and planning efforts can be coordinated.

### Expected Results

Human resilience, natural habitat conservation, and restoration planners interact with one another and are informed by a robust set of historical and predictive data from both sectors.



# A Path Forward Toward A Healthier Gulf

The Gulf of Mexico Alliance provides a strong foundation for long-term regional collaboration. Since 2006, the Alliance worked hard to realize the objectives outlined in the prior Governors' Action Plans, and this success has bred unprecedented trust and partnership. As a result, people from across the Gulf are eager to contribute to the work of the Alliance and its Priority Issue Teams. *Action Plan III* provides an opportunity to continue the culture of cooperation with renewed purpose and vitality.

*Action Plan III* is a reflection of a decade of experience addressing issues that directly affect the Gulf ecosystems and economies. The Gulf of Mexico Alliance has shown that it can restructure its priorities and organization to better serve the changing needs of the region. The teams' ability to come together across scientific and technical boundaries through the new cross-team initiatives are further evidence of the Alliance's evolution.

The Alliance is committed to a Gulf of Mexico region that includes healthy beaches, clean waters, productive marine ecosystems, and thriving resilient coastal communities. This vision is shared not only by the five Gulf States, but also by vital federal agencies, businesses, and non-governmental organizations. Achieving the goals of *Action Plan III* will take a coordinated effort, but history has shown that, working together, a healthy and resilient Gulf region is closer than ever.





The mission of the Gulf of Mexico Alliance  
is to enhance the ecological and  
economic health of the Gulf of Mexico  
through increased regional collaboration.

Gulf of Mexico Alliance  
1151 Robinson Street  
Ocean Springs, MS 39564  
[www.gulfofmexicoalliance.org](http://www.gulfofmexicoalliance.org)



Printed on Recycled Paper