

GULF OF MEXICO ALLIANCE
TEN YEAR SUMMARY REPORT: 2004-2014



A DECADE OF BUILDING PARTNERSHIPS
FOR A HEALTHIER GULF

May 2016



Gulf of Mexico Alliance

Ten Year Summary Report: 2004-2014

EXECUTIVE SUMMARY

This **Gulf of Mexico Alliance Ten Year Summary Report** documents the projects and accomplishments of the Alliance from 2004 to 2014. The Gulf of Mexico Alliance (GOMA) 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.

GOMA was established in 2004 by the leadership of the Governors of Alabama, Florida, Louisiana, Mississippi, and Texas in response to a regional call to action in the U.S. Ocean Action Plan. The five U.S. Gulf State Governors signed the first ***Governors' Action Plan for Healthy and Resilient Coasts*** in 2006 and the second ***Governors' Action Plan II for Healthy and Resilient Coasts*** in 2009. Throughout the years, federal, state, non-governmental, academic, and business partner members worked together to address the region's priorities:

- Water Quality for Healthy Beaches and Seafood – specifically focusing on mercury in seafood, harmful algal blooms, pathogens, and monitoring
- Habitat Conservation and Restoration – specifically focusing on reversing the downward trend in habitat and ecosystem services, Gulf regional sediment management master plan, technology development, and policy changes
- Ecosystem Integration and Assessment – specifically focusing on emergent wetlands status and trends report, living marine resources, ecological services valuation, Gulf of Mexico master mapping plan, data access and acquisition
- Nutrient Impact Reduction to Coastal Ecosystems – specifically focusing on nutrient characterization, criteria development and reduction strategies, and hypoxia
- Coastal Community Resilience – specifically focusing on risk and resilience assessment, management toolbox, and communication
- Environmental Education – specifically focusing on community education and outreach, public awareness, K through 20 environmental literacy, and economic value communication



Photo credit: Terry. Teague, EPA GMP

This report provides a brief overview of the history of GOMA and the Priority Issue Team projects accomplished from 2004-2014. The selection and stewarding of projects completed under the guidance of the Priority Issue Teams includes the efforts of many groups participating in the Gulf of Mexico Alliance as “partners.” The National Oceanic and Atmospheric Administration and the U.S. Environmental Protection Agency Gulf of Mexico Program provided significant financial support and participation.



A year after releasing the ***Governors' Action Plan II***, the Deepwater Horizon oil spill became one of the Gulf's largest challenges to date and GOMA began to administer a large oil spill research program, in addition to the addressing the priorities outlined in the ***Governors' Action Plan II***.

GOMA BY THE NUMBERS: 2004-2014

| | |
|------|---|
| 2 | <i>Governors' Action Plans</i> |
| 5 | Gulf States working together, including multiple agencies from each |
| 6 | Priority issues that serve as team focus under work plans |
| 8 | Community workshops held to identify priorities in 2004 |
| 10 | GOMA All Hands Meetings |
| 13 | Active Federal Agency Partners |
| 15 | GOMA Business Advisory Council member companies in 2014 |
| 65 | Total number of organizations participating in GOMA in 2014 |
| 148 | Projects accomplished by the Priority Issue Teams from 2004-2014 |
| 970 | Active participants in GOMA teams, committees, and councils in 2014 |
| 2000 | GOMA email newsletter subscribers as of 2014 |

As this summary report illustrates, this network of concerned professionals and citizens from all sectors of our Gulf States have worked hard to accomplish the goals set forth in the ***Governors' Action Plans***. The efforts have led to many useful tools, data, lessons shared, and integrated data sets. As a result, GOMA has successfully built many “partnerships for a healthier Gulf” in its first ten years.



Photo credit: Texas Parks and Wildlife Department



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TABLE OF ABBREVIATIONS

| | |
|------------|--|
| ADCNR | Alabama Department of Conservation and Natural Resources |
| ADEM | Alabama Department of Environmental Management |
| ADPH | Alabama Department of Public Health |
| CPRA | Louisiana Coastal Protection and Restoration Authority |
| DISL | Dauphin Island Sea Lab |
| ELI | Environmental Law Institute |
| EPA | Environmental Protection Agency |
| EPA GMP | Environmental Protection Agency Gulf of Mexico Program |
| FDEP | Florida Department of Environmental Protection |
| FIO | Florida Institute of Oceanography |
| FWC | Florida Fish and Wildlife Conservation Commission |
| FWRI | Florida Wildlife Research Institute |
| FSU | Florida State University |
| GCOOS | Gulf of Mexico Coastal Ocean Observing System |
| GOMA | Gulf of Mexico Alliance |
| GOMF | Gulf of Mexico Foundation |
| GOMRI | Gulf of Mexico Research Initiative |
| HRI | Harte Research Institute |
| LDEQ | Louisiana Department of Environmental Quality |
| LSU | Louisiana State University |
| LUMCON | Louisiana Universities Marine Consortium |
| MASGC | Mississippi-Alabama Sea Grant Consortium |
| MDMR | Mississippi Department of Marine Resources |
| MDEQ | Mississippi Department of Environmental Quality |
| MSU | Mississippi State University |
| NERR | National Estuarine Research Reserve |
| NGI | Northern Gulf Institute |
| NPS | National Park Service |
| NOAA | National Oceanic and Atmospheric Administration |
| NOAA NCCOS | NOAA National Centers for Coastal Ocean Science |
| NOAA NOS | NOAA National Ocean Service |
| NOAA OAR | NOAA Oceanographic and Meteorological Lab |
| TAMU | Texas A & M University |
| TCEQ | Texas Commission on Environmental Quality |
| TGLO | Texas General Land Office |
| TNC | The Nature Conservancy |
| TPW | Texas Parks and Wildlife |
| UC-Davis | University of California-Davis |
| USACE | United States Army Corp of Engineers |
| USFWS | United States Fish and Wildlife Service |
| USGS | United States Geological Survey |
| USM | University of Southern Mississippi |



Gulf of Mexico Alliance

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INTRODUCTION

The Gulf of Mexico Alliance (GOMA) is a partnership of the five U.S. Gulf States, federal agencies, academic organizations, businesses, and other non-profits in the region. GOMA's mission is to significantly increase regional collaboration to enhance the environmental and economic health of the Gulf of Mexico. Within GOMA, a large network of partners works collaboratively on teams to address priority issues in ways that a single entity cannot. Leadership from the five Gulf States forms the foundation of GOMA and each of the Gulf States has committed time and resources to its successful implementation. The success of GOMA is also based on leadership from 13 federal partners who have come together as a Federal Workgroup to support the priorities of the region. In addition, GOMA relies heavily on non-governmental partners, such as academic organizations, non-profit organizations, and businesses.

This **Gulf of Mexico Alliance Ten Year Summary Report** documents the projects and accomplishments of GOMA from 2004 to 2014. These accomplishments were achieved as a result of implementing two organizational work plans: ***Governors' Action Plan for Healthy and Resilient Coasts*** published in 2006 and ***Governors' Action Plan II for Healthy and Resilient Coasts*** published in 2009. The accomplishments associated with the ***Governors' Action Plans*** would not have been possible without the leadership of the Gulf States and the financial support from federal partners in the region such as the National Oceanic and Atmospheric Administration (NOAA) and the U.S. Environmental Protection Agency (EPA) Gulf of Mexico Program.

THE BEGINNING

In 2004, former Governor Jeb Bush of Florida reached out to the other four Gulf State Governors to encourage collaboration for the protection and restoration of their shared body of water. For years, the EPA's Gulf of Mexico Program had incubated an effective partnership of federal and state entities committed to improving the region's environmental health, so each Gulf State Governor received a letter inviting them to join together and strengthen the effort. By joining forces, the leaders of the Gulf States formed GOMA and brought the focus to ensure that vital economic assets of the Gulf were protected.

That same year, the U.S. Ocean Action Plan highlighted the importance of the new Gulf of Mexico Alliance that was established with leadership of the Governors of Alabama, Florida, Louisiana, Mississippi, and Texas. President Bush called for increased integration of resources, knowledge, and



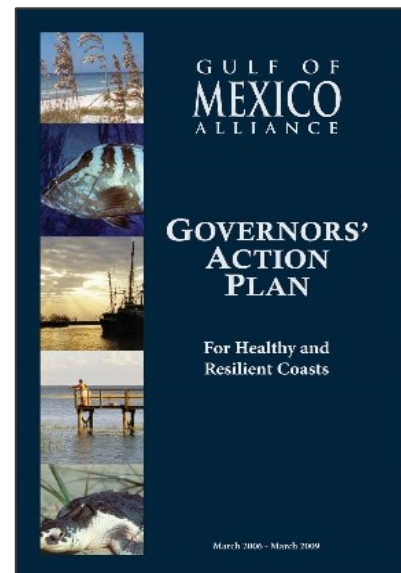
expertise to make this regional collaboration a success. Thirteen federal agencies committed to supporting GOMA and formed a Federal Workgroup in early 2005 coordinated by the EPA and NOAA. The Federal Workgroup assisted the states with identifying priorities for the region that were common to all five states and to identify tangible, short-term goals.

CITIZEN INPUT

To identify priorities for the region, the newly-formed GOMA conducted eight Community Workshops to identify wants and needs of regional stakeholders: one in Louisiana, one in Mississippi (which accommodated residents of Alabama), two in Texas, and four in Florida. Working around the intensive response to Hurricanes Katrina and Rita, the Gulf States conducted all eight workshops prior to the release of the first **Action Plan**. This input represented the opinions of homeowners, recreational fishermen, local leaders, scientists, and a variety of others that are dedicated to the environmental and economic health of the Gulf of Mexico. Outreach to citizens continues to be a critical practice of the members of GOMA putting useful tools into the hands of the residents of the Gulf coastal region.

ACTION PLAN I

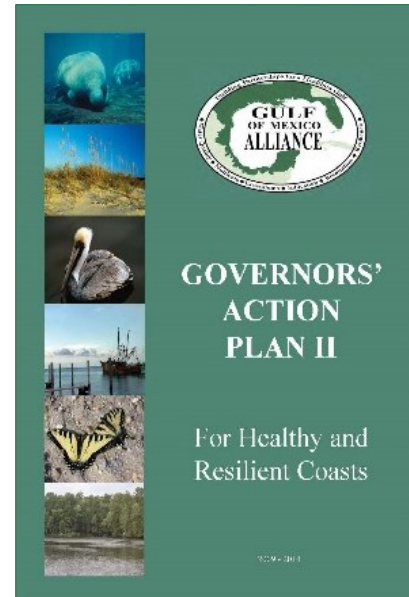
In 2006, the five Gulf State Governors signed the first **Governors' Action Plan for Healthy and Resilient Coasts** (hereinafter, **Action Plan I**). The primary goal of **Action Plan I** was to increase integration of resources, knowledge, and expertise to address priorities identified by the five Gulf States. Realizing the mission could only be achieved through diverse partnerships, GOMA began recruiting members and soon had the full support of 13 federal agencies working in the region. Ninety-nine percent of the objectives of **Action Plan I** were realized in just three short years. As a result of implementing **Action Plan I**, GOMA established an organizational structure that reflected an Alliance Management Team consisting of representatives of the five Gulf State governors, a federal work group, and priority issue teams made up of volunteers from the vast partner network including state and federal agencies, academia, and non-governmental organizations.





ACTION PLAN II

Building on the tremendous success of the first plan, GOMA released its second plan, the ***Governors' Action Plan II for Healthy and Resilient Coasts (Action Plan II)*** in 2009. This five-year plan was more aggressive with solutions to address the challenges of the time, including sustaining Gulf economies, improving ecosystem health, mitigating the impacts of climate change, and improving water quality. However, approximately a year later, the Deepwater Horizon oil spill occurred and restoration naturally 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, added a Business Advisory Council, managed six priority issue teams, and began to administer a large oil spill research program.





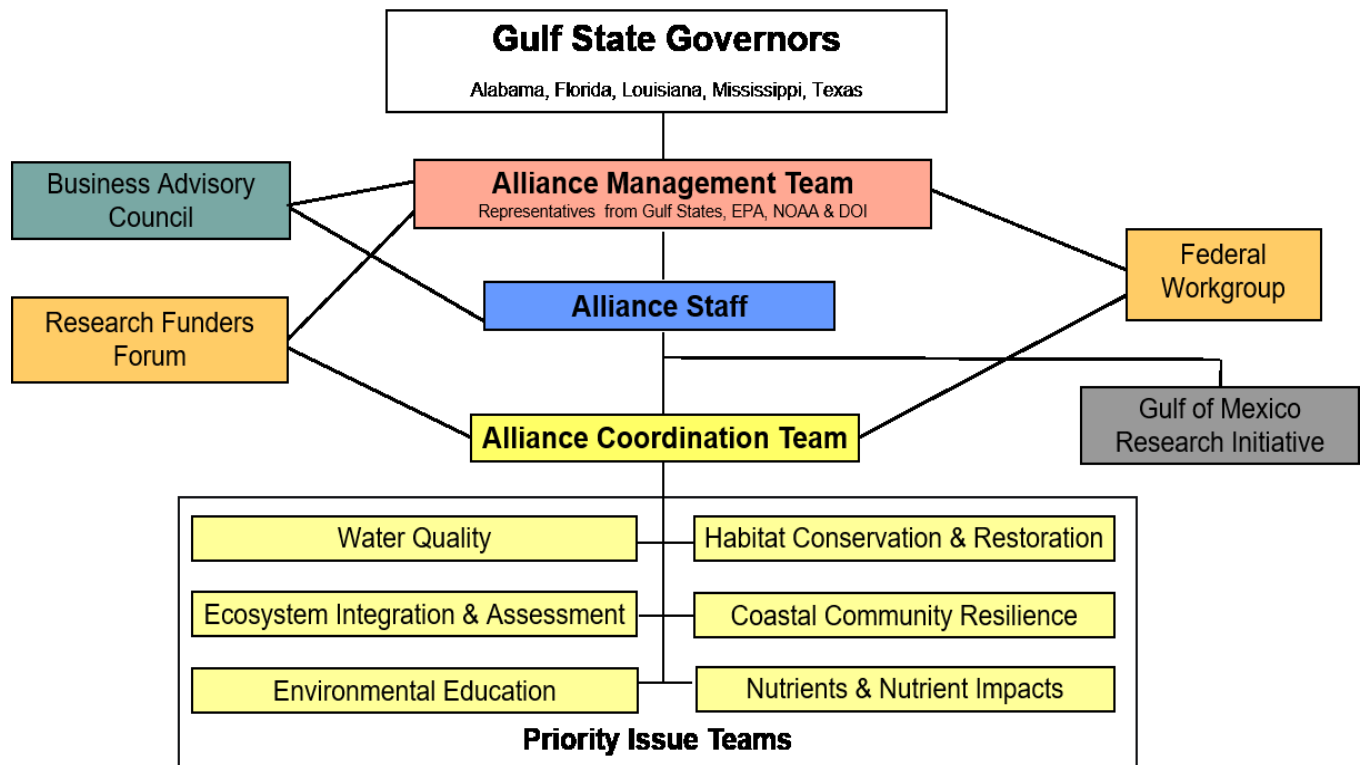
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ORGANIZATION

Through the course of the first ten years, GOMA matured from a loose network of partnerships to a formal non-profit organization. The more formal organization had the administrative ability needed to effectively provide forums for regional collaboration, develop and modify tools to address regional issues, identify opportunities for leveraging, and expand the partner network to enable strategic partnerships for specific needs. GOMA's 2014 structure is represented below.

Figure 1. Gulf of Mexico Alliance Organizational Structure, 2014





ALLIANCE MANAGEMENT TEAM

The Alliance Management Team was established in 2004 as the governing body of GOMA. Because GOMA is state-led, the five Gulf States serve as the “Board of Directors” having voting authority in accordance with GOMA’s By-Laws. Chair and Chair-Elect positions of the Alliance Management Team rotated among the five states from 2004 to 2014. Other members of the Alliance Management Team served in advisory capacity and were vital to the cooperative decision-making process.

ALLIANCE STAFF

The GOMA staff served as the backbone for implementing the mission and vision developed by the five Gulf States. Programmatically, GOMA administered two primary programs: (1) Priority Issues identified in the *Governors’ Action Plan* and (2) the Gulf of Mexico Research Initiative in accordance with the Master Research Agreement, a contract between GOMA and BP to administer a 10-year, \$500 million oil spill research program as a result of the Deepwater Horizon oil spill.

ALLIANCE COORDINATION TEAM

The Alliance Coordination Team is made up of representatives from each of the Priority Issue Teams, including state chairs, coordinators, and federal liaisons. The Alliance Coordination Team met on a regular basis to coordinate across the teams, as well as to plan organization-wide meetings. These key members of GOMA communicated the progress of the Priority Issue Team goals and objectives and ensured coordination among the teams.

PRIORITY ISSUE TEAMS

Priority Issue Teams (PIT) were developed to collaboratively address the region’s priority issues. Members included state and federal agency personnel as well as representatives from academia, business and industry and other non-governmental organizations. Each team was chaired by a state agency, included representatives from other state agencies, and had designated federal liaisons. The PIT members worked together to implement the *Governors’ Action Plans* in very focused efforts. After each *Action Plan* was adopted by the five Gulf States Governors, the teams developed Tier II plans to provide details of the steps required to fulfill each *Action Plan*. The teams pursued financial and other support and enlisted the expertise to complete the tasks in the plans. The members assist in selection of projects and help steward the efforts toward intended project goals, helping transfer the results of GOMA’s efforts to their states to affect a Gulf-wide implementation of the useful tools and data. The table on the following page depicts the PIT structure as of 2014.



Leadership from the five Gulf States formed the foundation of GOMA. The Gulf States and the Federal Facilitators committed time and resources to leading each of the six PITs, comprising a group referred to as the Alliance Coordinators Team. Through a collaborative approach, the priority issues of the Gulf were addressed with scientific and technical experts and resource managers who have the knowledge base and expertise to address the priority issues.

Table 1. Gulf of Mexico Alliance PIT Leadership (2014)

| Priority Issue Teams | Team Coordinating Agency | AL | FL | LA | MS | TX | EPA | Dept of Commerce | Dept of Interior |
|--|--------------------------|------------------------------|-------------------------------|--------------------------------------|-------------------------|---------------------------|----------------------|----------------------|------------------|
| | | State Leads | | | | | Federal Facilitators | | |
| <i>Habitat, Conservation & Restoration</i> | GOMF | ADCNR DISL | FDEP | Team Chair: CPRA | MDMR | TGLO | EPA GMP | NOAA NMFS | USFWS |
| <i>Ecosystem Integration & Assessment</i> | HRI | Geological Survey of Alabama | FWRI | CPRA | MDMR | Team Chair: HRI | EPA GMP | NOAA NOS | USFWS |
| <i>Environmental Education</i> | DISL | Team Chair: ADCNR | Rookery Bay NERR FDEP | LA Dept of Education LA Sea Grant | MDMR MDEQ | TX State Aquarium TCEQ | EPA GMP | NOAA NOS and NMFS | USGS NBII |
| <i>Community Resilience</i> | MDMR | Geological Survey of Alabama | FDEP | CPRA | Team Chair: MDMR | TGLO | EPA GMP | NOAA NOS | USFWS |
| <i>Water Quality</i> | FDEP | ADPH ADEM | Team Chair: FDEP / FIO | LDEQ | MDEQ | TCEQ | EPA GMP | NOAA OAR | USGS |
| <i>Nutrients & Nutrient Impacts</i> | MDEQ | ADEM | FWRI | LDEQ | Team Chair: MDEQ | TCEQ | EPA GMP | NOAA NCCOS | Open |



COMMITTEES AND WORKING GROUPS

Successfully implementing *Action Plan I* and *Action Plan II* required strong and enduring partnerships with programs that align priorities and share a desire for collaboration. It also required the volunteer formation of specific committees, working groups, partner programs and advisory councils. The following is a description of a few of the groups and summary of the results of a strong organization that successfully implemented two action plans in ten years.

Federal Work Group

Thirteen federal agencies committed to supporting GOMA came together as a Federal Workgroup under the leadership of the NOAA, EPA Gulf of Mexico Program, and the U.S. Department of Interior (DOI). The goals of the Federal Workgroup were to support the Gulf States and to coordinate an integrated federal response to priority regional issues identified by GOMA. The Federal Workgroup brought diverse expertise and established experience. By coordinating and integrating these capabilities, the impact of federal resources was fully maximized. Notes and presentations of the most recent Federal Working Group meetings can be found at <http://www.gulfofmexicoalliance.org/about-us/alliance-partnerships/federal-partners/>.

NOAA and the EPA Gulf of Mexico Program have provided constant support and participation. During this first ten years of GOMA, they led the efforts to publish “Gulf at a Glance: A Tool for the Gulf of Mexico Alliance and the American Public” in 2008 and in partnership with the U.S. Census Bureau “The Gulf of Mexico at a Glance: Second Glance” in 2011.

In 2014, the monthly Federal Work Group webinar included 13 federal agencies, including 150 people on Federal Workgroup email list and approximately 30 people on monthly webinars.

Public Relations Committee

The Public Relations Committee was established in 2009 to promote the identity of GOMA, its mission, and the priority issues to stakeholders and the general public. The Public Relations Committee was composed of volunteers from partner organizations who dedicated a portion of their time to public relations activities. Since 2009, the Public Relations Committee has provided consistent oversight for GOMA’s communication strategy.

Business Advisory Council

Business and industry involvement is vital to successfully achieving GOMA’s mission of healthy ecosystems and economies. GOMA established a Business Advisory Council in order to partner with industry members on priority issues and regional initiatives as well as to deepen a sense of stewardship for the Gulf of Mexico. The role of the BAC is to facilitate communication between the Alliance Management Team and the diverse groups of industries that are dependent upon the common resources of the Gulf of Mexico. GOMA’s BAC met on a quarterly basis via conference call and once annually in person. Table 2 presents the GOMA Business Advisory Council in 2014.

**Table 2. Gulf of Mexico Alliance Business Advisory Council (2014)**

| Industry | Company |
|-----------------------|-------------------------------------|
| Tourism | Gulf Divers, Inc. |
| | Compass Media |
| | Alabama Tourism and Visitors Bureau |
| Oil & Gas | Shell Exploration & Production |
| | ExxonMobil |
| | Statoil |
| | Chevron USA |
| | Mid-Continent Oil & Gas Association |
| Manufacturing | Sherwin Alumina |
| Utilities | Southern Company |
| Fishing | Florida Coast Charters |
| Marine Transportation | Gulf Ports Association of America |
| | Port of Corpus Christi |
| Seafood | Bon Secour Fisheries |
| Agriculture | Local Farmer |

KEY PARTNERSHIPS

Below are some key non-governmental partners that were the foundation for successful regional collaboration from 2004 through 2014:

Dauphin Island Sea Lab – provided coordination of GOMA’s Education and Engagement Team as well as a part-time Communications Coordinator for GOMA.

Gulf Coastal Ocean Observing System - ensured academic expertise and input on all six Priority Issue Teams; strong partner on Water Quality Team in particular.

Gulf of Mexico Foundation – provided coordination and project implementation for GOMA’s Habitat Resources Team.



Gulf of Mexico Sea Grant Programs – funded a part-time Regional Program Manager through the Mississippi-Alabama Sea Grant Consortium, provided a coordinator for GOMA’s Water Quality Team through the Florida Sea Grant, and provided support for GoMRI oil spill outreach through all four Gulf Sea Grant programs.

Harte Research Institute - provided coordination for GOMA’s Ecosystem Integration and Assessment Team and database management for the GoMRI Gulf Research Initiative Information Data Center.

Northern Gulf Institute – provided website and communications support for both the GOMA and GoMRI programs.

The Nature Conservancy – ensured non-governmental expertise and input on all six Priority Issue Teams; strong partner on Habitat and Resilience Teams in particular.



Photo credit: NOAA



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PRIORITY ISSUE TEAM PROJECTS

In accordance with *Action Plan I* and *Action Plan II*, GOMA addressed the region’s priorities by bringing together diverse talent, coordinating capabilities, and maximizing the impact of funding. Specific Priority Issue Teams were formed around the issues identified by the Gulf States, addressing the issues through a collaborative approach with scientific, technical and resource management experts who have a broad knowledge base and considerable experience.

The following sections provide a brief overview of Priority Issue Team projects accomplished from 2006 to 2014. Funding for these projects was provided by NOAA Coastal Services Center and the EPA Gulf of Mexico Program. More information about the projects can be found at: www.GulfofMexicoAlliance.org . A complete listing of awards per federal agency is provided in the Appendix.

WATER QUALITY PRIORITY ISSUE TEAM

To help ensure healthy beaches and safe seafood in our coastal areas, GOMA identified four water quality focus areas to guide the partnership’s effort (listed below). These issues were selected because they were best addressed through regional-scale efforts such as GOMA. Throughout the implementation of *Action Plan I* and *Action Plan II*, the Water Quality PIT was led the Florida Department of Environmental Protection. Funding for team coordination was provided by NOAA’s Regional Ocean Partnership Program.



Photo credit: Ben Mieremet, NOAA

Pathogens: GOMA’s Water Quality Team focused on pathogens to improve understanding of waterborne, disease-causing microorganisms, including their sources and survival so that coastal managers can make informed decisions that benefit public health and coastal economies.

| Products/Outcomes | Date | Partner Organizations |
|---|---|--|
| Molecular Marker Registry –Database of information about pathogens so that DNA and RNA markers can be compared Location: http://www.gulfofmexicoalliance.org/tools-and-resources/tools/#water | Published: 12/19/12 Last modified: 2/18/13 | USF, EPA, University of Tennessee-Knoxville, UC-Davis, USM |



| Products/Outcomes | Date | Partner Organizations |
|--|--|--|
| <p>Improved Methods for Recreational Water Quality Criteria – Journal article detailing recommendations to improve detection methods for water quality indicators, pathogens, and microbial source tracking. Location: http://www.iwaponline.com/jwh/009/jwh0090718.htm</p> | <p>Published in 2012 Journal of Water and Health</p> | <p>NOAA, AL Dept. of Public Health, USM, TAMU, ADEM, FL Dept. of Health FL DEP</p> |
| <p>Observational and Modeling Studies of Pathogenic Vibrios - This project goals were 1) to measure the concentration of total and pathogenic Vibrio species in water, bottom sediment and oysters in Breton Sound; 2) establish a statistical relationship between the Vibrio concentrations and environmental parameters; and, 3) incorporate the statistical relationship between Vibrio abundance and salinity/temperature with the hydrodynamic model FVCOM. http://www.environmental.lsu.edu/index.php/research/active-grants/</p> | <p>2010-2015</p> | <p>LSU and A&M College</p> |
| <p>Validation and Field Testing of Microbial Source Tracking Methodologies in the Gulf of Mexico - This project standardized and validated MST methods across laboratories in coastal GOM states. This study used PCR-based technology for environmental detection of specific targets across a Gulf of Mexico-wide geographic range, and involved five laboratories from five different institutions. It demonstrated the potential efficacy of the methods in laboratory scale studies, and then successfully field-trialed them across the Gulf of Mexico.</p> | <p>2007-2011</p> | <p>USF</p> |

Harmful Algal Blooms: GOMA’s Water Quality Team focused on harmful algal blooms (HABs) to reduce the effects of HABs by improving our ability to detect, track, forecast, and mitigate HAB movement and their effects along the Gulf Coast.



| Products / Outcomes: | Date | Partner Organizations |
|--|-------------|--|
| <p>Harmful Algal Bloom (HAB) prediction warning system - Improves the ability to detect, track, forecast, and mitigate their effects. Location: http://tidesandcurrents.noaa.gov/hab/</p> | Ongoing | NOAA, ADEM, GCOOS, TAMU Texas Dept of Health,, Sarasota Co. Health Dept. FL FWRI, TPW, Mote Marine Lab, Collier County |
| <p>Harmful Algal Blooms Observing System (HABSOS) – A data collection and distribution system for harmful algal bloom information in the Gulf of Mexico with the goal of providing managers, scientists, and the public with a data driven resource for HAB events. http://habsos.noaa.gov/</p> | Ongoing | EPA, FL F&W Research Institute, FIO, Integrated Ocean Observing System, NOAA, TPW, USGS, USF |
| <p>Resource Guide for Harmful Algal Bloom Toxin Sampling and Analysis – White paper that details a standardized protocol for routine sampling and analysis of coastal waters for HAB toxins. http://gulfofmexicoalliance.org/documents/pits/wq/goma_hab_toxin_resource_guide.pdf</p> | August 2014 | NOAA, LSU, TPW, ADPH, FL FWC, USM, Bigelow Laboratories for Ocean Sciences, USF, Mote Marine Lab |
| <p>A Binational Gulf of Mexico HAB Risk Assessment and Communications Partnership - This project worked to establish partnerships among the United States and Mexico to promote educational exchange, training opportunities and scientific data comparison.</p> | 2007-2012 | USF |
| <p>HABSOS Binational Workshops on Harmful Algal Blooms and Environmental Measurements - This project allowed 51 technicians, scientists and resource/public health managers from Mexico and the U.S. to receive training in Harmful Algal Bloom (HAB) identification and enumeration. Training workshops were conducted in Yucatan, Quintana Roo, and the Florida Keys and provided strategic opportunities for HAB personnel from the two countries to collaborate and provided an excellent opportunity for interested professionals working on HABs in individual Mexican and U.S. Gulf States to interact with one another.</p> | 2009-2012 | USF |
| <p>Detection of <i>Karenia brevis</i> Blooms in the Gulf of Mexico - This project was designed to conduct research on evaluating the range of K. brevis detection technologies currently available against the accepted standard and legal technique (light microscopic assessment).</p> | 2009-2012 | Florida FWC |



Mercury in Seafood: GOMA’s Water Quality Team focused on mercury to identify sources of mercury in Gulf fishery resources, understand its presence in the Gulf food web, and develop the ability to reduce the human health risk of exposure.

| Products / Outcomes: | Date | Partner Organizations |
|---|---------------|---|
| Mercury Fate and Transport White Paper - Provides a model for understanding the cycle of mercury through the Gulf of Mexico food web to identify important sources and improve the ability to reduce the risk of mercury exposure. Location: http://www.gulfofmexicoalliance.org/projects/files/74GOMA_Hg_White_Paper_Feb_2013.pdf | February 2013 | NOAA, Wright State University, FSU, FL Gulf Coast University, TAMU, FIO |
| Mercury Risks and Selenium Benefits Related to Consumption of Selected Estuarine and Marine Fishes in the Northern Gulf of Mexico - The project goal is to determine mercury:selenium ratios in selected species of estuarine and marine fishes commonly consumed in northern Gulf coastal communities. Samples were collected at fishing rodeos and during routine fisher-independent sampling conducted by the Gulf Coast Research Laboratory. A workshop was held to allow for presentation of research relevant to the mercury and selenium ratio issue for exchange of ideas and information related to fish advisory consideration and recommendations related to the ratio. | 2010-2014 | MDEQ |

Monitoring: GOMA’s Water Quality Team focused on water quality monitoring to obtain and provide vital information about the conditions of Gulf waters to support better management decisions regarding coastal fisheries, recreation, tourism, public health, and infrastructure planning.

| Products/Outcomes: | Date | Partner Organizations |
|---|-------------------------|---|
| Round Robin Sampling Events - Identified variability in sampling techniques, equipment, and standards. Location: http://www.gulfofmexicoalliance.org/2013/11/round-robins/ | June 2008-December 2012 | ADEM, FL DEP, LDEQ, MDEQ, TCEQ, Hillsborough County Lee County, Sarasota County |



| Products/Outcomes: | Date | Partner Organizations |
|---|---------------|---|
| <p>Gulf Monitoring White Paper - Provides water-quality information to support informed resource management and public knowledge. Location: http://www.gulfofmexicoalliance.org/projects/files/goma_gulf_monitoring_white_paper.pdf</p> | December 2013 | MDEQ, GOMA, FL DEP, ADEM, EPA GMP, FIO/GOMURC, Tetra Tech, Inc. |
| <p>Gulfwide Monitoring Network Design - Multi-year effort to identify existing monitoring efforts and scope a comprehensive system needed to ensure a healthy Gulf of Mexico Location: http://www.gulfofmexicoalliance.org/projects/files/goma_gulf_monitoring_network_design_report.pdf</p> | August 2013 | GCOOS |
| <p>Freshwater Inflows: Water for Healthy Estuaries Conference - This project goal was to conduct an interstate workshop on freshwater inflow issues in the Gulf of Mexico coastal region. The conference identified water management questions to be addressed, such as providing freshwater inflows to estuaries, updating participants on the current scientific knowledge regarding the role of freshwater inflows in protecting estuaries, and identifying management approaches and scientific work that the Gulf States should undertake to address the relevant water management questions.</p> | 2007-2011 | TPW |
| <p>Fostering Environmental Stewardship of the Gulf of Mexico - The project helped educate animal producers, middle/high school teachers and students, and volunteer water monitors about Gulf issues and water protection and monitoring. The project was initiated from Gulf watersheds in Alabama and Veracruz, Mexico. A series of water monitoring workshops, meetings, study tours, and an Environmental Education Directory educated the target audiences and a broader Gulf community.</p> | 2009-2014 | Auburn University |
| <p>Gulf of Mexico Alliance Coastal Monitoring Survey - The project goal was to develop a database to properly accommodate Gulf-wide, monitoring system metadata or, if a suitable one is not found. Upon completion, the database will be available on a public website to allow the Gulf of Mexico Alliance,</p> | 2009-2010 | FDEP |



| Products/Outcomes: | Date | Partner Organizations |
|--|------------------|--|
| <p>local, state, and federal agencies and entities access to the information compiled, that relates to the Gulf of Mexico.</p> | | |
| <p>A Northern Gulf Coast Observing System - This project was a continuation of support to the first long-term systematic water quality/meteorological network to be established in Mobile Bay. The recipient operated and maintained a network of four independent water and meteorological monitoring stations on a continuous 24/7 basis in Mobile Bay. This data was displayed and shared online and with several organizations such as the NOAA Coastal Data and Development Center, and the NOAA National Weather Service Hydrometeorological Automated Data System.</p> | <p>2010-2014</p> | <p>Marine Environmental Studies Consortium, DISL</p> |
| <p>Water Quality Monitoring in Lake Pontchartrain- Continue successful basin-wide water quality monitoring, accelerate pollution source tracking, and expand educational outreach.</p> | <p>2014</p> | <p>Lake Pontchartrain Basin Foundation</p> |
| <p>Support for 2014 Shelfwide Hypoxia Cruise- A shelf wide hypoxia cruise conducted.</p> | <p>2014-2015</p> | <p>LUMCON</p> |
| <p>Characterizing and Addressing Contamination from Septic System Effluent in a Watershed-This project goal was to address poor septic tank maintenance and performance and replace failing systems.</p> | <p>2014-2017</p> | <p>University of Alabama</p> |
| <p>North Water Tower Park Community Restoration and Education Initiative- Reconfiguring topography to improve stormwater retention and remove invasive species</p> | <p>2014-2017</p> | <p>Sarasota Bay Estuary Program</p> |
| <p>Lowry Park Zoo Water Resources Master Plan-The project identified means to enhance the Zoo's water conservation and onsite treatment processes, including options to rehab existing storm water ponds on and adjacent to the Zoo's property.</p> | <p>2014-2016</p> | <p>Lowry Park Zoological Society of Tampa</p> |
| <p>Increasing non-federal participation in the GOMA workshop-Travel support to work toward GOMA action</p> | <p>2013-2014</p> | <p>TAMU Research Foundation</p> |



HABITAT CONSERVATION AND RESTORATION PRIORITY ISSUE TEAM

GOMA promoted the implementation of on-the-ground projects by easing funding, policy, and technical hurdles that hindered program and project development. Throughout the implementation of *Action Plan I* and *Action Plan II*, the Habitat Conservation and Restoration Priority Issue Team was led by the Louisiana Coastal Protection and Restoration Authority and coordinated by the Gulf of Mexico Foundation. Funding for team coordination was provided by EPA’s Gulf of Mexico Program and NOAA’s Coastal Services Center.



Expanded Partnerships: GOMA’s Habitat Conservation and Restoration Team focused on expanding partnerships to identify and engage non-participating relevant United States stakeholders with interests in the health and sustainability of the Gulf, and coordinate specific issues with representatives from the Gulf Mexican states.

| Products / Outcomes: | Date | Partner Organizations |
|---|--|---|
| <p>International Integration Workshops – Established a network between U.S. and Mexican counterparts, identifying common goals and key issues for the Gulf and formulating strategies for both countries. Online location: http://www.gulfmex.org/1185/us-mexico-international-integration-workshops/</p> | <p>October 2010 February 2011 October 2013</p> | <p>Mexican Consortium of Marine Investigation, Institutions of the GoM, Center for Research & Advanced Studies INVESTAV</p> |
| <p>Wetland and Coastal Habitat Conservation and Restoration – Led coordination efforts of the Habitat Conservation and Restoration team.</p> | <p>2007-2009</p> | <p>GMF</p> |
| <p>Habitat Conservation and Restoration-Continuation and Advancement of the HCRT Priority Issue Team-This project supports continued work on issues of habitat and conservation restoration and expands efforts on the development of international collaboration.</p> | <p>2010-2016</p> | <p>GMF</p> |



Policy Changes: GOMA’s Habitat Conservation and Restoration Team focused on policy changes to address specific public policy issues impeding habitat conservation and restoration.

| Products / Outcomes: | Date | Partner Organizations |
|---|--------------|---|
| <p>Recommendation and Issues for the Federal Standard –Issues of concern and recommendations for action. http://www.gulfmex.org/wp-content/uploads/2011/08/2010_goma_hcrt_federal_standard_issues_recommendations.pdf</p> | 2010 | GOMA Habitat Team Member agencies |
| <p>A Comparison of Mexico/U.S. Policy, Law & Management –Strategy for enhanced collaboration between Mexico and the United States toward habitat conservation and restoration goals and actions Final Report: http://www.gulfmex.org/wp-content/uploads/2011/04/HCRT_comparing_mex_us_legal_frameworks.pdf Fact Sheet: http://www.gulfmex.org/wp-content/uploads/2013/04/GOMEX_Habitat_Frameworks.pdf</p> | 2011 2013 | ELI, Mexican Center for Environmental Law |
| <p>Increasing Restoration and Conservation on Private Lands-Analysis and recommendations for increasing restoration and conservation on private lands in the Gulf of Mexico Region Final Report: http://www.gulfmex.org/wp-content/uploads/2011/08/HCRT_Private_Lands_Analysis_May2011_final_report.pdf Fact Sheet: http://www.gulfmex.org/wp-content/uploads/2013/03/Private_Lands_Analysis.pdf</p> | 2011 2013 | GMF, Land Trust Alliance |
| <p>Analysis of Policy and Regulatory Programs that Provide Protection to Coastal Habitats – Identifies the strengths and weaknesses of the habitat conservation and restoration management systems in the five Gulf states, as well as the gaps and areas of overlap between the various components. Final Report: http://www.gulfmex.org/wp-content/uploads/2011/04/ELI-GoMex-State-Habitat-Frameworks-2011.pdf Project Fact Sheet: http://www.gulfmex.org/wp-content/uploads/2013/04/US_State_Policy_Analysis.pdf</p> | 2011 2013 | ELI |



Technology Development: GOMA’s Habitat Conservation and Restoration Team focused on technology development to identify and resolve specific scientific and technical issues so that conservation and restoration of Gulf habitats are more successful.

| Products / Outcomes: | Date | Partner Organizations |
|--|-------------|----------------------------|
| <p>Modeling and Abating the Impacts of Sea Level Rise on Estuarine Systems in the Gulf – Modeling of five significant estuarine systems in the Gulf of Mexico (Corpus Christi Bay, Mobile Bay, Pensacola Bay, Tampa Bay, and Southern Big Bend) http://maps.coastalresilience.org/gulfmex/</p> | 2011-2013 | TNC |
| <p>Sea-Level Rise Affecting Marsh Model (SLAMM) Analyses for Gulf National Wildlife Refuges – Analyses of six NWRs in five discrete geographical areas. http://www.gulfmex.org/1172/sea-level-rise-affecting-marsh-model-slam-analyses-for-gom-national-wildlife-refuges/</p> | 2010-2011 | Warren Pinnacle Consulting |
| <p>Assessment and Prioritization of Ecosystems Affected by Altered Freshwater Inflows - This project supports the identification of water management issues and challenges to protect estuaries. Project goal is to design support tool frameworks for managing freshwater inflows to estuaries, then created a web-based implementation of the decision support tool, and lastly, surveyed stakeholders to gauge its effectiveness. http://www.gulfofmexicoalliance.org/documents/pits/nur/montagna_final_report_freshwater_inflow_2014_03.pdf</p> | 2010 – 2014 | TAMU-Corpus Christi |
| <p>SLAMM Runs and Conservation Planning Data Platform Development – Assessment of potential impacts to coastal habitat as a result of sea level rise Planning Tool: http://maps.coastalresilience.org/gulfmex/ Final Reports: http://www.gulfmex.org/1174/sea-level-rise-affecting-marsh-model-slam-runs-and-conservation-planning-data-platform-development/</p> | 2011 | TNC |



| Products / Outcomes: | Date | Partner Organizations |
|--|------|----------------------------|
| Application of SLAMM Modeling to Southeastern Louisiana- Re-analysis took advantage of updated model capabilities Final Report: http://www.gulfofmexicoalliance.org/wp-content/uploads/2014/03/SLAMM_HCRT_SE-Louisiana_Final.pdf | 2013 | Warren Pinnacle Consulting |

Gulf Regional Sediment Management Master Plan: GOMA’s Habitat Conservation and Restoration Team focused on regional sediment management to develop and implement the Gulf Regional Sediment Management Master Plan to more effectively use dredged material and other sediment resources for restoration projects.

| Products / Outcomes: | Date | Partner Organizations |
|--|---------------------|--|
| Gulf Regional Sediment Management Master Plan – A collection of products that serves as a guide for more effective management of dredged material and sediment resources Online location: http://www.gulfmex.org/7860/gulf-regional-sediment-master-plan-technical-framework/ | May 2011 | GMF, MDMR |
| Gulf Regional Sediment Management Case Studies- Twelve case studies of selected dredging projects, federal navigation projects, that demonstrate the beneficial application of regional sediment management principles http://www.gulfmex.org/1168/gulf-regional-sediment-management-master-plan-case-study-compilation/ | Oct 2010 – May 2011 | Applied Coastal Research and Engineering |
| Regional Sediment Management Master Plan Update for Beneficial Uses of Dredged Material along Coastal Mississippi – Comprehensive plan to identify areas where dredged material can be placed to help restore, nourish, and enhance the coastal marshes and wetlands http://www.gulfmex.org/1170/rsm-master-plan-update-for-beneficial-uses-of-dredged-material-along-coastal-mississippi/ | 2011 | CH2M Hill |



| Products / Outcomes: | Date | Partner Organizations |
|---|-----------|-----------------------|
| <p>West Galveston Bay Regional Sediment Management Project – The plan includes extensive information on sediment resources and hydrodynamic modeling along with potential RSM actions to be explored for future projects. http://www.gulfmex.org/1164/west-galveston-bay-regional-sediment-management-project/</p> | 2011 | ATKINS, GMF |
| <p>Habitat Conservation and Restoration-Continuation and Advancement of the HCRT Priority Issue Team- Translation of the Executive Summary of the Gulf Regional Sediment Management Master Plan Technical Framework into Spanish. http://www.gulfmex.org/conservation-restoration/conservation-restoration-projects/</p> | 2010-2016 | GMF |

Reversing the Downward Trend in Habitat and Ecosystem Services: GOMA’s Habitat Conservation and Restoration Team focused on monitoring a Gulf-wide inventory of distribution, gain, and loss of coastal habitats and measure the ecosystem services they provide.

| Products / Outcomes: | Date | Partner Organizations |
|---|-----------|-----------------------|
| <p>Study of Ecosystem Services Provided by Marsh Habitat in the Galveston Bay Region – Identifies the service flows for marsh habitat and overlays sea level rise projections under various scenarios to aid in decision making</p> | 2012 | HRI, FIO |
| <p>Habitat Conservation and Restoration-Continuation and Advancement of the HCRT Priority Issue Team- Project goal is to support four restoration projects. Information on all constructed projects can be found at http://www.gulfmex.org/conservation-restoration/conservation-restoration-projects/</p> | 2010-2016 | GMF |



ECOSYSTEMS INTEGRATION AND ASSESSMENT PRIORITY ISSUE TEAM

Through GOMA’s Ecosystems Integration and Assessment Team, GOMA provided an effective partnership structure to improve accessibility and awareness of the extensive data available throughout the region. Throughout the implementation of **Action Plan I** and **Action Plan II**, the Ecosystem Integration and Assessment Priority Issue Team was led by the Texas Commission on Environmental Quality and Harte Research Institute. Funding for team coordination was provided by NOAA’s Coastal Services Center.

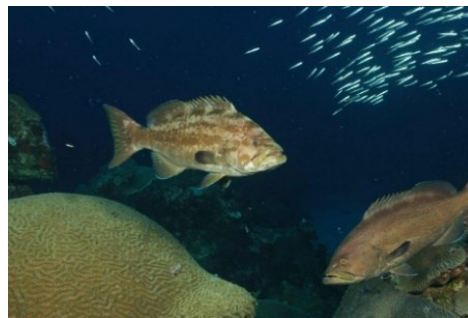


Photo credit: NOAA

Gulf of Mexico Master Mapping Plan: GOMA’s Ecosystems Integration and Assessment Team focused on producing the Gulf of Mexico Master Mapping Plan, a comprehensive plan to collaboratively acquire data on the physical characteristics of the Gulf region, particularly elevation, shoreline, and surface data.

| Products / Outcomes: | Date | Partner Organizations |
|---|---------|---|
| <p>Gulf of Mexico Master Mapping Plan – Project goal is to develop a comprehensive plan to collaboratively acquire data on the physical characteristics of the Gulf region, particularly elevation, shoreline, and surface data http://goma.sam.usace.army.mil/</p> | Ongoing | USACE |
| <p>Gulf of Mexico Data Atlas – Provides answers to questions related to the physical environment, marine resources, and economic activity in the Gulf of Mexico http://gulfatlas.noaa.gov/</p> | Ongoing | NOAA, EPA, USACE, DOI, FWC, MDMR, ADCNR, HRI, LDWF, Gulf States Marine Fisheries Comm, MSU, DISL, USM, Univ of Colorado, Alpine Research Center, TAMU, Ocean Conservancy, GCOOS, FIO, NatureServe |



Data Access and Acquisition: GOMA's Ecosystems Integration and Assessment Team focused on providing resource managers and Alliance partners' access to a Gulf-wide data and ecosystem support services system.

| Products / Outcomes: | Date | Partner Organizations |
|--|-------------|---------------------------------------|
| GOMAportal – A metadata catalog and data repository for Gulf of Mexico related geospatial datasets http://gomaportal.org/geoportal/catalog/main/home.page | Ongoing | HRI |
| Gulf of Mexico Data Acquisition Planning Tool - Platform to plan and coordinate data acquisition activities through a map-based interface http://hrgis.tamucc.edu/GDAPT/ | Ongoing | HRI, TAMU |
| Metadata Enterprise Resource Management Aid (MERmaid) – Online web-based tool allows users to establish unlimited metadata databases to organize their metadata records http://www.ncddc.noaa.gov/metadata-standards/mermaid/ | Ongoing | NOAA, GOMA |
| Geospatial Assessment of Marine Ecosystems – Mapping project that identifies, inventories, and catalogues information related to coastal and marine habitats of the Gulf of Mexico http://myfwc.com/research/gis/regional-projects/gulf-game/ | 2010-2014 | FIO, FWC, Fish and Wildlife Institute |
| Implementation of a Spatial Catalog to Characterize and Identify Habitats in the Gulf of Mexico – Project goal is to develop an inventory of habitat-related data within the Gulf of Mexico http://slideplayer.com/slide/5014381/ | 2007-2010 | FWC |



Living Marine Resources: GOMA’s Ecosystems Integration and Assessment Team focused on providing collaboration opportunities for the various living marine resource organizations to support the management of the Gulf as a large marine ecosystem.

| Product / Outcome: | Date | Partner Organizations |
|--|-------------|------------------------------|
| EcoWatch- A data management infrastructure comprised of data services and support functions for data discovery http://www.ncddc.noaa.gov/activities/healthy-oceans/ecowatch/ | Ongoing | NOAA |
| Coastal and Marine Ecological Classification Standard and Development of Priority Habitat Information Network System - Common language for marine science and management and a template for translating existing habitat classification schemes to a common framework so that mapping results can be more easily compared and integrated https://coast.noaa.gov/digitalcoast/publications/cmecs | 2007-2012 | NatureServe |

Emergent Wetlands Status and Trends Report: GOMA’s Ecosystems Integration and Assessment Team focused on developing an Emergent Wetlands Status and Trends Report to provide scientists and decision makers with regional information to guide management decisions.

| Products / Outcomes: | Date | Partner Organizations |
|---|-------------|------------------------------|
| Emergent Wetlands Status and Trends Report-A comprehensive literature survey on emergent wetlands in the five Gulf states http://gom.usgs.gov/GOMEmWetStatusTrends.aspx | Ongoing | USGS, EPA |
| Seagrass Status and Trends in the Northern Gulf of Mexico – US EPA GMP’s report on research and restoration plan for seagrasses http://pubs.usgs.gov/sir/2006/5287/ | 2007 | EPA GMP |



Ecosystem Service Valuation: GOMA’s Ecosystems Integration and Assessment Team focused on determining socioeconomic values of critical coastal ecosystem services in the Gulf region.

| Products / Outcomes: | Date | Partner Organizations |
|--|-----------|-----------------------------------|
| GecoServ – An ecosystem services valuation database providing valuation studies relevant to the Gulf of Mexico region http://www.gecoserv.org/ | Ongoing | HRI |
| Evaluation of Ecosystem Services of Coastal Habitats - A support tool that evaluates the economic and social value of coastal habitats. This project produces procedures and tools for mapping ecosystem services and the values of those services for the Gulf of Mexico habitats. | 2008-2012 | HRI, TAMU-Corpus Christi, EPA GMP |



NUTRIENTS AND NUTRIENT IMPACTS PRIORITY ISSUE TEAM

GOMA provided a collaborative approach to building and evaluating tools needed to reduce excess nutrients and restore coastal waters that have been negatively impacted by nutrients. Throughout the implementation of *Action Plan I* and *Action Plan II*, the Nutrients Priority Issue Team was led and coordinated by the Mississippi Department of Environmental Quality. Funding for team coordinator was provided by NOAA Coastal Services Center.



Photo: Mobile Bay National Estuary Program

Nutrient Characterization: GOMA’s Nutrients and Nutrients Impacts Team focused on implementing regional nutrient characterization studies to evaluate ecosystem responses and to develop the tools for better characterization of nutrients in coastal waters.

| Products / Outcomes: | Date | Partner Organizations |
|---|---------------|-----------------------|
| <p>Benthic Index of Biotic Integrity - A report on benthic invertebrate data from the National Coastal Assessment sampling efforts, assisting in investigation of linkages among the benthic biological community structure, intermediate stressors, and nutrient concentrations Location: http://www.gulfofmexicoalliance.org/projects/files/48Benthic Index of Biological Integrity for Estuarine and Near Estuarine Waters.pdf</p> | November 2011 | MDEQ, Tetra Tech |
| <p>Characterization of Nutrient Sources, Fate, and Transport - A study to assess where nutrients are coming from, how they are transported through the estuary, and how they are broken down or absorbed in Weeks Bay, AL. Project report location: http://www.gulfofmexicoalliance.org/2014/02/sources-fate-transport-and-effects-of-nutrients-in-weeks-bay-alabama/</p> | 2009-2014 | MDEQ, ADEM |



| Products / Outcomes: | Date | Partner Organizations |
|---|-----------|-----------------------|
| <p>Sources, Fate, Transport, and Effects of Nutrients on Downstream Ecological Processes in the Galveston Bay Estuary-The goal of this project is to characterize the source(s), fate, transport and effect (SFTE) of nutrients (nitrogen and phosphorus) in the Galveston Bay Estuary www.tamug.edu/phytoplankton/Research/Galveston_Bay.html</p> | 2010-2015 | TAMU Galveston Bay |

Nutrient Criteria Development: GOMA's Nutrients and Nutrients Impacts Team focused on identifying common state needs and priorities for the development of nutrient criteria and provide support and technical assistance to facilitate a regional approach to nutrient criteria development and management.

| Products / Outcomes: | Date | Partner Organizations |
|--|-----------|--|
| <p>Development of Pilot Nutrient Criteria for an estuary in the Western Gulf of Mexico – A pilot project that characterizes the nutrient dynamics in the Mission-Aransas estuary in terms of their sources, transport, fate and effects, providing a more complete understanding of the relationships between freshwater inflow, nutrients, physical processes, and biological communities with the goal of developing nutrient criteria for ecosystems. Location: http://www.gulfofmexicoalliance.org/?s=Mission-Aransas&submit=#nutrients</p> | 2009-2014 | University of Texas-Austin, University of Texas Marine Science Institute |
| <p>Development of Pilot Nutrient Criteria for a Mississippi Estuary - A pilot project that characterizes the nutrient dynamics in Bay St. Louis, MS estuary in terms of their sources, transport, fate and effects, providing a more complete understanding of the relationships between freshwater inflow, nutrients, physical processes, and biological communities with the goal of developing nutrient criteria for ecosystems. Location: http://www.gulfofmexicoalliance.org/?s=Bay+St.+Louis&submit=</p> | 2009-2013 | MDEQ, Tetra Tech, USM |



Hypoxia: GOMA’s Nutrients and Nutrients Impacts Team focused on coordinating strategies and provide guidance to better characterize hypoxia and the resulting socioeconomic impacts.

| Product / Outcome: | Date | Partner Organizations |
|---|-------------|--|
| Primer on Gulf of Mexico Hypoxia - A document explaining the causes and impacts of hypoxia in the Gulf region to stakeholders, coastal managers, decision makers and the general public. Location: http://www.gulfofmexicoalliance.org/pdfs/Primer_on_Hypoxia_in_the_Gulf_of_Mexico.pdf#view=Fit&toolbar=1 | 2011 | MASGC, GCOOS, LUMCON, Hypoxia Task Force |

Nutrient Reduction Strategies: GOMA’s Nutrients and Nutrients Impacts Team focused on developing management tools and implement nutrient reduction activities in cooperation with local communities to reduce excess nutrient inputs to estuaries and coastal waters.

| Products / Outcomes: | Date | Partner Organizations |
|--|-------------|------------------------------|
| Decision Support Toolbox - A decision support program designed for use by state and local agencies interested in reducing nutrients (nitrogen and phosphorus) and other pollutants to water bodies in an effort to reduce Gulf hypoxia Location: http://www.gulfofmexicoalliance.org/toolbox/toolbox.html | 2009-2015 | MDEQ |
| Coastal Nutrient Reduction Strategy Template Development – This project’s goal is to develop a common template that can be used by GOMA states to guide the development of their respective state nutrient reduction strategies, which will be used to develop watershed-based nutrient reduction management plans for Gulf coastal watersheds. https://www.deq.state.ms.us/MDEQ.nsf/pdf/WMB_CoastalNutrientReductionStrategy011510/\$File/Coastal%20Nutrient%20Reduction%20Strategy%20Template%20Report%20011510.pdf?OpenElement | 2009-2015 | MDEQ |



| Products / Outcomes: | Date | Partner Organizations |
|--|-----------|-----------------------|
| <p>Using Wetlands for Nutrient Reduction in the Mississippi Basin – This integrated project’s goal is to test the effectiveness of restored wetlands on nutrient reduction in the Mississippi Basin by comparing the spatial and temporal nutrient patterns and loading-update relationships of three different wetland ecosystems in the Gulf of Mexico</p> | 2009-2014 | LSU, TA&M College |
| <p>Evaluation of Water Management Structures as Important Tools in Nutrient Reduction Strategies – A demonstration project for farms located in the Mississippi Delta evaluated at a watershed and BMP scale, water control structures such as slotted pipes and low grade weirs as low-technology, innovative drainage management structures in primary aquatic systems associated with agriculture for nutrient reductions to downstream receiving waters.</p> | 2010-2014 | MSU |
| <p>Restoration Pilot of Degraded Wetlands Using Wastewater Assimilation - This project is an effort to evaluate the use of wastewater as a resource to restore degraded wetlands.</p> | 2009-2013 | MDEQ |



COASTAL COMMUNITY RESILIENCE PRIORITY ISSUE TEAM

Building resilience is an economic imperative for the region and GOMA provided a collaborative approach for communities and businesses to identify risks and vulnerabilities, address those risks, and share with others. Throughout the implementation of *Action Plan I* and *Action Plan II*, the Coastal Community Resilience Priority Issue Team was led and coordinated by the Mississippi Department of Marine Resources. Funding for team coordination was provided by NOAA's Coastal Services Center.



Photo credit: Jeanne. Allen, EPA GMP

Risk and Resilience Assessment: GOMA's Coastal Community Resilience Team focused on providing tools to coastal communities to better understand the risks and impacts associated with coastal hazards, including climate changes.

| Products / Outcomes: | Date | Partner Organizations |
|--|---|---|
| <p>Community Resilience Index – A self-assessment tool that communities can use to examine how prepared they are for storms and storm recovery http://masgc.org/coastal-storms-program/resilience-index</p> | <p>Originally published 2010 Revised in 2015</p> | <p>MASGC, Louisiana Sea Grant, Texas Sea Grant, Florida Sea Grant, EPA GMP, NOAA Coastal Storms Program, GOMA</p> |
| <p>Coastal CHARM Resilience Tool – Planning tool for engaging the public and gathering their values about the community's future http://tcwp.tamu.edu/charm/</p> | <p>Ongoing</p> | <p>Texas Sea Grant</p> |
| <p>Coastal IQ-Survey that collected data for the measurement of societal norms, practices, and beliefs surrounding resiliency issues http://masgc.org/projects/details/enhancing-the-coastal-iq-survey-measuring-knowledge-and-attitudes-of-gulf-coast-residents</p> | <p>2009-2012</p> | <p>NGI</p> |



| Products / Outcomes: | Date | Partner Organizations |
|--|-----------|-----------------------|
| <p>Modeling and Abating the Impacts of Sea Level Rise on Five Significant Estuarine Systems in the Gulf of Mexico – Project is using geographic information systems and simulation models to investigate the potential effects of accelerated sea-level rise on coastal wetlands and dependent species at five priority estuaries in the Gulf of Mexico. The predicted sea level rise has the potential to greatly influence coastal productivity and the viability of many coastal species</p> | 2010-2014 | TNC |
| <p>Dissemination and Evaluation of a Coastal Community Resilience Index-This project built on earlier efforts that developed and pilot tested a Coastal Community Resilience Index assessment tool and focuses on delivering and implementing the index across communities in the five U.S. Gulf of Mexico states.</p> | 2010-2015 | Auburn University |

Risk and Resilience Management Toolbox: GOMA’s Coastal Community Resilience Team focused on preparing an inventory of existing capabilities and tools to address coastal hazards in the Gulf region, identify important gaps, and, where needed, develop new methods to enhance regional and local resilience.

| Products / Outcomes: | Date | Partner Organizations |
|---|-----------|--|
| <p>StormSmart Coast Network –An online resource for coastal decision makers looking for the latest and best information on how to protect their communities from weather and climate hazards http://stormsmartcoasts.org/</p> | 2010-2014 | MDMR, MASGC, Blue Urchin, FDEP, TX GLO, CPRA, ACDNR, AL Geological Survey |
| <p>Clean & Resilient Marinas – An initiative to promote and expand resilient and environmentally responsible operations and best management practices at marinas in the Gulf region. It is a three-document set including a Guidebook, Policy Guide, and a tri-fold brochure. http://www.gulfofmexicoalliance.org/2013/05/gomas-clean-resilient-marina-initiative/</p> | Ongoing | MDMR, Ecosystems, Inc., Gulf Sea Grant Programs, State Clean Marina Coordinators |



Risk and Resilience Communication: GOMA’s Coastal Community Resilience Team focused on informing communities about the risks associated with coastal hazards and provide access to the tools necessary to increase their resilience.

| Products / Outcomes: | Date | Partner Organizations |
|---|---------|--|
| <p>Resilient Coastal Development through Land Use Planning –A report that presents broad categories of land use tools that can be used by local communities for developing resilient policies in a variety of settings. http://masglp.olemiss.edu/webinar/resilient-planning.pdf</p> | 2013 | MASGC Legal Program, NOAA, MDMR, Gulf Sea Grant Programs |
| <p>Mississippi Homeowner Handbooks-Project goal is to help homeowners in Mississippi prepare for natural hazards to reduce risks to family and property http://stormsmart.org/handbook/</p> | Ongoing | MDMR, MASGC |
| <p>Alabama Homeowner Handbook – Project goal is to help homeowners in Alabama prepare for natural hazards to reduce risks to family and property http://stormsmart.org/handbook/</p> | Ongoing | ADCNR, MASGC |
| <p>Florida Homeowner Handbook – Project goal is to help homeowners in Florida prepare for natural hazards to reduce risks to family and property http://stormsmart.org/handbook/</p> | Ongoing | FL Sea Grant, FL DOH |
| <p>Texas Homeowner Handbook – Project goals is to help homeowners in Texas prepare for natural hazards to reduce risks to family and property http://stormsmart.org/handbook/</p> | Ongoing | TX GLO, TX Sea Grant |
| <p>Louisiana Homeowner Handbook –Project goals is to help homeowners in Louisiana prepare for natural hazards to reduce risks to family and property http://stormsmart.org/handbook/</p> | Ongoing | LA Sea Grant, LA CPRA |



| Products / Outcomes: | Date | Partner Organizations |
|---|--------------------|---------------------------------------|
| <p>Designing for Impact-The project goal is to provide designers, policymakers, and developers with tools they can use to support development that is designed, built, and managed to preserve valuable natural areas and systems.</p> | <p>2014-2016</p> | <p>Houston-Galveston Area Council</p> |
| <p>Enhancing Community Resilience and Saving Money: Assisting Communities Through the 2013 Community Rating System-This Project worked with local coastal communities participating in the National Flood Insurance Program to facilitate the transition to the 2013 CRS Coordinators' Manual.</p> | <p>2014-2016</p> | <p>University of Mississippi</p> |
| <p>Resilience Training Workshops – A series of workshops conducted across the Gulf States to train local communities to evaluate their resilience using the Resilience Index</p> | <p>2011 – 2013</p> | <p>NOAA, Coastal Training Program</p> |
| <p>Coastal Resilience Advertising – produced 40 print-ready, website-ready, and radio messages to promote coastal resilience across the Gulf of Mexico</p> | <p>2012</p> | <p>True Blue, MDMR</p> |



ENVIRONMENTAL EDUCATION PRIORITY ISSUE TEAM

GOMA committed to providing environmental education that included local cultural and economic values with the belief that education will encourage action toward a healthier Gulf. GOMA’s environmental education efforts included formal and informal educational opportunities, professional development, communication, and actions which reach an extensive audience. Throughout the implementation of **Action Plan I** and **Action Plan II**, the Environmental Education Priority Issue Team was led by the Alabama Department of Conservation and Natural Resources and coordinated by Dauphin Island Sea Lab. Funding for team coordination was provided by NOAA’s Coastal Services Center.



Photo credit: Jeanne Allen, EPA

Community Education and Outreach: GOMA’s Environmental Education team focused on increasing awareness and promoting action among Gulf citizens by engaging in educational and outreach activities.

| Products / Outcomes: | Date | Partner Organizations |
|---|-----------|--|
| Environmental Education Listserv (GOMAEEN) - A network that facilitates information sharing to interested partners. | Ongoing | DISL |
| Gulf of Mexico Coastal Training Program Initiative: Regional Coastal Training Workshops - This is a unique regional collaboration designed to deliver relevant information to key stakeholders on issues related to the ecological and economic health of the Gulf of Mexico. http://www.gulfalliancetraining.org/workshops.aspx | Ongoing | NOAA, EPA GMP, Grand Bay NERR, Weeks Bay NERR, Apalachicola NERR, Rookery Bay NERR, Mission-Aransas NERR, Weeks Bay Foundation |
| Smart Yard, Healthy Gulf – A project to encourage homeowners to reduce their spring and fall fertilizer use. http://masgc.org/smart-yard-healthy-gulf/home | 2009-2012 | DISL, MASGC, NOAA |
| Expanding Conservation and Stewardship of the Gulf of Mexico - This project built upon and extended the successes of GOMA partners to expand public knowledge and awareness of issues related to the Gulf of Mexico and increase K-12 environmental literacy. | 2010-2014 | FL A&M University, EPA GMP |



| Products / Outcomes: | Date | Partner Organizations |
|---|-----------|-------------------------|
| Muddy Water Watch – A state-wide education program training volunteers to monitor for stormwater runoff from construction sites. | 2009-2011 | Mobile Baykeeper, ADCNR |
| Gulf Lagniappe: Adult EE Workshops – Adult education workshops focusing on environmental topics in south Louisiana. | 2010-2011 | LUMCON |
| Community Grass Gardens – a community restoration, outreach and education initiative, mini-grant | 2011 | NOAA, MSU, DISL |

Public Awareness: GOMA’s Environmental Education team focused on expanding public awareness efforts to connect the Gulf and its relevance to the lives of citizens.

| Products / Outcomes: | Date | Partner Organizations |
|---|-----------|--|
| Coastal Ecosystem Learning Center Designation – Expanded to at least one facility in each of the five U.S. Gulf States and the Mexican Gulf State of Veracruz. | 2006-2013 | Coastal America, Audubon Aquarium, USM, Veracruz Aquarium, Rookery Bay NERR, EPA GMP |
| USGS NBII GOMAEEN Clearinghouse –An electronic clearinghouse designed to disseminate effective Gulf coast related educational information and materials via the Internet. | 2006-2012 | USGS NWRC NBII |
| Underserved and Underrepresented Populations Working Group - A working group to engage communities for the purpose of learning about the environments in which they live. | 2006-2012 | BTNEP, GMF, NOAA, MSU, DISL |
| Pilot program to Engage Underserved and Underrepresented Communities – A working group was established to work with UU target audiences. A regional pilot project was conducted. | 2006-2008 | BTNEP, EPA, FLDEP LIFE, LUMCOM, Texas State Aquarium |
| Strengthening the Gulf of Mexico Alliance: Enhancing Local Capacity to Reach Underserved and Underrepresented Populations – Project increases access to environmental information and opportunities related to water quality, eutrophication, coastal habitats, and wetland loss. https://cfpub.epa.gov/si/si_public_record_Report.cfm?dirEntryID=179183 | 2007-2010 | EPA GMP |



| Products / Outcomes: | Date | Partner Organizations |
|--|-----------|--|
| <p>Environmental Awareness Campaign for the Gulf of Mexico Alliance – Social Marketing Plan - The first regional social marketing study for the Gulf of Mexico. It included both a review of nutrient issues and perceptions of GOMA. Literature review, qualitative brief, and research brief were produced.</p> | 2007-2009 | EPA GMP, NGI, DISL |
| <p>Florida Alliance Educators – Support the Gulf A series of strategies aimed at addressing Alliance issues in Florida.</p> | 2007-2011 | EPA GMP, FLDEP RBNERR |
| <p>Enhanced Public Awareness and Understanding of the Gulf of Mexico Alliance Priority Issues Through Exhibitory – Oceans Today Kiosk Enhancing the awareness and understanding of the relevance of the Gulf of Mexico to the everyday lives of the citizenry within the five U.S. Gulf States and one of the six Mexican States bordering this region.</p> | 2010-2015 | Coastal Ecosystem Learning Centers, Smithsonian |
| <p>Building Cultural Competency in Experiential Environmental Education - Project to engage teachers, students, and parents in STEM education through cultural understanding.</p> | 2010-2014 | FDEP Learning in Florida’s Environment |
| <p>Clean Coast Partnership Website- A collaborative effort to coordinate city, state, business and individual efforts and resources for recycling and other environmentally friendly practices http://cleanisland.org/</p> | Ongoing | Alabama Gulf Coast Convention & Visitor's Bureau |
| <p>EcoHero Kiosks Partnership - Interactive kiosks developed and installed in the Gulf of Mexico Coastal Ecosystem Learning Centers. Kiosk topics were centered on GOMA priorities.</p> | Ongoing | GCOOS, CELCs, EPA GMP |
| <p>National Marine Education Association Conference - An international conference held on the Gulf Coast for formal and informal educators.</p> | 2013 | NOAA, DISL |
| <p>Muddy Water Stormwater Commercial - A novel Q&A stormwater commercial placed in area movie theatres.</p> | 2009-2010 | NOAA, DISL, ADCNR, WBNERR, NRCS |



K through 20 Environmental Literacy: GOMA’s Environmental Education team focused on increasing environmental literacy within the K through 20 audiences by developing, implementing, expanding, and enhancing specific environmental education programs.

| Products / Outcomes: | Date | Partner Organizations |
|--|-------------|--|
| DWH Education Project for Formal and Informal Educators - Virtual workshops held synchronously across four states to educate teachers on Deepwater Horizon oil spill issues. | 2010 – 2012 | Institute for Marine Mammal Studies, Dauphin Island Sea Lab, NOAA, MASGC |
| K-12 Pilot Program with B-WET - A project using residual B-WET funds to supplement a former EE mini-grant in K-12 education. | 2012 – 2013 | NOAA SEFSC, Wolf Bay Watershed Watch, ADCNR, DISL |
| LIFE-Big Cypress Watershed (Collier, Okaloosa) The expansion of the FLDEP LIFE program to new locations. | 2009 – 2011 | NOAA, FDEP Learning in Florida’s Environment |
| Science and Spanish Club Network A Texas program to help engage minority students in STEM education, community service, and workforce development. | 2009-2011 | NOAA, GMF |
| Gulf of Mexico Ocean Literacy Project – Identify and implement successful strategies for reaching underserved and underrepresented audiences through field-based activities for middle school teachers and students. https://cfpub.epa.gov/si/si_public_record_Report.cfm?dirEntryID=179124 | 2007-2008 | FDEP, EPA GMP |
| Formal and Informal Environmental Education of the Northern Gulf of Mexico – Preparation of and presentations of lessons on the elements of the Coastal Habitats. http://aquila.usm.edu/teacher_resources_docs/2/ | 2009-2014 | USM, EPA |
| Watershed Investigations: Engaging Underserved Youth in Exploring Climate Change -Watershed Investigations project goal is to introduce students to the local watershed, water quality, coastal habitats, climate change and the role students can play in protecting our water resources. | 2014-2017 | The Florida Aquarium |



| Products / Outcomes: | Date | Partner Organizations |
|---|-------------|---|
| Gulf of Mexico Stewardship Communications Products to help communicate and engage the K-12 community on water quality. Key products were tool boxes delivered to the Gulf states. | Ongoing | NPS, Stephen F. Austin State University |
| Mini-Grants in Alabama | | |
| Oyster Gardening Project | 2009-2010 | Alma Bryant High School |
| Wonders of Wetlands | 2009-2010 | Wolf Bay Foundation |
| Engaging Youth in Engineering | 2009; 2011 | Mobile Area Education Foundation |
| Marine Applications of Science and Technology | 2010-2011 | DISL-Discovery Hall Program |
| Sea Star | 2011-2012 | DISL-Discovery Hall Program |
| From the Mountains to the Gulf: Helping Teachers Make Connections | 2010-2011 | Environmental Education Association of Alabama |
| Squeaky Sneakers | 2011 | Eastern Shore Art Center |
| Mini-Grants in Florida | | |
| Pilot Summer Program for Teachers: Gulf of Mexico Stewardship and Conservation | 2009 – 2010 | Florida A&M University |
| Conservation through Education at the Navarre Beach Marine Science Station | 2009-2011 | Santa Rosa County, FL School District |
| Coastal Crusaders: Conserving Native Florida | 2010-2011 | City of Bradenton Beach, FL |
| Minority Students and Community Outreach on Hurricane Preparedness and Adaptation | 2010-2011 | NOAA Environmental Cooperative Science Center, Florida A&M University |
| High School Teachers: Teens teaching Tweens about the Coast | 2011-2012 | The Florida Aquarium |
| Assessing Water Quality in Local Estuarine Tributaries of Pensacola Bay | 2011-2012 | Marine Science Academy, Escambia County School District, FL |
| Increasing Access to Science Based Environmental Education by Matching Local Needs with Resources | 2011-2012 | FDEP, OEE |
| Island Adventures Pilot Project | 2011-2012 | Nature’s Academy, Inc. |



| Products / Outcomes: | Date | Partner Organizations |
|---|-------------------------|--|
| Mini-Grants in Louisiana | | |
| Going Beyond the Bayou & Gulf Lagniappe: Adult EE Workshops & Wetland Warriors | 2009-2011; 2010-2012 | LUMCON |
| Marine Lab Estuarine & Marine Lab Awareness Program | 2009-2011 | Louisiana Department of Wildlife & Fisheries |
| Coast to Classroom | 2009-2010 | Audubon Nature Institute |
| Louisiana Environmental Literacy Plan | 2010-2011 | Louisiana Environmental Education Commission |
| Training Future Scientists, Teachers and Families in Coastal Wetland Conservation and Restoration | 2011-2012 | Southeastern Louisiana University |
| An Electronic Field Trip: Conservation and Protection of the Gulf Coast | 2011 | Foundation for Excellence in Louisiana Public Broadcasting |
| Mini-Grants in Mississippi | | |
| Website for Aquatic Plants | 2009-2010 | Jackson State University |
| Student and Community Outreach Symposia | 2009 | J.L. Scott Marine Education Center, USM |
| Website for Aquatic Plants & their Habitats of the MS Coast | 2009-2010 | Jackson State University |
| Camp Leonardo: Where Science Meets Art | 2010 | The Mary C. O'Keefe Cultural Center of Arts & Education |
| WETMAAP Gulfwide | 2010 | USM |
| Mini-Grants in Texas | | |
| Sunset Lake Invaders | 2010-2011 | Texas State Aquarium |
| Get Hip to Habitat | 2009-2010 | Galveston Bay Foundation |
| GK-12 Summer Field Science Program | 2009-2011 | University of Texas Marine Science Institute |
| Kids Teaching Parents Environmental Education & Kids Teaching Parents II | 2010 | Texas AgriLife Extension Service (Texas Sea Grant) |
| Know Your Watershed | 2010 | Legacy Land Trust |



| Products / Outcomes: | Date | Partner Organizations |
|---|-------------|-----------------------------------|
| River Stewards II | 2011 | Colorado River (Texas) Foundation |
| Groundwater to the Gulf Institute - Learning about the Colorado River (TX) watershed & the Gulf of Mexico | 2011 | Texas Parks & Wildlife |

Economic Value Communication: GOMA's Environmental Education team focused on including the economic value of Gulf ecosystems in environmental education.

| Product / Outcome: | Date | Partner Organizations |
|---|-------------|------------------------------|
| Ecosystem Services Video Translations – Video translations to English, Vietnamese, and Spanish | 2013 | HRI (EIA team), NOAA |



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REGIONAL INITIATIVES

As the Gulf's regional ocean partnership, GOMA served as a nexus for a variety of regional efforts. More information on the programs described below and other GOMA programs, can be found at: www.GulfofMexicoAlliance.org/

GULF RESTORATION

Starting in 2010, many members GOMA were involved in the unprecedented restoration efforts resulting from the Deepwater Horizon oil spill. GOMA maintained a web page and a section of the monthly newsletter dedicated to updates regarding regional restoration activities including Natural Resource Damage Assessment, RESTORE Act, National Academy of Sciences' Gulf Research Program, National Fish and Wildlife Foundation's Gulf Environmental Benefit Fund, and National American Wetlands Conservation Act. The webpage can be found at: www.gulfofmexicoalliance.org/learn-more/gulf-restoration/.

GULF OF MEXICO RESEARCH INITIATIVE

The Gulf of Mexico Research Initiative (GoMRI) is a research funding program developed by BP shortly after the Deepwater Horizon oil spill in May 2010. BP voluntarily committed \$500 million to an open, competitive research program designed to study the impact of the oil spill through 2020 and its associated response on the environment and public health in the Gulf of Mexico. The Gulf of Mexico Alliance administers GoMRI through the Master Research Agreement, a separate agreement between GOMA and BP that is outside the scope of the **Governors' Action Plan**. The ultimate goal of GoMRI is 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, with an emphasis on conditions found in the Gulf of Mexico. An independent Research Board solicits and competitively selects research programs and projects for GoMRI funding opportunities. GoMRI is approximately half-way through its program life, but already has some significant accomplishments.

Over \$330 million in research has been awarded under the themes of physical distribution, dispersion, and dilution of petroleum, chemical evolution and biological degradation of the petroleum/dispersant systems, environmental effects of the petroleum/dispersant system on the Gulf of Mexico, technology developments, and impact of oil spills on public health.





The GoMRI Master Research Agreement requires that data derived under GoMRI funding is to be made publically available as soon as possible. Implementation of this requirement led to the establishment of the GoMRI Information and Data Cooperative.

HYPOXIA TASK FORCE

The Mississippi River Gulf of Mexico Watershed Nutrient Task Force (Hypoxia Task Force) was established in 1997 to reduce and control hypoxia in the Gulf of Mexico. Sponsored by EPA, the Hypoxia Task Force consists of 5 federal agencies and 12 states and tribes within the Mississippi/Atchafalaya River Basin. Both Mississippi and Louisiana are important participants on the Hypoxia Task Force, each serving as the chair at some point.

The Hypoxia Task Force published their Action Plan in 2008 have been making progress toward reducing nutrients in the Basin. According to a recent progress report, member states are making progress in by finalizing their nutrient reduction strategy documents. The next step will be implementation. The Hypoxia Task Force also concludes that despite the incremental improvements and significant investments to reduce nutrient pollution, the goal of reducing the size of the hypoxic zone to 5,000 square kilometers is unlikely to be achieved by 2015. However, strides in management plans as well as science and monitoring shows that the overall goal to reduce the hypoxic zone remains reasonable. The Hypoxia Task Force holds semi-annual meetings that are open to the public. More information can be found at: <http://water.epa.gov/type/watersheds/named/msbasin/>.

NATIONAL OCEAN POLICY

The National Ocean Policy outlines challenges facing our nation's oceans and coastal areas subdivides the United States into nine regions to address those issues. In the Gulf of Mexico region, GOMA was established before the National Ocean Policy and already had the structure in place to address six of the nine challenges: (1) ecosystem-based management, (2) informed decision-making and improved understanding of the ecosystem, (3) coordination and support of federal, state, and local authorities, (4) coastal resilience, (5) ecosystem restoration and protection, and (6) water quality. The three priority objectives of the National Ocean Policy that are not addressed by the Gulf region are not applicable, although informational marine planning meetings were held in 2013, 2014, and 2015



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COLLABORATION BUILDING

COORDINATION

The central role of the GOMA has been coordinating the efforts of the network's leadership, partners and members. Members of the GOMA Alliance Management Team and PITs identified the priorities and selected projects to address those priorities. GOMA staff assisted in identifying and securing funding opportunities for the teams and managing sponsored programs. Funding for coordination of the PITs was provided by EPA's Gulf of Mexico Program and NOAA's Coastal Services Center. Until 2010, funding was provided directly to the states; in 2011, funding for PIT coordination was awarded to GOMA through a competitive grant process.

COMMUNICATIONS

Under the direction of the Governors of the five Gulf States, GOMA coordinated a decade of building partnerships by simply calling together similarly situated natural resource professionals from the five states to work together on issues common to all and affecting the Gulf of Mexico. They soon realized that true regional collaboration could only be achieved by involving a wide variety of partners, including academia, non-governmental organizations, businesses and general citizens.



Photo credit: Jeanne. Allen, EPA

Annual All Hands Meetings

Each year GOMA and its partners hosted an "All Hands on Deck" meeting, providing a venue for the members of the PITs to meet and collaborate on issues of regional importance. In the early years, the EPA Gulf of Mexico Program coordinated the annual event, rotating it around the Gulf in order for all members to have access to the meeting. After formalizing as a non-profit organization, GOMA was able to request sponsorships from partnering organizations and began hosting the annual meeting in 2012. On occasion, the GOMA All Hands Meetings were combined with the Harte Research Institute's Gulf Summit and the EPA's Gulf Guardian Awards Ceremony.



These annual meetings provided the best opportunity for resource professionals throughout the Gulf region for exchange of data and research, lessons learned, new goals for GOMA, and technical training. In addition, this annual event activity built the sense of community that has been the hallmark of this organization. The following table identifies the venue, location and host who provided support for each annual All Hands Meeting since 2005.

Table 3. Gulf of Mexico Alliance All Hands Meetings

| Date | Location | Host |
|-------------|-------------------------|-------------|
| 2005 | Rookery Bay, Naples, FL | EPA |
| 2006 | New Orleans, LA | EPA |
| 2007 | St. Petersburg, FL | EPA |
| 2008 | Corpus Christi, TX | EPA |
| 2009 | Mobile, AL | EPA |
| 2010 | Biloxi, MS | EPA |
| 2011 | New Orleans, LA | EPA / GOMA |
| 2012 | Corpus Christi, TX | GOMA |
| 2013 | Tampa, FL | GOMA |
| 2014 | Mobile, AL | GOMA |

Interim Meetings and Conferences

The GOMA staff facilitated monthly and other periodic meetings and teleconferences for the Alliance Management Team, the Alliance Coordinators Team, and other working groups. The headquarters office provided access to telecommunications services and meeting logistics facilitation. GOMA staff assisted the Business Advisory Council in their role to facilitate communication between the Alliance Management Team and the diverse groups of industries that are dependent upon the common resources of the Gulf of Mexico. GOMA's BAC met on a quarterly basis via conference call and once annually in person.

Website, Publications, And Social Media

Federal, state, and academic partners worked closely with GOMA's Environmental Education PIT to create a comprehensive website, providing central access to information about progress toward addressing priority issues. The Environmental Education PIT team leadership provided frequent coordination communications to the large group of GOMA email listserve users. GOMA also



published hardcopy versions of important documents to facilitate distribution of key concepts to stakeholders.

What GOMA is communicating:

- | | |
|----------------------|-------------------|
| Priority Issues | Coastal Training |
| Regional Restoration | GoMRI progress |
| Regional Events | Stewardship Facts |
| Job Postings | |

To whom GOMA is communicating:

- Internal – Resource Managers, Researchers & Academia
- External – General Public, Legislators & Politicians

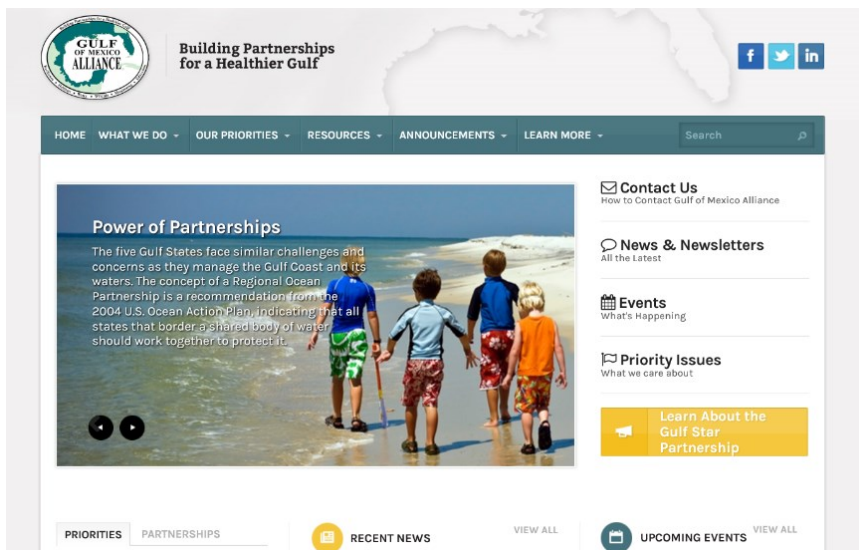
How GOMA communicates:

- | | |
|------------------|-------------------|
| Conference Calls | Webinars |
| E-Newsletters | E-blasts |
| Website | Emails |
| Social Media | Printed Materials |

Throughout GOMA’s first ten years, GOMA’s effective communication strategies resulted in profound growth:

- Approximately 970 people on six PITs;
- Over 400 people at annual meetings;
- 2000 people who voluntarily signed up for the GOMA email list; and
- Numerous twitter followers, Linked In connections, and blog viewers.

The most comprehensive compilation of information about the GOMA organization, priorities, accomplishments, events, publications and opportunities to participate is located on the GOMA website at: www.GulfofMexicoAlliance.org



You can also go to GOMA’s website by scanning this QR code





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CONCLUSION

As this summary report illustrates, the GOMA network of concerned professionals and citizens from all sectors of our Gulf States have successfully addressed priorities set forth in the Gulf of Mexico Alliance **Governors' Action Plans**. The efforts have led to many useful tools, data, lessons shared, and integrated data sets.

10-YEAR RECOGNITION

GOMA recognized 10 years of building partnerships for a healthy Gulf on May 20, 2014, at the annual GOMA All Hands Meeting in Mobile, Alabama. There were nearly 300 people in attendance at the 10-Year Celebration Reception where GOMA recognized the importance of the people and partnerships that were instrumental to its success. Former EPA Gulf of Mexico Program Director Bryon Griffith kicked off the evening with a recap of the formation of GOMA in the early years. Over 45 people who had been active in GOMA for 5 years or more were presented with a GOMA membership pin. Founders Awards were presented to several people who had been with GOMA from the very beginning (2004-2014). Dr. LaDon Swann concluded the evening with a toast:

"The Gulf of Mexico connects us culturally, spiritually and economically. We are who we are because of it. Ten years ago, some of us may have known each other, but through networks like GOMA, we've had the good fortune to build and nurture some enduring professional and personal relationships! May our joys be as deep as the Gulf and our misfortunes as light as the foam."

- LaDon Swann, Director, Mississippi-Alabama Sea Grant Consortium



Founders Award Recipients (L-R): Phillip Hinesley (ADCNR), Dugan Sabins (LDEQ), Mark Ornelas (ADEM), Matt Howard (GCOOS), Bryon Griffith (Dewberry, formerly EPA GMP), and Larry Handley (USGS)



NEXT STEPS

After 10 years of successful collaboration, GOMA's Management Team re-evaluated the region's priorities and the resulting structure includes new teams to address issues associated with regional data and monitoring as well as wildlife and fisheries. The comprehensive list of priorities was published in GOMA's *2015 Regional Collaborative Blueprint* and reflects the new team structure:

Water Resources – Combining focus areas of the Water Quality Team and the Nutrients Team, the new Water Resources Team will address multiple focus areas related to water quantity and quality, including fresh water in-flows, human health issues (pathogens and mercury), and aquatic health issues (hypoxia, excess nutrients, harmful algal blooms, and impaired streams).

Habitat Resources – The existing Habitat Conservation and Restoration Team will continue many of its successful actions and incorporate some issues previously addressed by the Ecosystems Team. Focus areas will include regional sediment management issues, sea-level rise modeling and data interpretation, living shorelines, and habitat status and trends.

Community Resilience - The existing Resilience Team will continue many of its successful actions and explore others that have immediate effects on our ability to respond to natural and man-made hazards. Focus areas will include risk communication techniques and resilience assessments as well as coastal adaptation and planning.

Data & Monitoring - The new Data & Monitoring Team will incorporate the water quality monitoring efforts and many of the data and data acquisition efforts of the Ecosystems Team. Comprehensive Gulf-wide monitoring will be a large focus of this team as well as data gathering and populating GOMAportal, and continuation of Gulf of Mexico mapping efforts.

Wildlife & Fisheries - The new Wildlife & Fisheries Team was developed out of a need to provide a venue for agencies and organizations working directly with wildlife and fisheries issues on a regional basis. Initial interest for this team includes regional biological objectives and monitoring for living marine resources. Team members will have an opportunity to develop additional focus areas.

Education & Engagement - The existing Education Team will shift its focus to providing education, outreach and engagement to the other team projects and programs. It will incorporate a wide variety of stakeholders including coastal trainers, outreach and extension specialists, and K-12 educators.



In 2015, GOMA announced the *Gulf Star* Public-Private Partnership designed to support projects that address the region's priority issues including healthy seafood supplies, improved habitat conservation, higher quality water resources, increased natural resource stewardship, and improved strategies for land use planning.

Action Plan III for Healthy and Resilient Coasts (Action Plan III) was drafted by the Priority Issues Teams with direction from the Alliance Management Team in 2015. ***Action Plan III*** was signed by all five Gulf State Governors in early 2016. GOMA, working through the five-year work plan, will continue to address the region's priorities in a collaborative way.



Photo credit: Rick Long, USFWS



APPENDIX

Funding Sources / GOMA Project Support

| Source | Date | Awardee | Amount | Teams Supported |
|-------------------------------------|-----------|------------------------------------|-------------|----------------------------|
| NOAA Office of Education, Sea Grant | 2006-2008 | DISL | \$200,000 | Environmental Education |
| NOAA NOS | 2008-2012 | MDEQ | \$1,813,900 | Nutrients |
| | 2008-2012 | GOMF | \$2,180,316 | Habitat |
| | 2008-2012 | MDMR | \$2,132,991 | Resilience |
| | 2008-2012 | HRI | \$1,875,447 | Ecosystems |
| | 2008-2012 | DISL | \$2,151,837 | Education |
| | 2008-2012 | FDEP | \$1,827,758 | Water Quality |
| | 2013-2016 | GOMA | \$104,500 | Resilience |
| EPA GMP | 2007-2013 | FDEP | \$1,042,648 | Water Quality Education |
| | 2007-2012 | USF | \$1,302,143 | Nutrients Water Quality |
| | 2007-2010 | FWC | \$302,474 | Ecosystems |
| | 2007-2009 | GOMF | \$333,805 | Habitat |
| | 2007-2010 | LUMCON | \$78,950 | Education |
| | 2007-2010 | DISL | \$150,000 | Education |
| | 2007-2010 | MDEQ | \$75,000 | Nutrients |
| | 2007-2012 | NatureServe | \$340,466 | Ecosystems |
| | 2007-2011 | TPWD | \$104,620 | Water Quality |
| | 2010-2011 | HRI | \$210,860 | Ecosystems Habitat |
| | 2010-2012 | TNC-FL | \$198,712 | Habitat |
| | 2010-2013 | GOMF | \$1,200,000 | Habitat |
| | 2010-2014 | FL A&M University | \$497,663 | Education |
| | 2010-2014 | Stephen F. Austin State University | \$135,000 | Education |
| | MDMR | 2013-2015 | GOMA | \$425,000 |
| National Park Service | 2010-2013 | Stephen F. Austin State University | \$135,000 | Education |