

GULF MEXICO AILIANCE

GULF MEXICO ALLIANCE

strong.

Governors' Action Plan IV for Healthy and Resilient Coasts 2021 - 2026

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lead

Governor Kay lvey ALABAMA



Governor Ron DeSantis FLORIDA



Governor John Bel Edwards



OUISIANA



Governor Tate Reeves

Governor Greg Abbott

-EXAS



Dear Gulf Residents and Visitors,

We, the Governors of the five U.S. Gulf states, recognize that the Gulf of Mexico provides a unique quality of life for citizens, workers, and visitors alike. The unique qualities of our region are fundamentally linked to the Gulf's natural resources. As the most productive body of water in the United States, we have bountiful estuaries that provide seafood for our nation, white sandy beaches that support a robust tourism industry, and a rich ocean and coastal area that provides our nation's energy.

We know that healthy natural resources mean healthy economies. Therefore, it is important to protect, conserve, and restore those natural resources. Recognizing that natural resources do not know geographical boundaries, the Gulf states formed the Gulf of Mexico Alliance to foster a regional approach to improving the health of our coastal areas and the lives of millions of people that live, work, and visit this region every year.

This Governors' Action Plan IV for Healthy and Resilient *Coasts* is the fourth in a series of plans that provide a blueprint for addressing common issues in a voluntary and collaborative way. We understand that by working together, we can make great strides in resource management and leave a lasting legacy for the Gulf of Mexico. Therefore, as the executives of the five Gulf states, we pledge our full support of and solicit your help toward implementing the actions detailed in this Governors' Action Plan IV.

Kay Ivy Ron De Santis Tate Reebes

Governor of Florida

Governor of Mississippi

John Bel Edwards Greg Abbott Governor of Louisiana

Governor of Texas

building partnerships for a healthier gulf.





build.

INTRODUCTION AND BRIEF HISTORY

Since 2004, the five Gulf states have been the foundation of the Gulf of Mexico Alliance, a partnership network dedicated to working on issues common to the Gulf region. The members of the Gulf of Mexico Alliance include state and federal agencies, tribal governments, communities, academic organizations, businesses, and non-governmental organizations in the region.

The mission of the Gulf of Mexico Alliance is to significantly increase regional collaboration to enhance the environmental and economic health of the Gulf of Mexico.

The overarching goals of the Alliance continue to be:

- providing forums for collaboration,
- developing and modifying tools to address regional issues,
- enabling strategic partnerships, and
- tracking restoration efforts.

Within the Alliance, this large network of partners works collaboratively to address issues in ways that a single entity cannot. Leadership from the five Gulf states and our federal partners is the reason for successful collaboration for over fifteen years and the completion of three successful Action Plans.

With this *Governors' Action Plan IV* comes new challenges, new opportunities, and new actions to address on-going and emerging issues. This Action Plan IV contains commitments to regional data sharing, serving underserved communities, and incorporating drivers such as sea level rise, storm impacts, and population and land use changes into our planning and models.





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2003

Pew Oceans Report and U.S. Ocean Commission Report calling for regional collaboration

2004

Gulf Governors' Agreement and Call to Action

2009 Governors' Action Plan II

2006

Governors' Action Plan I

Gulf of Mexico Alliance Through The Years

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2018 Executive Order 13840 establishing Regional Ocean Partnerships **20I0** Gulf of Mexico Research Initiative established as a result of the 2020 Deepwater Horizon oil spill Kickoff of Embrace the Gulf Campaign 2016 Governors' Action Plan III **20I2** Gulf of Mexico **202I** Alliance Business Advisory Council Governors' Action Plan IV 2015 time. Deepwater Horizon Project Tracker

state

Leadership from the five Gulf states forms the foundation of the Gulf of Mexico Alliance. Each of the five Gulf states has committed time and resources to its successful management, including leadership of our Priority Issue Teams.



federal

The success of the Gulf of Mexico Alliance is based not only on the dedication of the five Gulf states, but also on commitment from our federal partners.



U.S. Department of State * U.S. Department of Transportation U.S. Department of Homeland Security * Department of Health & Human Services * National Aeronautics and Space Administration * U.S. Department of Agriculture

The Gulf of Mexico Alliance is a network of partners that collaborate to address our identified priority issues in ways that a single entity cannot. The Alliance recognizes that the five U.S. Gulf states are not the only residents of this important ecosystem and we will seek opportunities, where appropriate, to collaborate with our international neighbors.

academia

The academic community is a critical partner for addressing Gulf of Mexico Alliance priorities in the region. In addition to expertise, innovation, and science capacities, universities educate the next generation of scientists and engineers required to support a healthy, sustained Gulf environment and economy.



nongovernmental organizations

Non-governmental organizations are another important sector that makes the Gulf of Mexico work. Many members of non-governmental organizations participate in the Priority Issue Teams and work together on Alliance-sponsored projects. These partners bring a strong link to local communities and a variety of skills such as research & monitoring, project implementation, and communication.

business and industry

A diverse group of industries are dependent on the common resources of the Gulf of Mexico and their involvement in the Alliance is important to achieving the goal of healthy ecosystems and economies.

business advisory council statement

Healthy ecosystems are the foundation for thriving coastal economies in the Gulf of Mexico region. The Gulf of Mexico Alliance brings together a wide variety of stakeholders to identify key priority issues that can benefit from a collective effort to move the needle towards positive action. This collaboration fosters a sense of shared stewardship of the Gulf of Mexico. As with all other stakeholder groups, the businesses and industries that advise and counsel in this collaborative process are vital to having open and honest conversations about successfully achieving and sustaining healthy ecosystems.

Recognizing that the Alliance is the Regional Ocean Partnership for the Gulf, the **Business Advisory Council exists to facilitate** communication between governmental, academic, and non-governmental partners and the diverse groups of industries that are dependent upon the resources and resilience of the Gulf of Mexico. We are committed to increasing the awareness of the interdependence of ecosystems and economies, promoting the advancement of regional priority issues, and serving as a forum for consultation and collaboration.

Signed, Gulf of Mexico Alliance Business Advisory Council

Support. Gulf Star Public-Private Partnership



The people and organizations of the Gulf of Mexico Alliance believe that collaboration brings exponential benefits. We have found the formula for building trust and building inclusive networks of people interested in doing good things for the Gulf.

The Gulf Star Program is a public private initiative of government agencies and private businesses. Working in partnership, these organizations fund regional projects tied to healthy ecosystems that impact Gulf economies through the Gulf of Mexico Alliance.

In just a few short years, the Gulf Star Program has become known for projects that provide foundational support for ecosystem health and resilience. Our success is built upon the strength of the Alliance's collaborative formula and Gulf Star projects are only made possible by the shared vision of our partners.



partners

Gulf Star partners include government agencies and several of the region's leading corporations working together to support priority projects. We work with public organizations to accomplish their agency objectives and private organizations to implement their philanthropic strategies - all right here in the Gulf of Mexico where they operate.

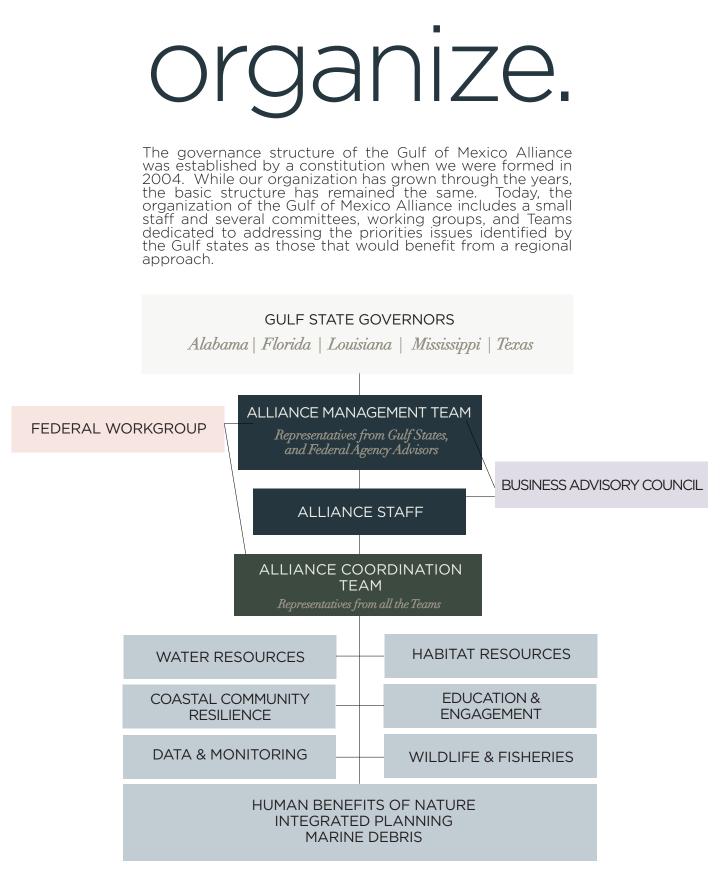
priorities

With the help of Gulf Star Partners, the Gulf of Mexico Alliance addresses priorities tied directly to Gulf economies:

healthy beaches sustainable seafood loss of critical habitat community resilience water quality

leveraging.







coordinate.

The **Alliance Management Team** is comprised of representatives of the five Gulf State governors with federal agencies and other organizations serving in advisory capacity.

Alliance Staff reports to the Alliance Management Team and administers the Priority Issue Team programs, facilitates the Federal Working Group, and coordinates the Business Advisory Council.

The **Alliance Coordination Team** is comprised of representatives from each of the Priority Issue Teams, including state chairs, coordinators, and federal liaisons that meet on a regular basis to coordinate across the teams and implement the vision of the Alliance Management Team.

Priority Issue Teams are the hallmark of the Gulf of Mexico Alliance. These stateled Teams focus on well-defined issues and are key to our success. Participation in the Teams is open and voluntary. They are composed of region-wide partners who collaborate on a regular basis to achieve individual team objectives. Specific actions associated with addressing the priority issues are developed and implemented by the voluntary participants of the teams. In this Governors' Action Plan IV, the Alliance is addressing six priority issues: • Coastal Community Resilience

- Data and Monitoring
- Education and Engagement
- Habitat Resources
- Water Resources
- Wildlife and Fisheries

Cross-Team Initiatives are opportunities for cooperation among two or more Priority Issue Teams. In this Governor's' Action Plan IV, the Alliance is addressing three crossteam initiatives:

- Human Benefits of Nature
- Integrated Planning •
- Marine Debris

The Federal Working Group is comprised of federal agencies working in the Gulf region that bring diverse expertise and established experience to the Alliance.

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



Credit: Patricia Richardson

coastal community resilience team

Homes, businesses, and infrastructure are at risk from the impacts of coastal hazards such as hurricanes, coastal storms, and flooding. Events such as these disproportionately impact our most vulnerable populations. Communities that prepare for short and long-term coastal impacts and consider hazard risks in planning are able to recover from disasters more quickly.

The Gulf of Mexico Alliance Coastal Community Resilience Team is developing strategies and tools that improve access to resources and actively engage diverse perspectives. For *Governors' Action Plan IV*, the Team will focus its actions on the regional ability to respond to natural and man-made hazards, including risk communication techniques and resilience assessments as well as a variety of coastal adaptation and planning methods.

team goals

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

risk & resilience communication

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

actions

- Conduct local community coastal hazards
 workshops
- Get the Homeowners Handbook into the hands of local homeowners
- Promote the StormSmart Coasts network
- Share sea level rise modeling results
- Update other resilience tools with latest information

why do this?

Communication about vulnerabilities and assistance with available tools will encourage communities to use this knowledge in making preparedness, response, recovery, mitigation, and development decisions.

expected results

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



COASTAL COMMUNITY RESILIENCE priority issue



focus area

risk & resilience assessment

Help coastal communities to evaluate their resilience associated with the impacts of coastal hazards.

actions

- Assess the resilience gaps within the natural, built, and socioeconomic systems of a community
- Help communities to quantify risks to their resilience using the Community Resilience Index or other evaluation tools
- Expand the Community Resilience Index to include additional sectors
- Support the implementation of community-based resilience projects to reduce risk and share best practices

why do this?

Communities that identify and prepare for the potential impacts of disruptive threats can bounce forward better from these events.

expected results

- Communities better understand the risks to the natural, built, and social systems of the Gulf Coast as well as the resilience and restoration tools available to help them.
- Residents and visitors utilize available resilience and restoration tools for selfassessment to reduce coastal risks and vulnerabilities.
- New sectors of the community make progress toward resilience after using resilience tools to assess vulnerabilities and acting to improve resilience and reduce risk.



Credit by: Will Greer

focus area

resilience planning & adaptation

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

actions

- Encourage coastal communities to use resilience techniques, strategies, and resources identified as best practices
- Document case studies, lessons learned, and best practices to communicate with others

why do this?

Incorporating resilience into their planning process empowers communities to strengthen their built environment as well as their socioeconomic status.

expected results

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

priority issue team

Credit: Carla Swallow

data & monitoring team

Monitoring programs in the Gulf of Mexico encompass a wide range of natural resource and socioeconomic topics that provide data and information for decision making. These programs describe how data and information can be collected and used in ways so that multiple stakeholders and communities benefit from the information.

For Governors' Action Plan IV, the Data and Monitoring Team will focus their efforts on developing integrated networks for monitoring and mapping. This structural framework is the foundational perspective for a regional, long-term partnership supported by the Gulf of Mexico Alliance. Increasing coordination can reduce redundancy; integrate monitoring, mapping and other technology efforts; address local, state, and regional issues; promote inter-agency data sharing; and provide real-time or near real-time observations with synthesized information and products.

🧯 team goals

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

DATA & MONITORING priority issue

focus area

gulf monitoring network

Organize the development and implementation of a comprehensive monitoring structure in support of state and regional program coordination.

actions

- Identify, coordinate, and communicate essential monitoring needs related to water quality, habitats, and wildlife and fisheries in collaboration with other Gulf of Mexico Alliance Teams and Communities of Practice
- Promote the guidance, best practices, and comparability for data and information collection, sharing, and accessibility

why do this?

By increasing coordination, monitoring entities could reduce redundancy; integrate monitoring and related research technology development efforts; address local, state and regional issues; promote inter-agency data sharing; and provide real-time or near real-time observations along with synthesized information and products.

expected results

The Gulf Monitoring Network (GMN) is a community of monitoring practitioners that will promote guidance resources to organize the development and implementation of a comprehensive monitoring structure that integrates existing monitoring plans. It describes how data and information can be collected and applied so that it is most useful to multiple stakeholders and communities. In addition to data, this effort should also explore data quality, field methods and protocols, policies, practices, and metadata documentation that can vary between state and federal entities. This can be an evolving effort as best practices, accepted methods and protocols, policies, etc., change with time.



DATA & MONITORING priority issue





focus area

gulf mapping network

Coordinate and communicate essential mapping needs and information.

actions

- Identify essential mapping needs in collaboration with other Gulf of Mexico Alliance Teams
- Promote collaboration and dissemination of mapping standards, classification methods, and map products

why do this?

The Gulf of Mexico Mapping Network (GoMMN) provides a forum to coordinate and communicate essential mapping information to better serve local, state and regional needs. By expanding into the areas of essential mapping needs identified by the other Gulf of Mexico Alliance Teams, incorporating these data requirements with restoration activities, and providing an environment to collaborate, the GoMMN can identify gaps and assess areas of concern where the Gulf of Mexico Alliance and stakeholder interests overlap. The GoMMN can facilitate access to mapping information and products that support multiple intentions (map once, use many times).

expected results

The GoMMN intends to coordinate and communicate priority mapping issues identified by Gulf of Mexico Alliance Teams. The development and support of a common visualization platform for mapping requirements that supports discoverability and links to relevant data and documentation is fundamental to GoMMN. Data collected using a multitude of methodologies at differing spatial scales can be compared across the region and used for large-scale analyses. This network will also support an improved data integration and allow researchers to leverage existing data and map products.



Credit: Tyler Jones

habitat resources team Gulf Coast natural habitats have suffered significant lo degradation over the past several decades. These com

Gulf Coast natural habitats have suffered significant losses and degradation over the past several decades. These communities are threatened by increasing development, pollution, extreme weather events, day-to-day and storm-driven erosion, and sea level rise. The Habitat Resource Team's goal is to support positive outcomes in priority Gulf Coast habitats and facilitate improved conservation and restoration planning, policies, and implementation. Within *Governors' Action Plan IV*, the Habitat Resources Team will continue to focus on priority habitat information, living shorelines, and regional sediment management.

team goals

- Coordinate the development and communication of information on priority Gulf coastal habitats and regional status and trends analyses
- Develop and disseminate information and tools for the planning and implementation of living shorelines across the five Gulf states
- Develop information and tools to assist Gulf stakeholders plan and implement more comprehensive regional sediment management
- Coordinate and contribute as appropriate Priority Issue Team activities and work products to the goals and objectives of the Alliance's Cross-team Initiatives

habitat assessment

Coordinate development and communication of information on priority Gulf Coast habitats (marsh and mangroves, seagrasses, oysters, benthic) needed to make informed management decisions, improve disaster response, and develop restoration strategies

actions

- Support priority habitat mapping and trend analyses
- Coordinate information-sharing about habitat assessments of priority habitats
- · Identify challenges and solutions for response to, and management of, habitat change

why do this?

Habitat assessment and mapping is necessary to establish baselines, detect ecological change, and manage natural resources. Updated status and trends data on Gulf coastal habitats are important to inform coastal management decisions to maintain and restore our natural resources and the goods and services we derive from them. Leveraging existing state-level habitat assessment efforts allows for the efficient creation of these status-and-trends documents, which can be used to identify "big picture" challenges and solutions across the region.

expected results

A broad range of coastal stakeholders and managers utilize priority habitat assessment and trend data to inform management decisions to maintain our natural resources. Information on habitat assessment and mapping is more accessible to stakeholders and managers.

living shorelines

Develop, promote, and evaluate best practices that allow stakeholders to implement living shorelines as an alternative to traditional shoreline protection methods

actions

- Advance and coordinate the development, use, and transfer of living shorelines information
- Develop an inventory of lessons learned from living shorelines projects that model the generally
- preferred, least-damaging, and practicable alternative to traditional shoreline armoring
 Develop and communicate recommendations for standardized metrics of living shoreline
- Develop and communicate recommendations for standardized metrics of living shoreline projects to ensure consistent monitoring of project performance over time
- Evaluate the use of nationwide permitting for living shorelines projects

why do this?

Historically, property owners have relied on hardened structures (i.e. bulkheads) to protect their real estate from coastal erosion that displace or damage coastal habitats. Living shorelines offer an effective alternative for protecting property and infrastructure, controlling erosion while also creating habitat for fish and wildlife. By developing and advancing living shoreline implementation techniques, site suitability, project costs, and permitting, the Alliance can promote methods that restore habitat and provide positive benefits for coastal ecosystems.

expected results

Eroding shorelines are protected and natural habitats and the ecosystems services they provide are restored. Coastal property owners increasingly choose living shorelines rather than traditional shoreline armoring to protect their eroding shoreline. Likewise, shoreline protection practitioners are armed with improved knowledge about living shorelines and training to successfully implement shoreline projects. And, Gulf stakeholders have an improved understanding of permitting and site suitability regarding living shorelines.

regional sediment management

Serve as a Gulf-wide coordination point for the development of information and tools that inform sediment resource management and facilitate discussions about challenges regarding the availability and allocation of Gulf sediment resources

actions

- Develop tools and data to assist the implementation of regional sediment management and beneficial use of dredged materials
- Promote regional sediment management and beneficial use information
- Conduct studies that facilitate sediment management, including engagement and conflict resolution

why do this?

Sustainable and effective ecosystem restoration and improved coastal resilience requires the effective use of sediment resources. Since Action Plan I, the Gulf of Mexico Alliance has supported several local/regional data development and planning efforts and will continue regional collaboration regarding improved sediment management practices to catalyze and advance Gulf restoration.

expected results

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



Credit: Jennifer McGee

education and engagement team

The Gulf of Mexico region is fortunate to have a wealth of experts that provide diverse education, outreach, and engagement on regional priorities. In this *Governors' Action Plan IV*, the Education and Engagement Team will focus on stewardship and creating a science-informed society, which are the heart of the Gulf of Mexico Alliance. The Team will work with other Alliance Teams and Cross-Teams to build on their collaborative relationships and expand engagement to include new partners in the Gulf of Mexico's vast watershed. Given the Gulf's unique cultural heritage, the Team will strive for more diversity and inclusion. The Education and Engagement Team is committed to engagement that leverages resources, builds partnerships, and results in measurable impacts.



EDUCATION & ENGAGEMENT priority issue



Credit: Erika Zambello

focus area

collaborative educational partnerships

Increase collaborative educational partnerships to build capacity and expand local, regional, and national learning-in-action opportunities and stewardship.

actions

- Enhance and establish collaborative partnerships to support environmental stewardship outreach efforts
- Address needs of the education network through professional development and training
- Improve environmental stewardship by increasing capacity of stakeholder organizations

why do this?

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

expected results

Audiences within both the Gulf region and broader Gulf watershed are aware of the importance of our region and of the actions they can take to conserve and protect it. Expanded collaboration carries Gulf of Mexico Alliance science and stewardship messages farther. Success is determined by enhanced understanding of Gulf of Mexico watershed issues as well as improved stewardship behavior.

alliance engagement activities

Integrate Gulf of Mexico Alliance activities to promote public awareness and stewardship of the Gulf of Mexico and its watershed.

actions

- Identify opportunities to develop engagement that informs stakeholders of important Gulf of Mexico Alliance Team messages
- Partner with other Gulf of Mexico Alliance Teams to implement stakeholder engagement activities
- Utilize Gulf of Mexico Alliance communication channels to increase awareness of Alliance priority issues

why do this?

In a changing world, information must be shared using an increasing number of methods as people are communicating in both new and traditional ways. Integrating education and engagement into all Gulf of Mexico Alliance initiatives enables translation, consistency, and effective programming. Informed and involved audiences better understand the significance of Alliance initiatives and projects.

expected results

Education and engagement professionals work together with stakeholders to build communication capacity around Alliance priority issues. Also, informed stakeholders have the tools to make wiser decisions that can translate to positive Gulf stewardship.



Credit: Erika Zambello



Credit: Jennifer McGee

water resources team

The Gulf of Mexico region provides beautiful beaches, delectable seafood and a myriad of activities such as boating, fishing and snorkeling. None of this would be possible without the benefits of our water resources. Today's Gulf of Mexico faces multiple issues related to water quality, water quantity, human health risks, and aquatic health.

The Water Resources Team will address issues specific to threats to human and aquatic life, resource conservation as it relates to water quality, protective measures associated with resource management, and advancing/increasing stewardship for healthy water resources. Understanding the relationships among these issues is essential for enhancing and sustaining this vital resource.

.....

team goals

- Protect the vitality of water resources within the Gulf of Mexico watershed by advancing science and technology, improving education and overall environmental awareness, and enhancing partnerships
- Identify, prioritize, and pursue additional data, information, and research needed to better characterize, understand, and reduce negative impacts to water quality and potential threats to human health or aquatic life
- Initiate and support activities at the local, state, regional, national, and international level to identify and understand linkages between water quality, water quantity, and sustainability and threats to aquatic life or human health, and how these connections contribute to strong communities and a thriving economy within the Gulf of Mexico region

threats to human health and aquatic life

Decrease threats to human health and aquatic life through research projects, coordination of water science information, and providing accurate technical messaging

actions

- Promote monitoring and research pertaining to threats to human health and/or aquatic life
- Develop and support implementation of onthe-ground watershed projects that reduce risks and advance understanding of threats to human and aquatic health

why do this?

Data collection, monitoring, research, and rapid response to ongoing events within our Gulf of Mexico waters help us to identify and understand how aquatic life and human health are impacted by specific threats to water resources. Supporting regional coordination as well as the development and implementation of effective projects reduces potential negative impacts. Gulf-wide efforts to collect data, monitor water resource conditions and trends, and identify linkages between water quality and threats to human health or aquatic life (such as harmful algal blooms, bacteria, microplastics, etc.) provide critical information to support improvements within Gulf of Mexico waters.

expected results

Natural resource managers and stakeholders have an increased knowledge of potential threats to human health or aquatic life within Gulf of Mexico waters. Also, risks to human health and aquatic life are decreased.

WATER RESOURCES

impacts to water quality

Support efforts to evaluate, mitigate, reduce, and eliminate sources of nutrients and other pollutants within the Gulf of Mexico watersheds

actions

- Partner to collect data and establish or expand pollutant reduction practices in agricultural watersheds
- Collaborate with business and industry to demonstrate the economic value of water resource conservation

why do this?

Pollutant reduction practices and water conservation and reuse initiatives have direct benefits to water quality. Improved water quality supports healthy water resources, healthy Gulf communities, and a healthy Gulf economy.

expected results

Excess nutrients or other pollutant runoff is significantly reduced as a result of expanded partnership efforts in priority watersheds. In addition, the awareness of the business community is improved regarding the economic value of water, leading to increased interest in and application of water conservation and reuse efforts.

Credit: Owen Matthew



water resources protection

Support regional and national efforts to improve water resource management through implementation of protective measures

actions

- Support the development and implementation of restoration and protection initiatives
- Share water data, methodologies, and technologies to enhance water protection and restoration
- Strengthen and support the protection and restoration of water resources
- Increase awareness of how healthy water resources are essential for a healthy Gulf economy

why do this?

Protection and restoration of water resources is often implemented at local and regional levels. Support for collaboration among local, regional, and Gulf-wide efforts is essential to protecting and restoring water resources and maintaining strong coastal communities.

expected results

Water conservation and protection initiatives are leveraged and demonstrate that protection and restoration efforts are essential for a healthy, stable coastal economy.

WATER RESOURCES priority issue

focus area

stewardship of water resources

Advance knowledge and understanding of water science to promote stewardship for healthy water resources

actions

- Provide accessible, accurate, and reliable information regarding water resources
- Provide opportunities for water science training for citizen scientists, industry groups, public officials, media, educators, and other interested groups
- Promote stewardship of water resources through community engagement projects and activities

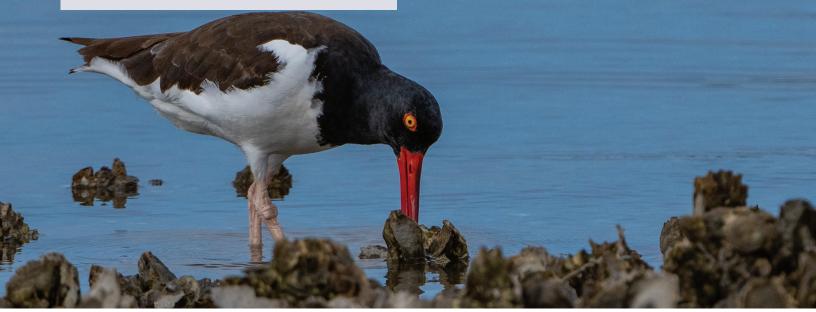
why do this?

Understanding the complexities of water science in the Gulf is essential for its protection now and into the future. Increasing awareness regarding the importance of the Gulf's water resources and how critical this resource is for Gulf communities and their economies, promotes a continued protection for generations to come.

expected results

Water resource practitioners are better prepared to deal with the complex water-related issues facing the Gulf region. Communication of water science topics with the public is greatly improved. The Gulf of Mexico Alliance serves as a coordination point for accurate, trusted water science data and information.

priority issue team



wildlife & fisheries team

The Gulf of Mexico region is home to over 15,000 species of marine and coastal wildlife including marine mammals, sea turtles, and over 400 species of birds. The Gulf also provides a third of the nation's seafood production. Commercially and recreationally important species include shrimp, red snapper, oysters, crabs, and menhaden.

The Wildlife and Fisheries Team will focus on assessing status and trends, threats, and needs of priority wildlife species and will collaborate with other Gulf of Mexico Alliance Teams to enhance ecological resilience. The Team will also work to provide tools and information that supports better decision making for wildlife management, commercial and recreational fisheries, and emerging areas of interest such as aquaculture.



team goals

- Work to understand and support diverse wildlife and fisheries populations to preserve and sustain a resilient Gulf of Mexico ecosystem
- Provide information concerning wildlife and fisheries to policy makers, managers, and other key stakeholders and through collaboration with the other Gulf of Mexico Alliance Teams

status and trends

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

actions

- Identify priority species to assess trends, threats, and/or habitat linkages
- Prioritize research on status and trends, threats, and habitat linkages
- Identify and coordinate priority short and long-term monitoring programs to support the development, expansion or refinement of these programs

why do this?

Natural resource management is dependent on access to and availability of social-ecological data and information, and the ability to adaptively respond to future changes through coordinated and integrated data collection efforts that are science-based, relevant, rigorous, and cost-effective.

expected results

Status and trends results assist natural resource managers in assessing and understanding key performance indicators of baseline conditions and historical trends to inform decisions and identify future research needs. Establishing baseline conditions for target resources allows managers to respond better to future changes.



collaboration

Collaborate with other Gulf of Mexico Alliance Teams and partners to enhance ecological resilience by sharing knowledge and informing actions that impact wildlife and fisheries

actions

- Provide information to key stakeholders concerning fish and wildlife, their habitats, requirements, or other issues
- Engage key stakeholders and efforts to enhance ecological resilience through tools, data, and messaging

why do this?

Sound natural resource management requires collaboration with the other Gulf of Mexico Alliance Teams; local, state, federal, and international partners; and non-governmental organizations.

expected results

Working collaboratively, it is expected that there will be reduced duplication of efforts; increased sharing of data and information; increased leveraging of resources; and broader applicability of monitoring and research results. These benefits are expected within and across taxa, methodologies, protocols, and procedures. There will be better alignment with existing priorities and increased diversity and level of knowledge, skills, abilities, and expertise.

species conservation

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

actions

- Coordinate multi-partner collaborations regarding relevant conservation issues and threats
- Identify key areas for conserving priority species
- Engage key partners to align projects and address management issues
- Utilize data and information to inform management practices that support conservation needs

why do this?

It is important to support species conservation efforts in order to effectively conserve and manage Gulf of Mexico species that have economic, cultural, aesthetic, or intrinsic values. Vital to those efforts is communicating and coordinating across geo-political or jurisdictional boundaries.

expected results

Wildlife and fisheries management is grounded in sound science and management decisions should adequately reflect and address stakeholder values and needs. The Gulf of Mexico Alliance partners comprehensively conserve and manage wildlife and fisheries populations across geopolitical and/or jurisdictional boundaries.

1

cross-team initiative

integrated planning

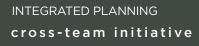
Gulf Coast communities are deeply connected to the natural environment and the ways it influences our sense of place. While the built and natural environment are interdependent, planning activities have rarely been connected. Coastal habitats, climate, natural hazards, and the conservation needs of priority wildlife species all shape the planning that takes place within a community. Planning also plays an important role in the adaptive management of natural systems.

The Integrated Planning Cross-Team Initiative will serve as a coordination point to support implementation of adaptive and resilient concepts at the local community and regional scale. Conservation, restoration, and resilience decisions also depend on tools and modeling. The Cross-Team Initiative will provide data and modeling for drivers that influence the built and natural environment such as sea level rise, climate, population growth, and land use change.



cross-team initiative goals

- Continue the development of information and tools in support of Gulf Coast-regional integrated program and project planning
- Promote local community integrated program and project planning and implementation
- Advance natural and human system planning models that contribute to Gulf Coast local and regional decision-making



Credit: Texas Sea Grant

focus area

integrated gulf regional planning

Support the development of strategies that facilitate adaptive and resilient concepts at the intersection of human/built and natural systems

F. Sectors

actions

- Coordinate and promote integrated planning that comprehensively includes conservation, restoration, and resilience
- Develop conservation, restoration, and resilience datasets for integrated regional planning

why do this?

Management is most effective when decision-makers and scientists consider conservation, restoration and resilience within a comprehensive framework.

expected results

Regional datasets and planning tools for habitat restoration, fish and wildlife conservation, and human communities will be available for stakeholders to plan and implement comprehensive approaches to Gulf Coast resources. This will maximize the duration and degree of public and ecosystem benefits gained from limited restoration funding.

integrated local community planning

Provide forums and tools to equip local communities to take into account long-term actions associated with both human use and natural systems

actions

- Identify funding, tools, and technical assistance for local planning that include conservation, restoration, and resilience
- Host workshops/practitioner forums for local communities to incorporate conservation, restoration, and resilience into their planning
- Develop and share recommendations for locally appropriate tools and approaches for planning that incorporates conservation, restoration, and resilience

why do this?

Collaborative planning with stakeholders at the local level will engage stakeholders who are most directly affected by conservation, restoration and resilience activities.

expected results

Local communities across the Gulf will have improved access to the tools and information needed to inform the planning and implementation of integrated programs and projects.



natural and human system planning models

The developers of plans used for conservation, restoration and community resilience need to recognize and consider the interdependencies between the human and natural environments. Those plans often rely on landscape-change and ecosystem models for projecting the response of natural and human systems. This focal area recognizes the need for relevant conservation, restoration, socioeconomic, and resilience data and modeling to inform decisions.

actions

- Coordinate the identification, prioritization, development, enhancement, and delivery of natural- or human-system predictive models for use by Gulf stakeholders.
- Evaluate the comparability of predictive models used for integrated planning

why do this?

There are numerous natural and human system models available for Gulf stakeholders to use in support of decision-making. Users benefit from up-to-date models and an understanding of their capacities.

expected results

Gulf stakeholders will have improved access to, and understanding of, the suite of available conceptual and numerical models available to assist and facilitate coastal resource decision-making.

Credit: Billy Pope





Credit: Patrycja Stubbs

human benefits of nature

Coastal communities have an inherent connection to ocean and nearshore ecosystems and the ecological, social, and economic benefits which they provide. Wetlands buffer storm impacts, forests capture carbon and provide wildlife habitat, and clean water supports productive fisheries and recreational opportunities. These processes are the foundation on which our communities were built and their health allows our communities and coastal ecosystem to thrive. Acknowledging, understanding, and supporting these complex relationships is critical to maintaining balance between human communities and coastal ecosystems.

The Human Benefits of Nature Cross-Team Initiative aims to increase understanding of these ecosystem services, communicate the value of these relationships, and encourage the incorporation of this knowledge into environmental assessment, planning, and restoration.

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cross-team initiative goal

• Advance the understanding of how protection, restoration and management of coastal and marine natural resources benefit people and advance inclusion of these human-natural connections in value assessment, management and policy decisions, and communications

HUMAN BENEFITS OF NATURE cross-team initiative



focus area

Credit: Florida Fish and Wildlife Conservation Commission

connection between nature & human use

Characterize the connection between human benefits, economic well-being, and natural resources through studies and public stewardship

actions

- Develop and communicate a stronger understanding of the connection between coastal and marine resources, human use, and social/economic well-being
- Promote stewardship of coastal and marine resources through public outreach and engagement activities

why do this?

Humans are intricately connected to the natural world around them. Understanding and communicating the contributions of nature in support of human uses is critical for effective management and to garner public support for protective policies and stewardship.

expected results

Decision makers have a more comprehensive understanding of the interconnectedness between natural and human systems. By sharing success stories and experiences, effective policy and stewardship actions can be achieved.

benefits of the ocean and coastal economy

Investigate the contributions and importance of the ocean and coastal economy to supporting and sustaining coastal communities

actions

Enhance the understanding of the economic contributions of ocean and coastal industries through targeted studies

why do this?

Many coastal communities are dependent on ocean and coastal industries. Developing a better understanding and communicating these contributions could aid in supporting economic stability and community resilience.

expected results

Public awareness and support for "blue economy" initiatives is broadened through the study and communication of ocean and coastal industry contributions.





benefits of restoration and protection

Assess how protection and restoration activities promote ecosystem and economic health as well as community resilience

actions

- Conduct ecosystem services assessment studies to enhance the understanding of how habitat protection and restoration projects contribute to ecosystem and community resilience
- Integrate human benefits into ecosystem assessments

why do this?

Developing a better understanding of the ecological, economic, and social benefits of ecosystem restoration and protection can enhance the overall effectiveness of conservation efforts and resilience planning.

expected results

Knowledge of the value of ecosystem restoration and protection is incorporated into coastal management decision-making.



Credit: Jace Tunnell

marine debris

The Gulf of Mexico is impacted by marine debris that litters its waters and shorelines and harms ecosystems, marine life, navigation, and the economy. It is generated from multiple sources, including land-based debris from inland and densely populated coastal areas, and ocean-based debris from commercial and recreational activities in the Gulf. To effectively address the marine debris problem in the Gulf of Mexico, it is important to develop coordinated responses and activities among stakeholders and organizations. In this *Governors' Action Plan IV*, the Gulf of Mexico Alliance Marine Debris Cross-Team Initiative is dedicated to working to address the issue of marine debris in the Gulf through prevention, research, and removal efforts.

cross-team initiative goal

• The goal of this initiative is to assess, prevent, remove, and eliminate marine debris and litter in the Gulf of Mexico and its watersheds to enhance wildlife, fisheries, habitats, water resources, humans and the Gulf economy:



prevention

Prevent the introduction of marine debris and litter by raising awareness and improving stewardship through an educated and involved community

actions

- Engage companies and businesses to reduce or eliminate plastic packaging
- Emphasize the connection between economics, use of sustainable materials, and reduction of marine debris and litter
- Establish coordinated marine debris resources and educate consumers
- Enhance efforts to reduce local sources of marine debris

why do this?

By working together, litter can be prevented from entering the ocean in the first place. Cities, businesses, communities, and homes can all contribute to the ultimate solution of marine debris.

expected results

Overall marine debris and litter is reduced in watersheds in the Gulf region as a result of an informed community that understands its potential impacts.



MARINE DEBRIS CROSS-TEAM INITIATIV

Credit: Jennifer McGee

focus area

research

Assess the impacts of marine debris and litter through research and monitoring to develop solutions

actions

- Support citizen science projects focused on marine debris
- Increase sampling and coverage of marine debris research projects
- Support research on the impacts of marine debris and of sustainable alternatives or preventive technology

why do this?

Marine debris is a globally pervasive issue that poses a significant threat to the marine environment and the communities that depend on them. Although multidisciplinary research on this issue has increased exponentially over the last decade, there are still substantial gaps in our understanding.

expected results

Multidisciplinary research shapes our understanding of the environmental and health effects of marine debris, provides direction in designing outreach and educational programs, improves preventative methods to reduce marine debris and litter, and determines what other future actions need to be taken for long-lasting change.

CROSS TEAM INITIATIVE priority issue



Credit: Jennifer McGee

focus area

removal

Facilitate and implement locating, removing, and disposing of marine debris and litter in the Gulf of Mexico and its watersheds

actions

- Support incentives for volunteer marine debris and litter removal
- Track and communicate opportunities for removal of marine debris and litter
- Support marine debris and litter removal opportunities with a focus on fishing and aquaculture industries

why do this?

Marine debris and litter have been accumulating in the environment for decades. To prevent further environmental impacts from these materials they must be cleaned up and legacy debris should be removed by communities.

expected results

Habitats and human health are improved by removing marine debris and litter that entangle wildlife or could be ingested and enter the food chain. Progress and trends in reducing marine debris and litter are tracked and shared.

a path forward.

Over nearly 20 years, the Gulf of Mexico Alliance has built a reputation for fostering collaborative relationships that lead to positive change. We have grown into a trusted source of scientific information and best management practices for coastal communities and ecosystems across the region. By working together, we have strengthened community resilience, increased access to data, and improved our management of coastal habitats and wildlife species.

The Alliance remains steadfast in our commitment to achieving the vision for a healthier Gulf reflected in *Governors' Action Plan IV*. The work defined in this Plan was written as a shared effort among the five Gulf states, in partnership with federal agencies, academics, businesses, and non-governmental organizations. Every person and organization who contributed to developing this plan has a role to play in our success and we will continue to foster new relationships in the years to come.

Just like the Gulf of Mexico, our work flows without limits, transcending geographic and organizational boundaries. We look forward to addressing the issues that directly affect Gulf ecosystems and economies in continued partnership.



If you are looking to be a part of something larger than yourself, **JOIN US!**

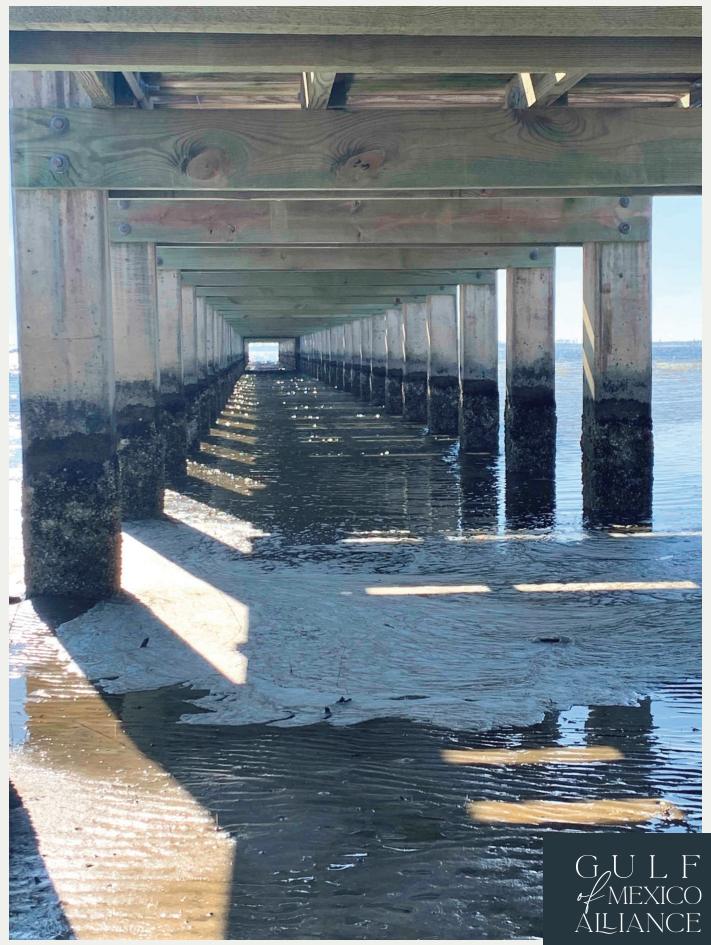
The Gulf of Mexico Alliance is a 501c3 organization and membership is free to anyone willing to give their time and expertise. The more voices we have at the table, the better solutions we are able to develop.

To join us, go to https://gulfofmexicoalliance.org/contact-us

We accept donations in order to continue to implement projects that contribute to our mission.

To support us, go to https://gulfofmexicoalliance.org/get-involved/donate





Credit: Judy Altman



Gulf of Mexico Alliance www.gulfofmexicoalliance.org

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