



Gulf 20/20:

Case for Long-Term
Restoration

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Gulf 20/20: The Case for Long-Term Restoration

The Deepwater Horizon blowout has now become the largest offshore oil spill in US history. With the loss of the 11 men killed in the explosion and the ongoing loss of livelihoods for thousands of Gulf Coast residents, this disaster shows with painful clarity how environmental disaster is also human tragedy.



Oil slicking the surface of the Gulf. © Bridget Besaw

Coming on top of decades of degradation, merely cleaning up the effects of the spill will not be enough to save the Gulf and all the benefits—food, lives and livelihoods, shelter from storms—it provides for the plants, animals and people of the Gulf, as well as the nation. This is a pivotal moment and people are asking stark and sobering questions, “What will the Gulf be like next year? What will it be like in five years or 10? Or even 20? What will the Gulf be like when present generations pass it to our children and our grandchildren?” Will we leave a legacy of abundance or a history of devastation? Right now, we have a choice.

BP must be held accountable for the full cost and extent of damages associated with the effects of the spill. But given what’s at stake, the nation’s response must go well beyond cleaning up the current mess to restoring the Gulf’s resilience and health in all areas—social, economic and environmental.

The decisions made over the next several months will echo—for good or for bad—far into the future.

A healthy economy does not need to come at the expense of a healthy Gulf of Mexico.

While the magnitude of the disaster is still unfolding, one thing is clear—the long history of decline in the Gulf of Mexico must be reversed and restoration must occur at a scale that is beyond what has previously been accomplished. Business as usual will not be enough and the people of the Gulf and the nation must realize that healthy Gulf habitats are the foundation of a robust and diverse economy.

On the cover (top to bottom): Aerial of the Mississippi River delta and river channel below New Orleans, Louisiana. Marsh grasslands and coastal forest exist on a landscape built from thousands of years of silt carried from the midwest and great plains into the Gulf of Mexico. © Bridget Besaw; With less than 400 in existence, whooping cranes migrate to the Texas coast every year. © Kendal Larson; Mel Landry, Public Involvement coordinator for BTNEP, adjusts yellow oil containment booms that lay along an artificial oyster reef near the coast of Grand Isle on the Louisiana Gulf Coast. © Bridget Besaw

To change the future and avoid the obstacles of the past, we all—state and federal governments, NGOs, oil and gas, tourism, communities, and all of those who value and rely on the Gulf—must come together around a truly comprehensive plan to re-imagine, revitalize and restore it.

At more than 1.3 billion pounds of annual seafood production with a dockside value of \$661 million, the Gulf of Mexico produces more finfish, shrimp and shellfish than the entire U.S. Atlantic seaboard fisheries combined.

More than 24 million recreational fishing trips—28 percent of the US total—were taken in 2008 alone.

Tourism and recreation, much of which is related to healthy Gulf beaches and waters, provides more than 600,000 jobs and \$9 billion in wages annually.

Half of the nation's domestic oil and gas is produced in the Gulf region, and seven of the 15 largest ports in the nation are in the Gulf.

A Place Like No Other

The Gulf of Mexico is one of the few places on Earth where the health of the environment is so obviously linked to the health of the economy and community on such a vast scale. In the Gulf, clean and healthy marshes, beaches, and bays mean abundant fisheries, protection from storm surge and hurricanes, and a vibrant tourism economy. Vital commerce and industry and rich coastal and marine ecosystems have coexisted for generations in the Gulf. The economy of the United States as a whole is tightly linked to the energy, shipping and other industries that operate here.

However, decades of damage affect the Gulf's ability to support these needs and the needs of wildlife. The effects of the Gulf oil spill have now added urgency to a problem that was already ingrained, and directly impacts the lives and livelihoods of 24 million Americans from Florida to Texas who rely on a healthy and resilient Gulf of Mexico.

Over the last 90 years, the Gulf and the natural systems that support it have changed dramatically. Rivers have been altered by levees and dams that restrict fresh water and sediments needed for healthy coastal wetlands; coastal prairies and forests have been developed and fragmented, dredging and overharvesting are harming shellfish beds, and coral reefs and sea grass beds have been severely damaged.



Oystermen tonging in Apalachicola Bay, Florida. © Richard Bickel

The Gulf of Mexico is among the fastest-developing regions in the world. Already lost are up to 50 percent of the Gulf's inland and coastal wetlands, up to 60 percent of its seagrass beds, over 50 percent of oyster reefs, and up to 33 percent of its mangrove forests.

In Louisiana, a football field of land disappears into the Gulf every half-hour. Since the mid-1900s, nearly 2,000 square miles of fish nurseries, shrimping grounds, storm buffers, recreational paradise, and communities have been lost.

As of July 4, 2010, the federal no-fishing zone in the Gulf resulting from the oil spill was expanded to 81,181 square miles*, representing 33.5 percent of Gulf federal waters. If managed properly, Texas' healthy coastal nurseries—which currently remain largely unaffected by the oil spill—can help fill the void created by fishing bans. However, it will be important to strike a balance between making up for lost production and maintaining the delicate balance of life within Texas's waters.

As a result, millions of acres of marshland and other habitats have been lost, fisheries and shellfish stocks have lost productivity, dozens of species have become threatened or endangered, and the resiliency of these systems in the face of natural or man-made disturbances has been compromised.

There are still areas in the Gulf that have remained untouched by oil, and in addition to meeting the immediate needs of oiled wildlife, it will be increasingly important to continue, expand and accelerate conservation and restoration work on areas that have so far been spared. Once the full impact of the oil spill is fully realized in other areas of the Gulf, restoration planning and action will need to include those places as well.

Restoration work must continue as quickly and at as broad a scale as possible. At the end of the day, every animal—every sea turtle or pelican, every juvenile shrimp or blue crab—needs a safe, healthy refuge.



Brown Pelicans on Shamrock Island off the Texas coast. © Erika Nortemann/TNC

The Three-Strand Restoration Strategy

It's time to look beyond slowing the damage to the Gulf. We must reverse it and restore the Gulf's resilience by restoring the sources of its strength, health and productivity. It will not be easy or quick, but it can and must be done. The three key actions we must take to reverse the tide of degradation and restore the Gulf are very clear. Like strands in a rope, each action is reinforced, strengthened and bound by the others.

* (U.S. Federal waters)
http://www.noaa.gov/news/stories2010/20100704_closure.html



Bayou Heron at Grand Bay National Wildlife Refuge in Mississippi. © Lynda Richardson



Kemp's ridley sea turtle hatchling. © Erika Nortemann/TNC

The marshes of the Atchafalaya Basin in Louisiana are growing due to the sediments carried to the coast by the Atchafalaya River. These sediments spread out at the mouth of the Atchafalaya where it enters the gulf, forming the only actively growing delta in the region, and demonstrating the important connection between rivers and long-term restoration.

The future of our wildlife depends on a healthy Gulf of Mexico. The Gulf of Mexico provides nesting, resting and feeding habitat critical to some 243 North American bird species, including 75 percent of the migratory waterfowl traversing the United States. The only known nesting beach for the most endangered sea turtle in the world, Kemp's ridley, is found along the western coast of the Gulf of Mexico.

First—Restore Key Bays and Estuaries

The bounty of the Gulf of Mexico begins in its bays and estuaries. These are the natural foundations of the entire ecosystem and contain the marshes, seagrasses, fish, mangroves, coral reefs, and other plants and animals that make the Gulf one of the most important and productive places on Earth. Experts can point to key bays, estuaries and rivers that contribute to the Gulf's health (see attachment).

Investments in even a fraction of these places can serve as Model Demonstration Sites for implementing restoration with long-term impacts. Restoring estuaries helps to replenish damaged fisheries, putting fishermen back to work and ensuring a future for the next generation of fishermen.

- Rivers are the lifeblood of the Gulf's marshes and other coastal habitats. Restoring coastal rivers flowing to key Gulf estuaries provides the fresh water and sediments needed to rebuild marshes while reducing the nutrient loads that create persistent dead zones in the Gulf.
- Restoring millions of acres of estuarine and coastal habitats such as oyster reefs, seagrass beds, sand dunes, coral reefs, marshes and migratory bird areas. These habitats are critical for re-building Gulf fisheries and protecting Gulf communities from storms and sea-level rise.

As the Gulf struggles to heal itself from the oil, bays and estuaries with clean water, healthy oyster reefs and seagrass beds, will be important life support systems for the people, plants and animals who depend on life in the Gulf for their own lives and livelihoods.

Second—Ensure oil and gas development is carried out in a safe and sustainable manner

It is now evident that the response plan prepared by BP for the Deepwater Horizon drilling platform was wholly inadequate. The nation should take strong measures to ensure ongoing oil and gas development in the Gulf minimizes harm to coastal and marine biodiversity and habitats. More than 50,000 wells have been drilled in the Gulf's federal waters since 1947.

The Oil & Gas industry is tremendously important to the economy of the Gulf of Mexico. In the past, many companies have given back to Gulf Coast communities to support conservation. Going forward, a renewed and expanded commitment by the oil and gas industry will be vital to restoring the health of all the Gulf Coast Communities—plants, animals and people—that share the resource.

Currently, the Gulf of Mexico has 7,000 active leases, 64 percent of which are in deepwater. Energy development in the Gulf should minimize impacts to important natural resources, be carried out in a safe and responsible manner, and contribute to the long-term restoration of Gulf ecosystems. Specifically, the Outer Continental Shelf Lands Act (OCSLA) should be amended in the following ways:

- Enact robust safety regulations to ensure energy and mineral development does not harm coastal and marine environments.
- Ensure future oil and gas leasing is guided by a comprehensive regional marine plan that integrates and coordinates other marine uses, including conservation of important marine habitat.
- Ensure that revenue generated through oil and gas development contributes to the conservation and restoration of Gulf ecosystems.

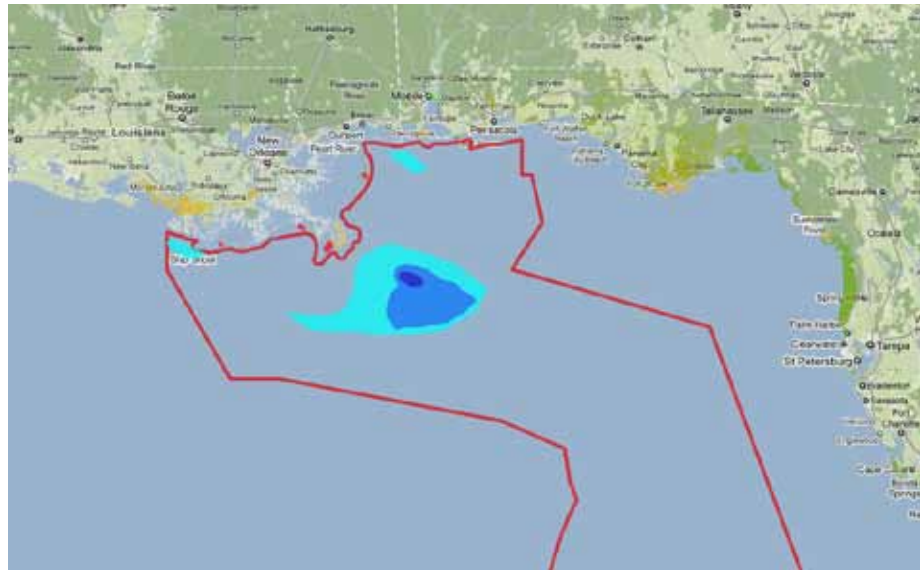


Aerial view of the extended marshland comprising the Mississippi delta, south of New Orleans, Louisiana. © Bridget Besaw

Comprehensive, well-planned and managed efforts to harvest the Gulf's resources responsibly will also reduce conflict between oil and gas development and preservation of the environment and wildlife.



A diver glues cuttings of coral to cement blocks in a water nursery near the Florida Keys in an effort to reverse the decline of coral in the Keys.
© Ken Nedimyer



Global Coastal Resilience Assessment Tool © The Nature Conservancy

Harnessing the Power of Data: Gulf of Mexico Decision Support System

An online, interactive planning tool, the Gulf of Mexico Ecosystem Decision Support, provides multi-layered information to support decision-makers as everyone looks beyond the immediate challenges of the spill to the long-term challenges of meaningful restoration.

From showing real-time reports on forecasts for oil spill trajectories, locations of beached oil, to the locations of important ecological areas such as marshes, seagrass beds and important oyster reefs, this tool can be used to inform future decisions about large-scale restoration.

The tool is available online at <http://globalcoastalresilience.org/>

Third—Invest in science and technology to inform decision-making and restoration plans for the Gulf of Mexico.

The full impact of the spill on the Gulf's ecosystems will not be known for some time, and significant study will be needed. Science tells us that a spill of this magnitude would have profound effects on even the healthiest of ecosystems, but the risks to Gulf coastal habitats are greatly magnified by the decades of degradation that preceded it.

Fortunately, there is a rich history of research in the Gulf that shows us where to start work. For decades, Gulf scientists have studied what has had the greatest impact on Gulf habitats—rising sea levels, altered salinities, habitat destruction, depleted oxygen. Restoration practitioners must rely on this science—and the multitude of plans developed from it—to inform our strategies as the agenda for Gulf-scale restoration is developed.

In the near term, we're also going to need to turn to the vast body of study on oil spill clean up in marine and estuarine systems to inform our restoration practices and identify gaps in our knowledge. Many of our restoration strategies will also rely heavily on the body of engineering science developed around coastal restoration and the process of adaptive management to perfect our implementation of these projects.

Even with the vast store of knowledge and expertise that exists in the Gulf, there is need to expand a comprehensive science and research program that spans the entire Gulf. Currently, there is no comprehensive Gulf restoration plan that encompasses the geography from Texas to Florida, as well as the open ocean.

Key pieces of a Gulf-wide restoration program are already captured in existing plans for specific places, such as the Louisiana-Mississippi Roadmap for Ecosystem Resilience and Sustainability, the Hypoxia Action Plan, and various planning and science efforts related to the National Estuary System.

Accelerated and expanded research and scientific study will offer research priorities for continued response to the oil spill, as well as comparisons to the state of the Gulf today against historical time spans and the functions of marine species and habitats like marshes, and oyster and coral reefs. Using science to inform restoration planning and activities will ensure that the scale and location of conservation investments will deliver maximum benefits and least harm for Gulf habitats and the services they provide to coastal communities.



Florida Keys coral with diver. © Jiangang Luo



Oysters for sale in Florida. © Richard Bickel

Moving Beyond Reaction to Coordinated, Meaningful Work

The current tragedy has given us perspective that should guide our future actions and direct how we invest in the future of the Gulf of Mexico. Governments have written many plans for restoring pieces of the Gulf beginning before Hurricane Katrina. Due to their lack of a comprehensive view and adequate funding, these plans have only been a patch on the larger problem. Patches aren't enough. We can no longer afford to focus on short-term wins at the expense of long-term success.

The breadth of our work must match the scale of the problem. The key to success in the Gulf will be to coordinate across the Gulf, secure funding for long-term restoration, and collectively focus on actions that provide the most benefits. We need a robust long-term effort to protect and restore Gulf coastal ecosystems, across 5 states from Texas to Florida that will combine to elevate the Gulf to a level of health and resilience that it has not seen in decades.

Funding Opportunities

Create an Endowment for the Gulf of Mexico to be administered by an agency designated by the President and funded by Clean Water Act fines that must be paid by BP.

If passed, dedicate a portion of the barrel tax increase proposed in Congress on oil produced in and imported into the United States to fund Gulf Coast restoration and, in time, large scale restoration in other estuaries. By earmarking 10 cents of this tax—roughly ¼ cent per gallon—for long-term restoration of the Gulf of Mexico, it could be possible to generate funding needed for long-term restoration efforts.

Use revenues from offshore oil and gas leasing to create a \$1 billion Ocean Trust Fund to support long-term marine and coastal stewardship. The principle that offshore revenues should be reinvested is not new, but today more than ever we stand witness to the environmental pressure that coastal development creates on our natural resources.

On-the-ground action is needed, and can begin by focusing on the following:

Build a Gulf of Mexico coalition representing government, local communities, academic institutions, scientific leadership, NGOs, oil and gas, and other private industry leadership to support a vision for a sustained Gulf and to commit to working in concert to carry out a roadmap to success. Many organizations, including The Nature Conservancy, are already beginning to coordinate efforts in the Gulf to begin the work of long-term Gulf restoration.

Meaningful restoration of the Gulf will require the leadership, skills, coordination and resources of the public, private and NGO sectors. The actions of government and BP alone will—at best—return the Gulf to pre-oil spill conditions, but it will not be enough to reverse decades of decline.

Dedicate funding to support long-term restoration—beyond damages caused by the oil spill—to reverse decades of degradation and neglect. Despite years of conservation and restoration in the Gulf, appropriations to fund this work have lagged far behind the estimated need. Even before the oil spill, the cost of meaningful restoration of the Gulf was estimated at \$600 million per year for 20 years. It is important to understand that currently, BP restoration funds can only be used for damages caused by the oil spill and cannot be used to address pre-existing problems.

The Administration and Congress must hold BP accountable for the full cost and extent of the damages resulting from the spill. Decisions are being made in Congress and by the administration right now that can create opportunities for much needed funding for long-term restoration in the Gulf of Mexico. These funds should provide the resources to go beyond cleaning up the effects of the spill and begin long-term restoration of the Gulf of Mexico and the way of life of those who depend on it.



Mangroves in West Content Key, Florida. © Jeff Ripple

According to the “Shellfish Reefs at Risk” Report, globally 85 percent of oyster reefs have been completely lost. However, the Gulf of Mexico is one place where investments in oyster reef restoration can make a difference.

The report can be viewed online at www.nature.org/shellfish



Piping plover. © Billtacular/FlickrCC

Start restoration now in “no regrets” places. Science shows us where it’s possible to start right now. Experts can point to key bays, estuaries and rivers that contribute to the Gulf’s health. Investments in even a fraction of these places can contribute to immediate recovery and demonstrate effective large-scale restoration that focuses on restoring habitat and reestablishing natural systems. A number of organizations from nonprofit, public and private sectors have been working across the Gulf for many years in these places and others around the Gulf to restore marshes, seagrasses, mangroves, coral reefs and oysters.

Five case studies from each Gulf state can be used to illustrate how large-scale restoration can be applied:

The Barataria Estuary, Louisiana: The Delta of the Mississippi River, which includes the Barataria Estuary, is a 3-million-acre ecosystem containing extraordinary biodiversity. It provides habitat for an array of plant and animal species, including 79 that are rare, threatened or endangered. It contains 25 percent of the world’s population of Piping Plover, 75 percent of Mississippi and the Central Flyway’s wintering waterfowl. From the Delta comes 34 percent of the nation’s oysters and one-third of its total fisheries.

Beginning in 1928, levees were constructed along the Mississippi River to prevent flooding and facilitate navigation, ending the natural process of spring flooding that provides regular replenishment of sediments and freshwater to the coast of Louisiana. In addition, thousands of miles of canals were dug to support oil and gas exploration, allowing saltwater deep into the Delta. These events, coupled with natural and man-induced subsidence, has resulted in the rapid loss of marshes and the disappearance of Louisiana’s coast at the rate of 25 square miles per year.

The most rapidly disappearing place on the continent, the Barataria Estuary has also been one of the estuaries hardest hit by the oil spill. But Barataria was struggling even before oil came ashore and made an already urgent situation more challenging.

Returning fresh water and sediment to the Delta has long been recognized as key to restoring coastal wetlands and sustaining this ecosystem. It is also an important step in helping the estuary recover from the losses caused by the spill. Restoring key habitats, such as oyster reefs, will directly benefit the species—both recreational and commercial—that are important to the economy of the region.

Mississippi Sound, Mississippi: The Mississippi Sound represents the entire Mississippi coastal area, and its health is critical to everything that happens on the Coast. The Sound is set off from the open Gulf by the pristine barrier islands of Gulf Islands National Seashore, creating a large and highly productive brackish water estuary, home to important commercial and sport fisheries. All Mississippi coastal rivers and bays empty into the Sound—each of these bays are home to large expanses of productive salt marshes.



Oyster restoration work © Nicole Vickery/TNC

Like all North American coastal areas, Mississippi has undergone rapid population growth, with the accompanying conversion of marshes, savannahs and coastal forests to commercial and residential use. Habitat loss and degradation has reduced marsh areas, damaged oyster reefs and seagrass habitats and exposed Coast residents to increasing risk from tropical weather. The newest challenge to the Mississippi Coast and all of its neighbors is the massive Deepwater Horizon oil spill.

Habitats critical to Mississippi Sound—seagrasses, coastal marshes, oyster reefs—have already been identified and work is ongoing. The restoration of the Mississippi Sound is the key to environmental, economic, and aesthetic future of the Gulf Coast.



Oystermen tonging in Apalachicola Bay.
© Richard Bickel

Apalachicola Bay, Florida: Located along Florida's Panhandle, the Apalachicola Bay is the ultimate destination of many of the South's most important rivers—rivers that supply drinking water, waste management, hydropower, irrigation, and navigation to one of the fastest growing regions of the nation. Given the high demand for the water that eventually flows into the Apalachicola River, maintaining fresh water flow into the bay is an ongoing challenge.

But without this water, the Apalachicola River basin would lose much of its biodiversity and Apalachicola Bay would lose its productive oyster reefs, reefs that supply approximately 10 percent of the nation's entire oyster harvest each year. However, most of the reefs in Apalachicola Bay are worked and harvested within a short timeframe. Natural oyster reef structures are nearly completely gone.

This is significant because natural oyster reefs are not flat, but rather have significant three-dimensional structure provide important habitat for numerous species of fish and invertebrates. While it is important to maintain the vibrant oyster fishery in Apalachicola Bay, the resilience of the fishery as well as the health of the entire Bay would benefit greatly from expanded restoration and protection of core natural oyster reefs.



Seagrass off the Texas Coast
© Erika Nortemann/TNC

Matagorda/San Antonio Bays, Texas: The marshes, coastal prairies and islands of the Matagorda and San Antonio Bays lie at the end of the Central Flyway, one of four primary routes for migratory birds in North America. And while the Gulf of Mexico is a very large system, its parts are connected—by ocean currents, by the annual migration of marine life and birds, and by the economic, cultural and historical relationships among its communities.

And, increasingly, its parts are linked by common problems. The natural and human communities around the Gulf face rising threats that include polluted water, over-fishing, and loss of natural habitat, including marshes, oyster reefs and seagrass.

The seagrasses that grow in the shallows of coastal bays and estuaries are the foundation of life in the Gulf of Mexico. Underwater meadows of shoalgrass, turtlegrass, manateegrass and other seagrasses protect water quality and clarity, and serve as a nursery for the shrimp, shellfish and the sport fish prized by anglers, including redfish, drum and sea trout. Yet, conservationists, anglers and concerned citizens are becoming increasingly aware that seagrasses are in decline.

Over the past 20 years, studies show that shoalgrass, for example, has decreased by 60 percent. At the same time, underwater areas that lack vegetation entirely have increased by nearly 300 percent. The declining quantity and quality of these seagrass habitats now represent a major threat to shrimp, fish and other species depending on them. Ducks and other birds, sea turtles and crabs need seagrass to thrive.



One of three oyster restoration projects in Alabama, ReefBLK cages are being used in Mobile Bay to create 750 linear meters of breakwater reefs. © Jeff DeQuattro/TNC

Oysters are the engineers of the ocean. Functioning oyster reefs provide reef fish habitat, protect adjacent marshes and encourages re-establishment of marshes and seagrass habitat. Implementing on-the-ground restoration like this is a smart use of Gulf restoration funding and builds the infrastructure critical to necessary longer-term restoration needed in the Gulf.

Mobile Bay, Alabama: Adding a distinctive notch to Alabama’s Gulf Coast shoreline, Mobile Bay—with an average depth of 10 feet—is one of the shallowest bays of its kind. It is also the fourth largest estuary in the United States and plays an important role in sheltering and nurturing many species, including the finfish, shrimp and oysters, that are vital to Gulf communities.

Over the last decades, Mobile Bay has seen significant loss of marsh, seagrass and oyster reef habitats through dredge-and-fill activities, sea walls and jetties, erosion, storm events and other causes, thus offering one of the largest potential areas for outright restoration, replacement and enhancement of these lost habitats on the Northern Gulf Coast.

This type of habitat replacement/restoration has long-term benefits in helping to improve on-going problems in Mobile Bay, from stormwater to the “free-floating bottom sediment” issue to shoreline erosion. While the marsh component is critical to rebuilding habitat for quick fish stock recovery, it will also aid in stormwater remediation, including nitrogen capture. This effort will also make the coastline more resilient to any impacts from hurricanes, oil spills or climate change.

A Gulf-wide restoration program should seek to work with organizations working in the Gulf to select such other “no regrets” sites that can have an immediate impact while advancing the science needed to inform long-term restoration plans.

In starting with the work we already know needs to happen, everything benefits. Our coastal communities will be safer in the face of increasing storms and sea level rise; our fisheries will be more stable and productive, providing a livelihood for generations to come; our wildlife will have nurseries and refuges; and our tourism economy can continue to fuel the needs of local communities.

But restoration at this scale cannot be accomplished alone. The problem is bigger than any one group or organization can solve independently, and interests ranging from environmental to industry to community, must be part of restoring the Gulf to health.



Padre Island National Seashore in Texas. © Erika Nortemann/TNC

The Future of the Gulf Depends on Us

Restoration is, like politics, the art of the possible. Restoring the Gulf of Mexico, then, is not about turning back time, it's about seeing a new way forward. Over the last 100 years, human activities both in the Gulf and in upstream reaches, have altered the natural infrastructure of the Gulf—the marshes and the oyster reefs, the seagrass beds, the mangroves, the barrier islands and the nearshore environments. As these places have been degraded, the overall health of the Gulf has suffered. The suffering shows itself in Dead Zones in the Gulf, in declining fisheries and lost water quality, in disappearing marshes and dying reefs.

In more technical terms, the Gulf has lost much of its resilience—it is no longer robust and strong. It has lost the ability to absorb damage and recover its health and now has many underlying health problems that magnify the damage caused by natural and manmade disasters. The oil spill in the Gulf is adding profound insult to what was already dire injury.

This is a moment of decision for the Gulf and the nation. The effects of the BP spill on the communities and ecosystems of the Gulf are tragic and still unfolding. But the crisis of the spill is bringing renewed focus on the need for a new future for the Gulf of Mexico, one that begins to restore and reverse decades of degradation and decline that have affected the region. The people and the ecosystems of the Gulf are incredibly resilient, but they need our help. We owe it to them to do everything we can to help restore this valuable ecosystem for the benefit of the Gulf and the nation.

