Charting Restoration
Gulf Restoration Priorities and Funded Projects
Five Years After Deepwater Horizon
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Introduction

The Deepwater Horizon oil spill focused the attention of the Gulf states and the nation on the ongoing problems in the Gulf of Mexico. There is now a broader understanding of the Gulf’s remarkable environmental assets, the real economic value of those assets, and the many threats to the Gulf’s future. As local, state, and federal agencies plan for the expenditure of BP-related funds and make their recommendations to the RESTORE Council, it is important that existing plans — backed by science, public input, and research inform future decision-making.

During the five years since the Deepwater Horizon oil spill, multiple federal, state, and local agencies, nonprofit organizations, and coalitions have developed strategic plans and visions for restoring and conserving the Gulf of Mexico and lands along its coastline. These visions and plans range in geographic scope, scale, and detail depending on the entity that has put them forth. Many of the plans identify strategic land conservation, coastal protection, and ecological restoration activities at specific locations across the Gulf.

Achieving a comprehensive understanding of these existing priorities is crucial to guiding the Gulf restoration process. To this end, this report analyzes and synthesizes existing plans to identify common priorities and to demonstrate how priorities differ from state to state, in addition, where possible, this document identifies the location of priority actions. Additionally, this report identifies the 116 Gulf projects that have received oil spill funding to date. Those projects are then compared with the restoration and conservation priorities contained in the plans.

The RESTORE process and related funding decisions are once-in-a-lifetime opportunities to accelerate Gulf of Mexico restoration. Existing state, federal, nonprofit, and community plans and visions can and should be brought together to create practical guides for Gulf restoration.

Identifying Gulf Priorities and Funded Projects

The restoration- and conservation-related plans we used to identify priorities included:

- Federal agency regional restoration plans;
- Regional NGO restoration plans (e.g., TNC, National Wildlife Federation, Ocean Conservancy, Partnership for Gulf Coast Land Conservation);
- Quasi-government regional plans;
- State Comprehensive Coastal Management Plans; and
- National Estuary Program (NEP) plans.

To be included in the assessment of priorities, plans needed to either cover the entire Gulf region or be specific to coastal restoration in one or more of the five Gulf states: Alabama, Florida, Louisiana, Mississippi, and Texas. The finest scale considered for this assessment was the National Estuary Program plans. County-level management plans were not considered for this study due to the limited existence and availability of county-scale restoration plans. Unique priorities were identified in each plan, extracted to a database, and classified using a standardized classification scheme. When priorities contained location information, the priorities were mapped. Because priorities were available at varying scales, spatial information was not available for all priorities. “Funded projects” refers to those projects that have been approved to receive funding, or have received funding, from four distinct programs since the Deepwater Horizon oil spill through February 28, 2015. The four distinct programs are the following:

- Natural Resources Damages Assessment
  - Phase I
  - Phase II
  - Phase III
- National Fish and Wildlife Foundation
- Gulf Environmental Benefit Fund
- MOEX Supplemental Environmental Projects
- North American Wetlands Conservation Act

The funded projects were identified through the Environmental Law Institute’s Gulf of Mexico Restoration and Recovery Database (http://eli-ocean.org/gulf/restoration-projects-database). This database allows tracking of projects that have been approved to date in response to the Deepwater Horizon disaster. Each funded project was extracted to a database and classified using the same standardized classification scheme that we applied to the identified priorities. Where spatial information was available, the funded projects were also mapped.
Categorizing Priorities and Funded Projects

We developed four orders of attribution for cataloging project activities and priorities in order to systematically analyze common project types, goals, actions, and habitats across priorities and funded projects. The classification involved the following four attributes: 1) type of the priority or project, 2) goal of the priority or project, 3) main action or activity associated with the priority or project, and 4) the target habitat, where applicable.

**Classifications and definitions for priority and project types.**

<table>
<thead>
<tr>
<th>Type of priority or project</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Built</td>
<td>Built capital includes built infrastructures and their products. Examples include roads, buildings, and bridges.</td>
</tr>
<tr>
<td>Human and social</td>
<td>Human capital includes the health, knowledge, and all other attributes of individual humans, including financial capital, that allow them to function in a complex society. Social capital includes all the formal and informal networks among people—family, friends, and neighbors—as well as social institutions at all levels, such as churches; social clubs; local, state, and national governments; NGOs; and international organizations. Examples include outreach about coastal hazards risk and environmental education.</td>
</tr>
<tr>
<td>Natural</td>
<td>Natural capital includes the world’s ecosystems and all the services they provide. Examples include stream restoration and habitat creation.</td>
</tr>
</tbody>
</table>

**Classifications and definitions for priority and project goals.**

<table>
<thead>
<tr>
<th>Type of Goal</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restore and conserve habitat</td>
<td>Within this goal, a major focus is to work with Gulf Coast stakeholders to expedite implementation and improve the effectiveness of state and federal programs related to landscape-scale resource management, habitat conservation, and restoration strategies.</td>
</tr>
<tr>
<td>Replenish and protect living coastal and marine resources</td>
<td>Living coastal and marine resources are showing visible signs of distress, such as depleted species populations and degraded habitats. Within this goal, a major focus is to promote sustainable resource management that focuses on actions to conserve and restore viable populations of living coastal and marine resources and their coastal and offshore environments.</td>
</tr>
<tr>
<td>Enhance community resilience</td>
<td>Within this goal, a major focus is to create resilient communities through the use of ecosystem restoration and/or structural development, with the primary objective of reducing risk and enhancing community resilience. This includes the development of comprehensive coastal planning programs and education/outreach components.</td>
</tr>
<tr>
<td>Restore water quality</td>
<td>The Gulf of Mexico experiences numerous water-quality problems, including excess nutrients, altered sediment inputs, pathogens, and mercury and other pollutants. One of the most prevalent signs of such problems in the Gulf of Mexico is hypoxia—low oxygen levels in the water—which can result from excess nutrients in the water and other factors. Within this goal, a major focus is to reduce the amount of nutrients flowing into the Gulf and to undertake other measures to enhance water quality.</td>
</tr>
<tr>
<td>Other</td>
<td>An example of ‘other’ would be economic development projects.</td>
</tr>
</tbody>
</table>

**Classifications and definitions for priority and project actions.**

<table>
<thead>
<tr>
<th>Type of Action</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restoration</td>
<td>Focused on returning natural features or systems to a former or improved condition.</td>
</tr>
<tr>
<td>Habitat creation</td>
<td>Focused on the creation of a natural home or environment for an animal, plant, fish, or other organism.</td>
</tr>
<tr>
<td>Data collection, monitoring, and assessment</td>
<td>Focused on collection of data to support monitoring of water quality, species health, distribution, etc.</td>
</tr>
<tr>
<td>Grow or support aquatic or terrestrial species management</td>
<td>Focused on the life, well-being, population, or study of aquatic or terrestrial organisms. Includes increasing stocks/populations and related management activities.</td>
</tr>
<tr>
<td>Land easement or acquisition</td>
<td>Focused on the acquisition or protection of a tract of land.</td>
</tr>
<tr>
<td>Analytical tools for planning and science understanding</td>
<td>Focused on the use of a wide range of tools to support decision making and advance scientific understanding (example: GIS, statistical programs, other models).</td>
</tr>
<tr>
<td>Create or advance a program</td>
<td>Focused on bringing a new program into existence or advancing a current program.</td>
</tr>
<tr>
<td>Planning</td>
<td>Focused on the process of planning for an event, initiative, or policy.</td>
</tr>
<tr>
<td>Capital and finance</td>
<td>Focused on money or other assets.</td>
</tr>
<tr>
<td>Education</td>
<td>Focused on educating or supporting education.</td>
</tr>
<tr>
<td>Hydrologic improvement</td>
<td>Focused on improving the movement and/or distribution of water.</td>
</tr>
<tr>
<td>Sediment reduction or water-quality improvement</td>
<td>Focused on actions to reduce sediment and/or improve water quality.</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Focused on the creation or restoration of built structures and facilities.</td>
</tr>
<tr>
<td>Other</td>
<td>An example of ‘other’ would be economic development projects.</td>
</tr>
</tbody>
</table>

It is important to note potential limitations with the techniques used to classify priorities and funded projects. The classification process was intended to capture the main elements of the priorities and funded projects, however, erroneous attribution can be introduced due to the sometimes subjective nature of interpreting priorities and funded projects and reclassifying them into new categories. Classification of priorities and projects required us to select the one category that best captured the overall project. In reality, some projects have multiple goals and as such secondary objectives are not represented in this analysis. Quality control of the cataloged database required multiple iterations of review by the authors.

**Classifications used for habitat type.**

<table>
<thead>
<tr>
<th>Habitat Type</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank stabilization</td>
<td>Bank stabilization applications.</td>
</tr>
<tr>
<td>Barrier island/ headland</td>
<td>Barrier island applications.</td>
</tr>
<tr>
<td>Beaches/dunes</td>
<td>Beaches applications.</td>
</tr>
<tr>
<td>Coastal forest/long leaf</td>
<td>Coastal forest applications.</td>
</tr>
<tr>
<td>Habitat corridors</td>
<td>Habitat corridor applications.</td>
</tr>
<tr>
<td>Living shorelines</td>
<td>Living shoreline applications.</td>
</tr>
<tr>
<td>Mangroves</td>
<td>Mangrove applications.</td>
</tr>
<tr>
<td>Marsh/wetlands</td>
<td>Marsh/wetland applications.</td>
</tr>
<tr>
<td>Multiple</td>
<td>Multiple habitat applications.</td>
</tr>
<tr>
<td>Oyster/coral/scallop</td>
<td>Oyster/coral/scallop applications.</td>
</tr>
<tr>
<td>Ridge</td>
<td>Ridge applications.</td>
</tr>
<tr>
<td>Seagrass</td>
<td>Seagrass applications.</td>
</tr>
<tr>
<td>Unknown</td>
<td>Unknown applications.</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A applications.</td>
</tr>
</tbody>
</table>
Comparing Priorities and Funded Projects

The priorities identified across plans were compared to funded projects to identify where funding aligns with identified priorities and where there are differences across the Gulf. Priorities and funded projects were compared at three scales—Gulfwide, state, and local—depending on the scale of the individual priorities and funded projects (some projects have multiple objectives, but our methodology required that we choose the most significant objective for categorization). Gulfwide and state-specific summaries and maps were produced to show spatial patterns of priorities and funding. Priorities and funded projects that contained spatial information were mapped and aggregated to polygons in order to visualize the relationship between priorities and funding at a more local scale. Precise location information was not available for many priorities and funded projects; therefore, the maps should be viewed as a relative spatial distribution of priorities and funding across the Gulf, rather than a depiction of the exact location.

In some cases, general priorities (e.g., improve water quality) were identified for multiple states or the entire Gulf region but no locations were suggested for implementation. In these instances, we included the priority in the Gulfwide summaries but did not include them in the map analysis because it was impossible to determine the specific locations in which these priorities occurred. This same approach was used for funded projects in which no location was suggested. Thus, 5% (6 out of 116) of funded projects and 34% (430 out of 1,230) of priorities were not specific to a particular location or time, and we did not include them in the map analysis because it was impossible to determine the specific locations in which they occurred. Thus, the maps should be viewed as a relative spatial distribution of priorities and funding across the Gulf, rather than a depiction of the exact locations.

Identified Priorities

A total of 1,230 unique priorities were identified across the Gulf Coast within the 21 plans assessed. The priorities identified across plans were compared to funded projects to identify where funding aligns with identified priorities and where there are differences across the Gulf. Priorities and funded projects were compared at three scales—Gulfwide, state, and local—depending on the scale of the individual priorities and funded projects (some projects have multiple objectives, but our methodology required that we choose the most significant objective for categorization). Gulfwide and state-specific summaries and maps were produced to show spatial patterns of priorities and funding. Priorities and funded projects that contained spatial information were mapped and aggregated to polygons in order to visualize the relationship between priorities and funding at a more local scale. Precise location information was not available for many priorities and funded projects; therefore, the maps should be viewed as a relative spatial distribution of priorities and funding across the Gulf, rather than a depiction of the exact location.

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Identified Priorities

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What We Found

Identified Priorities

<table>
<thead>
<tr>
<th>Plan</th>
<th>Author</th>
<th>Number of unique priorities and actions</th>
<th>State(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barataria-Terrebonne National Estuary Program</td>
<td>Barataria-Terrebonne National Estuary Program</td>
<td>51</td>
<td>LA</td>
</tr>
<tr>
<td>America’s Gulf Coast: A Long Term Recovery Plan after the Deepwater Horizon Oil Spill</td>
<td>The United States Coast Guard and Navy</td>
<td>20</td>
<td>TX, LA, MS, AL, FL</td>
</tr>
<tr>
<td>Coastal Bend Bays Plan</td>
<td>Coastal Bend Bays Estuaries Program</td>
<td>53</td>
<td>TX</td>
</tr>
<tr>
<td>Gulf of Mexico Regional Ecosystem Restoration Strategy: Gulf Coast Ecosystem Restoration Task Force</td>
<td>The Environmental Protection Agency</td>
<td>161</td>
<td>AL, FL, LA, MS, TX</td>
</tr>
<tr>
<td>Charting the Course to 2015: Galveston Bay Strategic Action Plan</td>
<td>Galveston Bay National Estuary Program</td>
<td>52</td>
<td>TX</td>
</tr>
<tr>
<td>Initial Comprehensive Plan Restoring the Gulf Coast’s Ecosystem and Economy</td>
<td>Gulf Coast Ecosystem Restoration Council</td>
<td>7</td>
<td>TX, LA, MS, AL, FL</td>
</tr>
<tr>
<td>Governors’ Action Plan II: For Healthy and Resilient Coasts</td>
<td>Gulf of Mexico Alliance</td>
<td>21</td>
<td>TX, LA, MS, AL, FL</td>
</tr>
<tr>
<td>Louisiana’s Comprehensive Master Plan for a Sustainable Coast and Restoration Authority</td>
<td>Louisiana Coastal Protection</td>
<td>163</td>
<td>LA</td>
</tr>
<tr>
<td>Comprehensive Conservation &amp; Management Plan for Alabama’s Estuaries &amp; Coast</td>
<td>Mobile Bay National Estuary Program</td>
<td>16</td>
<td>AL</td>
</tr>
<tr>
<td>Mississippi Coastal Improvements Program</td>
<td>United States Army Corps of Engineers</td>
<td>13</td>
<td>MS</td>
</tr>
<tr>
<td>Vision for a Healthy Gulf of Mexico Watershed</td>
<td>National Fish and Wildlife Service</td>
<td>16</td>
<td>IA, LA, ND, SD, NE, TX</td>
</tr>
<tr>
<td>Gulf of Mexico Initiative</td>
<td>USDA-NRCS</td>
<td>67</td>
<td>FL, AL, MS, LA, TX</td>
</tr>
<tr>
<td>NRCS-USDA: Gulf of Mexico Restoration—A Private Lands Vision for Success</td>
<td>USDA-NRCS</td>
<td>5</td>
<td>TX, LA, MS, AL, FL</td>
</tr>
<tr>
<td>Restoring the Gulf of Mexico for People and Wildlife: Recommended Projects and Priorities</td>
<td>National Wildlife Federation</td>
<td>42</td>
<td>LA, TX, MS, AL, FL</td>
</tr>
<tr>
<td>Restoring The Gulf of Mexico: A Framework for Ecosystem Restoration in the Gulf of Mexico</td>
<td>The Ocean Conservancy</td>
<td>43</td>
<td>TX, LA, AL, FL</td>
</tr>
<tr>
<td>A Land Conservation Vision for the Gulf of Mexico Region: An Overview</td>
<td>Partnership for Gulf Coast Land Conservation</td>
<td>4</td>
<td>TX, LA, AL, FL</td>
</tr>
<tr>
<td>Southwest Florida Regional Ecosystem Restoration Plan</td>
<td>Joint Florida Gulf National Estuary Programs</td>
<td>280</td>
<td>FL</td>
</tr>
<tr>
<td>The Nature Conservancy: Seize the Moment</td>
<td>The Nature Conservancy</td>
<td>47</td>
<td>FL, AL, MS, LA, TX</td>
</tr>
<tr>
<td>The Nature Conservancy: Strategy for Restoring the Gulf of Mexico</td>
<td>The Nature Conservancy</td>
<td>62</td>
<td>FL, LA, MS, TX</td>
</tr>
<tr>
<td>Gulf of Mexico Recreational Fisheries: Recommendations for Restoration, Recovery, and Sustainability</td>
<td>Theodore Roosevelt Conservation Partnership</td>
<td>79</td>
<td>TX, LA, MS, AL, FL</td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td>1,230</td>
<td></td>
</tr>
</tbody>
</table>
Of the 1,230 priorities, 800 contained sufficient location information to enable mapping.

**Funded Gulfwide Projects**

Of the 116 funded projects identified, totaling over $1.1 billion, 110 projects had sufficient location information to be mapped.

**Comparing Gulfwide Priorities With Funded Projects**

Priorities and funded projects were compared by type, goal, action, and habitat across the Gulf to identify commonalities, differences, and funding gaps. Pie charts and bar graphs compare all of the identified priorities to all of the funded projects. The mapped comparisons include only the subset of identified priorities and funded projects that contained location information (the majority were mapped, as noted above).

**Type**

Priorities and funded projects were categorized as one of three project types: natural, human/social, or built. These project types indicate the primary outcome of the project. Natural projects generally relate to ecosystems, human and social projects relate to people and social networks, and built projects are infrastructure-focused.

**A note on reading the maps on the following pages**

The top map in each panel shows where *priorities* are distributed across the Gulf. Areas that have been identified as priorities are shown as shaded hexagons. Areas with more priorities have red hexagons; areas with fewer priorities have yellow hexagons.

The bottom map in each panel shows where *funding* has been distributed across the Gulf in relation to the priorities in the top map. Areas that have received funding to date are shown as shaded hexagons. Areas that have received more funding are shaded blue; areas that have received less are shaded green. The boundaries for each hexagon retain the color from the top map so you can easily identify where areas of priority align with areas of funding.

In addition to identifying the degree of restoration priority and amount of project funding along the Gulf Coast, these maps demonstrate the following:

- Geographic areas that have multiple priorities and have received project funding
- Geographic areas that have multiple priorities and have not received project funding
- Geographic areas that have not been identified as priorities but have received project funding
Goals

Priorities and funded projects were categorized as one of five project goals: Enhance community resilience, Replenish and protect living marine resources, Restore and conserve habitat, Restore water quality, and Other. The ‘Other’ category includes project goals such as economic development and projects in which a clear singular goal could not be identified.
Priorities Goal: REPLENISH & PROTECT LIVING COASTAL & MARINE RESOURCES

Number of priorities identified
1 – 3
4 – 7
8 – 10
11 – 33
Amount of project funding ($)
761,675 – 1,000,000
1,000,001 – 3,000,000
3,000,001 – 5,000,000
5,000,001 – 10,000,000
10,000,001 – 18,793,500

Funded Projects Goal: REPLENISH & PROTECT LIVING COASTAL & MARINE RESOURCES

Number of priorities identified
1 – 3
4 – 7
8 – 10
11 – 33
Amount of project funding ($)
189,400 – 20,000,000
20,000,001 – 50,000,000
50,000,001 – 100,000,000
100,000,001 – 318,363,000

Priorities Goal: RESTORE WATER QUALITY

Number of priorities identified
1 – 2
3 – 6
7 – 10
11 – 33
Amount of project funding ($)
3,687,700

Funded Projects Goal: RESTORE WATER QUALITY

Number of priorities identified
1 – 2
3 – 6
7 – 10
11 – 33
Amount of project funding ($)
1,973,500 – 2,000,000
2,000,001 – 5,000,000
5,000,001 – 10,000,000
10,000,001 – 13,600,000

Priorities Goal: RESTORE & CONSERVE HABITAT

Number of priorities identified
1 – 3
4 – 7
8 – 12
13 – 33
Amount of project funding ($)

Funded Projects Goal: RESTORE & CONSERVE HABITAT

Number of priorities identified
1 – 3
4 – 7
8 – 12
13 – 33
Amount of project funding ($)

Priorities Goal: ENHANCE COMMUNITY RESILIENCE

Number of priorities identified
1 – 2
3 – 6
7 – 10
11 – 33
Amount of project funding ($)

Funded Projects Goal: ENHANCE COMMUNITY RESILIENCE

Number of priorities identified
1 – 2
3 – 6
7 – 10
11 – 33
Amount of project funding ($)

THE NATURE CONSERVANCY | GULF OF MEXICO

CHARTING RESTORATION NATURE.ORG/GULF
Priorities and funded projects were categorized by the main action being used to achieve the goal. The left side of the graph indicates the number of times a particular action was identified as a priority. The right side of the graph shows the amount of funding for each action to date.

### Habitat Types

We categorized all of the identified priorities and funded projects into one of thirteen classes that describe the habitat of interest, if applicable. The bar graph shows the relative occurrence of target habitat types for priorities and the amount of funded projects for each habitat. Only priorities and funded projects that explicitly listed a habitat type were included. The not applicable classification was used for priorities and funded projects that were not related to habitats.

### Overall Gulfwide Findings

Across the Gulf, the majority of funding has gone toward restoring and conserving habitat, which shows good alignment with the plan priorities that have been identified in this report. There are, however, differences between priorities and funded projects in other categories of activity. The initial emphasis on habitat probably results from the funding coming primarily from the NFWF Gulf Environmental Benefit Fund, which focuses on restoration, land acquisition, and planning work related to habitat conservation for fish and wildlife, and from Natural Resources Damage projects, which, while usable for offsetting the loss of enjoyment of Gulf resources, are also focused on repairing or protecting habitat for plant and animal species.

The majority of priorities we were able to identify focused on the natural environment. This is not surprising, given that most of the plans used to identify priorities were conservation and restoration focused. These types of projects received the bulk of funding to date, which shows good alignment with priorities. However, we identified 358 priorities with a Human and Social focus that remained unfunded. This difference may be tempered by the various kinds of economic claims paid out to impacted businesses and communities, as well as by the co-benefits of some restoration projects.

Amid the goals we examined, Restore and Conserve Habitat is a priority across the Gulf and has been funded across many parts of the Gulf. In Florida, specifically in the Big Bend and southwest Florida regions, there are numerous priority areas for Restoring and Conserving Habitat that have received little to no funding to date. For the other goals of Restore Water Quality, Replenish and Protect Living Marine Resources, and Enhance Community Resilience, the maps show distinct areas in the Gulf where these goals have been identified as priorities.

The top identified priority actions were Restoration and Sediment Reduction or Water-Quality Improvements. While Restoration has been funded across the Gulf, much less money has been distributed for funding for Sediment Reduction Water-Quality Improvements. Several projects that have been funded, such as planning or community engagement, are activities that will lead to major improvements in water quality, but due to the classification system, the main actions of the projects were classified, rather than the long-term result.

For projects targeting habitats, the majority of the funding went toward barrier islands and beaches, though wetlands and marshes were identified as higher priorities. This difference is possibly due to the fact that barrier island and beach nourishment projects are typically more costly than wetland and marsh projects due to the significant engineering and equipment costs associated with that type of construction. In addition, in Louisiana, barrier island projects have been a feature of multiple long-term restoration plans and authorizations (e.g., CWPPRA, LCAAs). Thus, barrier island projects tend to be further along in development and readiness for implementation, which might explain the observed funding distributions.
COMPARISON OF IDENTIFIED PRIORITIES VERSUS ACTUAL SPENDING: TEXAS

- Restore Water Quality was the most identified priority goal followed closely by Restore and Conserve Habitat.
- The majority of funded projects have a goal of Restore and Conserve Habitat.
- Sediment Reduction and Water-Quality Improvements are a top priority activity that remains unfunded most probably because the initial sources of funding are not designed for water quality projects.
- Land Acquisition was the top funded activity in Texas.
- To date, Texas has received 7% of Gulf funding.

**GOALS**

- Enhance community resilience
- Replenish and protect living coastal and marine resources
- Restore and conserve habitat
- Restore water quality
- Other

**FUNDING**

- $10,955,060
- $5,919,800
- $66,097,374
- $11,900,000

**TYPES**

- Built
- Human and Social
- Natural

**FUNDED PROJECTS**

- $68M
- $11M
- 123
- 70

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The majority of funding in Louisiana has gone to Restoration and Conservation of Habitat (primarily barrier islands and beaches).

- Water Quality projects are a major priority but have received only a small portion of funding.
- Infrastructure projects were a major priority, yet have received little funding.
- To date, Louisiana has received 54% of Gulf funding.

**TYPES**

- Built
- Human and Social
- Natural

**GOALS**

- Enhance community resilience
- Replenish and protect living coastal and marine resources
- Restore and conserve habitat
- Restore water quality
- Other

**PRIORITIES VERSUS ACTUAL SPENDING: LOUISIANA**

- **Types of Projects:**
  - Built (67%)
  - Human and Social (178%)
  - Natural (50%)

- **Funded Projects:**
  - $122M
  - $570M
  - $761,675

- **GOALS:**
  - $572,459,231

- **PRIORITIES:**
  - $22M
  - $570M

- **EXPENDITURES**
  - $18,500,000

**Actions**

- Analytical tools for planning and science
- Capital and finance
- Create or advance a program
- Data collection, monitoring, and assessment
- Education
- Grow or support aquatic or terrestrial species
- Habitat creation
- Hydrologic improvement
- Infrastructure
- Land/ easement acquisition
- Planning
- Restoration
- Sediment reduction or water quality improvement
- Other

- **Funded Projects:**
  - $0
  - $100
  - $200
  - $300
  - $400
• The allocation of funding for Restore and Conserve Habitat projects closely reflects plan priorities.
• No funded projects in Mississippi have a primary focus on Restore Water-Quality or Enhance Community Resilience because, as is generally the case, the initial funding sources are not designed for water quality projects.
• To date, Mississippi has received 12% of Gulf funding.

**COMPARISON OF IDENTIFIED PRIORITIES VERSUS ACTUAL SPENDING: MISSISSIPPI**

- Built
- Human and Social
- Natural

**TYPES**

- PRIORITIES
- FUNDED PROJECTS

**GOALS**

- PRIORITIES
- FUNDED PROJECTS

**ACTIONS**

- PRIORITIES
- FUNDED PROJECTS

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COMPARISON OF IDENTIFIED PRIORITIES VERSUS ACTUAL SPENDING: ALABAMA

- Built projects were the lowest priority type but have received by far the most funding (this is primarily driven by the funding of the Gulf State Park Lodge and Convention Center).
- The allocation of funding for Restore and Conserve Habitat projects closely reflects plan priorities.
- To date, Alabama has received 12% of Gulf funding.

TYPES

- Priorities
  - Built: 42
  - Human and Social: 43
  - Natural: 53
- Funded Projects
  - Built: $86M
  - Human and Social: $43M
  - Natural: $8M

GOALS

- Priorities
  - Enhance community resilience: 9
  - Replenish and protect living coastal and marine resources: 42
  - Restore and conserve habitat: 53
  - Restore water quality: 19
  - Other: 12
- Funded Projects
  - Enhance community resilience: $3,687,100
  - Replenish and protect living coastal and marine resources: $13,081,600
  - Restore and conserve habitat: $27,589,465
  - Restore water quality: $85,505,305
  - Other: $8,831,000

ACTIONS

- Priorities
  - Analytical tools for planning and science: $14,120
  - Capital and finance: $10,420
  - Create or advance a program: $4,120
  - Data collection, monitoring, and assessment: $6,120
  - Education: $6,420
  - Grow or support aquatic or terrestrial species: $4,120
  - Habitat creation: $4,120
  - Hydrologic improvement: $12
  - Infrastructure: $12
  - Land/easement acquisition: $12
  - Planning: $12
  - Restoration: $12
  - Sediment reduction or water quality improvement: $12
  - Multiple: $12
  - Other: $12
- Funded Projects
  - Analytical tools for planning and science: $30
  - Capital and finance: $30
  - Create or advance a program: $30
  - Data collection, monitoring, and assessment: $30
  - Education: $30
  - Grow or support aquatic or terrestrial species: $30
  - Habitat creation: $30
  - Hydrologic improvement: $30
  - Infrastructure: $30
  - Land/easement acquisition: $30
  - Planning: $30
  - Restoration: $30
  - Sediment reduction or water quality improvement: $30
  - Multiple: $30
  - Other: $30
**The allocation of funding for Restore and Conserve Habitat projects closely reflects plan priorities.**

- *Restoring Water Quality* was the highest priority goal across the state yet has received only a small amount of funding because, as in other states, the early funding sources are not designed for water quality projects.
- No projects for *Enhancing Community Resilience* have been funded.
- To date, Florida has received 15% of Gulf funding.

### Comparison of Identified Priorities versus Actual Spending: Florida

- **Enhance community resilience**
- **Replenish and protect living coastal and marine resources**
- **Restore and conserve habitat**
- **Restore water quality**
- **Other**

### Types

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<tr>
<th>Priorities</th>
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<td>$240M</td>
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### Goals

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<td>$172M</td>
<td>$109M</td>
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**Actions**

- Analytical tools for planning and science
- Capital and finance
- Create or advance a program
- Data collection, monitoring, and assessment
- Education
- Grow or support aquatic or terrestrial species
- Habitat creation
- Hydrologic improvement
- Infrastructure
- Land/ easement acquisition
- Planning
- Restoration
- Sediment reduction or water quality improvement
- Multiple
- Other

<table>
<thead>
<tr>
<th>Priorities</th>
<th>Funded Projects</th>
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<tbody>
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<td>$35,177,000</td>
<td>$62,672,007</td>
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Conclusion

This study is based on the premise that existing and past studies and plans for restoration of the Gulf of Mexico can and should contribute to and inform current and future planning and can help to guide restoration investment in the Gulf. Many past plans have incorporated extensive scientific and public input in their conclusions, making them particularly valuable in drafting new plans, strategies, and proposals for the investment of Deepwater Horizon–related funds. The information presented in this assessment is an initial snapshot of how funds deriving from the oil spill are being spent in comparison to the priorities set out in current and past plans. It reveals that many expenditure decisions reflect plan priorities, but there are significant differences between plan priorities and expenditures to date. These differences could have a number of explanations, including the statutory or legal restrictions on the early spending from Deepwater Horizon sources and the funding allocation requirements of those sources. As other Deepwater Horizon–related funding sources become available, we expect the balance of funding to more closely resemble plan priorities.

We believe, however, that the information included in this study, when combined with the database of funded projects being maintained by the Environmental Law Institute, can be a useful ongoing tool for identifying differences in the allocation of restoration funds in the Gulf from the goals set out by government officials, citizens, and scientists in the many past Gulf planning efforts. Continuing review of these differences will be useful to NFWF, the RESTORE Council and its members, and state and county governments in ensuring that the overall funding of Gulf projects reflects priorities set over many years for restoring the health of the Gulf and the well-being of its diverse communities.

Restoration of the Gulf of Mexico will extend well beyond the expenditure of Deepwater Horizon–related funds. Current planning and restoration project selection should both provide short-term benefits to the Gulf and establish a firm foundation for future restoration. In the long run, the Gulf of Mexico can best be restored through a continuum of effort that takes into account the good ideas and good science of the past and adapts them to the demands of new information and feedback from experience on the ground. We see this study as a useful tool for pursuing this long-term approach to Gulf restoration.
Asia Pacific, Latin America, and the US.

Communities. He has completed projects in the Caribbean, and environmental information and build the capacity of geospatial technologies to analyze complex socioeconomic risk reduction, land-use planning, and agriculture. He uses tools in environmental modeling, climate adaptation, disaster environmental management, conservation, and geospatial techniques.

Ben Gilmer has over ten years of experience working on environmental management, conservation, and geospatial projects in the US and internationally. He has a background in environmental modeling, climate adaptation, disaster risk reduction, land-use planning, and agriculture. He uses geospatial technologies to analyze complex socioeconomic and environmental information and build the capacity of government agencies, NGOs, scientists, and local communities. He has completed projects in the Caribbean, Asia Pacific, Latin America, and the US.

Dr. Christine Shepard
Director of Science, Gulf of Mexico Program
The Nature Conservancy

Christine Shepard, Ph.D., is Director of Science for The Nature Conservancy’s Gulf of Mexico Program. Christine’s primary research focuses on assessing coastal hazards risk, quantifying the role coastal habitats play in reducing risk, and identifying where ecosystem-based approaches such as conservation or restoration are likely to be effective for risk reduction. In addition, Christine works to develop innovative spatial analyses and community engagement tools to help decision makers address coastal risks from climate change and coastal hazards like storms and sea-level rise. She co-authored the 2012 World Risk Report in partnership with United Nations University and was a member of the Department of Interior’s Strategic Science Working Group “Operational Group Sandy” deployed to assist the Hurricane Sandy Rebuilding Task Force.

Christine completed her Ph.D. in Ocean Science at the University of California-Santa Cruz in 2010 and her B.S. in Zoology and Psychology at the University of Florida in 2002.

Ben Gilmer
Senior Project Manager
Downstream Strategies

Ben Gilmer has over ten years of experience working on environmental management, conservation, and geospatial projects in the US and internationally. He has a background in environmental modeling, climate adaptation, disaster risk reduction, land-use planning, and agriculture. He uses geospatial technologies to analyze complex socioeconomic and environmental information and build the capacity of government agencies, NGOs, scientists, and local communities. He has completed projects in the Caribbean, Asia Pacific, Latin America, and the US.

Jeff DeQuattro
Director of Restoration, Gulf of Mexico Program
The Nature Conservancy

Jeff has over ten years of experience on ecosystem restoration projects both in the coastal and freshwater realm. He comes from a regulatory background where he worked with large developers and major waste producers to find ways of operating in a more environmentally friendly way. Now, Jeff’s primary focus centers around planning and implementing large restoration projects, conservation and restoration planning initiatives, and working with stakeholders on resilience opportunities around the Gulf. Jeff recently pioneered a quality based selection process to create key relationships with prominent engineering firms that work worldwide. These engineering relationships will assist TNC with designing and implementing large restoration projects, and will help to guide the Conservancy along a path to making a stronger case for natural infrastructure as a real-world solution for addressing increased risks associated with climate change and sea-level rise.

Shawn W. M. Weis
Program Director, Michigan Chapter
The Nature Conservancy

Shawn Weis is a Program Director for The Nature Conservancy’s Michigan Chapter. She is currently managing the Great Lakes Information Management and Delivery project, a basin wide initiative supporting collaborative adaptive management. Shawn has been advancing participatory, science based, planning at local, regional, state, and interstate scales for over 10 years. She focuses her research on developing spatial analyses and decision support tools that provide local and regional solutions to planning conundrums. She is interested in integrated approaches that provide analyses and recommendations that benefit both people and nature. She has previously played critical roles in the formation of the Caribbean Regional Ocean Partnership, the management of the New Hampshire Community Technical Assistance Program, and the development of the St. Kitts and Nevis Marine Spatial Plan.

Andrew Bleijwas
Associate Director of Marketing, Gulf of Mexico Program
The Nature Conservancy

Andrew leads The Nature Conservancy’s efforts to broaden support for conservation along the coast, building a constituency that supports and advocates for comprehensive Gulf restoration. Andrew previously worked as the humanitarian media manager at Oxfam America where he led the organization’s public response to man-made and environmental crises including the Haiti earthquake, famine in the Horn of Africa, and conflict in DRC. Prior to his international work Andrew led Oxfam’s communications work after Hurricane Katrina and the BP oil spill, generating local, national, and international media attention, and also produced an Emmy award-winning video on the impact of the spill.

Robert Bendick
Director, Gulf of Mexico Program
The Nature Conservancy

In September, 2011, Bob Bendick became Director of The Nature Conservancy’s Gulf of Mexico Program. Prior to this, Bob was the Conservancy’s Director of U.S. Government Relations at the World Office in Arlington, Virginia. In this position he supervised the Conservancy’s relationships with Congress and the Obama Administration over a wide range of policy activities before coming to Washington, D.C., Bob was Vice-President and Managing Director of the ten-state Southern U.S. Region of the Conservancy. The Southern Region included four of the five Gulf of Mexico states.

He has been with The Nature Conservancy since 1995, first as Florida Chapter Director and then also in the dual role as Florida Director and as director of previous southeastern U.S. groups of state chapters.

About the Authors

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