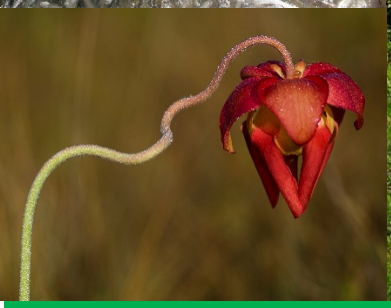

2016 Annual Report to Congress

Gulf Coast Ecosystem Restoration Council

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Calendar Year 2016

Submitted February 2017

Table of Contents

Letter from the Executive Director

The Gulf Coast Ecosystem Restoration Council (Council) was created in 2012 and as of fiscal year 2015 was formally established as a new, independent Federal agency with a clear mission to implement a long-term, comprehensive plan for the ecological and economic recovery of the Gulf Coast region. The Council, consisting of the five Gulf Coast states (States) and six Federal agencies, is committed to working with Gulf communities and partners to invest in actions, projects and programs that will ensure the long-term environmental health and economic prosperity across the Gulf Coast.

In fiscal and calendar year 2016 the Council achieved a number of critical milestones in our effort to restore the Gulf. On December 9, 2015, the Council approved an Initial Funded Priorities List (FPL) totaling $156.6 million, focusing on 10 key watersheds and estuaries, using conservation and restoration techniques tailored to the needs of each specific area. Since then, the Council has initiated funding the projects and programs on the Initial FPL. In addition, the Council formally approved a Spill Impact Component regulation as required by the Act. Funds available under this component will be invested in projects and programs identified in approved State Expenditure Plans (SEPs). The states of Florida, Mississippi and Texas have applied for and received funding to develop SEPs and the states of Louisiana and Mississippi have released draft SEPs for public review and comment.

On April 4, 2016, a federal court in New Orleans entered a consent decree resolving civil claims against BP arising from the *Deepwater Horizon* oil spill. This historic settlement, totaling more than $20 billion, represents the largest civil penalty ever paid by any defendant under any environmental statute, and the largest recovery of damages for injuries to natural resources. The settlement includes $5.5 billion in civil penalties under the Clean Water Act, plus interest, payable in installments over 15 years to carry out the RESTORE Act.

During the spring of 2016, the Council conducted a "Lessons Learned" review of the development of our Initial Comprehensive Plan and Initial FPL. The Council gained valuable insights from this public review and incorporated much of the feedback in a draft Comprehensive Plan Update. We held meetings across the coast throughout the summer and the Council voted to finalize the Comprehensive Plan Update on December 16, 2016. This update establishes the foundation for future action in 2017 and beyond by emphasizing collaboration and coordination with our restoration partners.

On behalf of the Council, I am pleased to submit this *Annual Report to Congress* outlining our progress over the past twelve months. Four years after the passage of the RESTORE Act and six years after the *Deepwater Horizon* oil spill, the Council is actively carrying out activities to restore the Gulf from the worst environmental disaster in our nation's history. The Council remains committed to maintaining active communication with Congress. Please contact us at any time with your thoughts, suggestions or questions. Thank you for your continued leadership and support in restoring the Gulf Coast region.

Respectfully submitted,

Ben Scaggs. Executive Director (Acting)

Gulf Coast Ecosystem Restoration Council Members

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Department of Agriculture

Thomas Vilsack
Secretary

State of Alabama
Robert Bentley
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State of Florida
Rick Scott
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Gina McCarthy
Administrator

Executive Summary

The environment of the Gulf Coast region was significantly injured by the 2010 *Deepwater Horizon* oil spill, as well as by chronic and acute harm caused by other past and ongoing human actions. Restoring an area as large and complex as the Gulf Coast region is a costly and multi-generational undertaking. Gulf habitats are continually degraded and lost due to development, infrastructure, sea-level rise, altered riverine processes, ocean acidification, salinity changes and other human-caused factors. Water quality in the coastal and marine environments is degraded by upstream land uses (including both point and non-point discharges of pollutants) and hydrologic alterations spanning multiple States and involving the watersheds of large and small river systems alike. Stocks of marine and estuarine species are depleted by over-utilization and conflicting resource use. Some of the region's environmental problems such as wetland loss and hypoxia span areas the size of some U.S. states. This degradation represents a serious risk to the cultural, social and economic benefits derived from the Gulf ecosystem.

Spurred by the *Deepwater Horizon* oil spill, the Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act of 2012, or the RESTORE Act, was signed into law by President Obama on July 6, 2012. The Act calls for a regional approach to restoring the long-term health of the valuable natural ecosystems and economy of the Gulf Coast region. The RESTORE Act dedicates 80 percent of civil and administrative penalties paid under the Clean Water Act, after the date of enactment, by responsible parties in connection with the *Deepwater Horizon* oil spill to the Gulf Coast Restoration Trust Fund (Trust Fund) for ecosystem restoration, economic recovery and tourism promotion in the Gulf Coast region.

Established by the Act, the Gulf Coast Ecosystem Restoration Council (Council) is comprised of the Governors of the five Gulf Coast States (States), the Secretaries from the U.S. Departments of the Interior, Army, Commerce, Agriculture, and Homeland Security, and the Administrator of the U.S. Environmental Protection Agency. The Secretary of Agriculture currently serves as the Council's Chairperson.

The resolution of civil claim totals for entities held responsible for the *Deepwater Horizon* oil spill will yield more than $20 billion, the largest civil penalties ever awarded under any environmental statute, and the largest recovery of damages for injuries to natural resources of The United States. Of these penalties, the RESTORE Act will provide $5.33 billion (80 percent of $6.659 billion) to the Trust Fund, based on the following: $1 billion (plus interest) in civil penalties from Transocean Deepwater Inc. and related entities for violating the Clean Water Act in relation to their conduct in the *Deepwater Horizon* oil spill; $159.5 billion from a civil fine paid by Anadarko Petroleum Corporation; and $5.5 billion (plus interest) from BP Exploration and Production, Inc. (BP) for a Clean Water Act civil penalty under the April 4, 2016 consent decree, payable over a fifteen-year period (Figure 1).

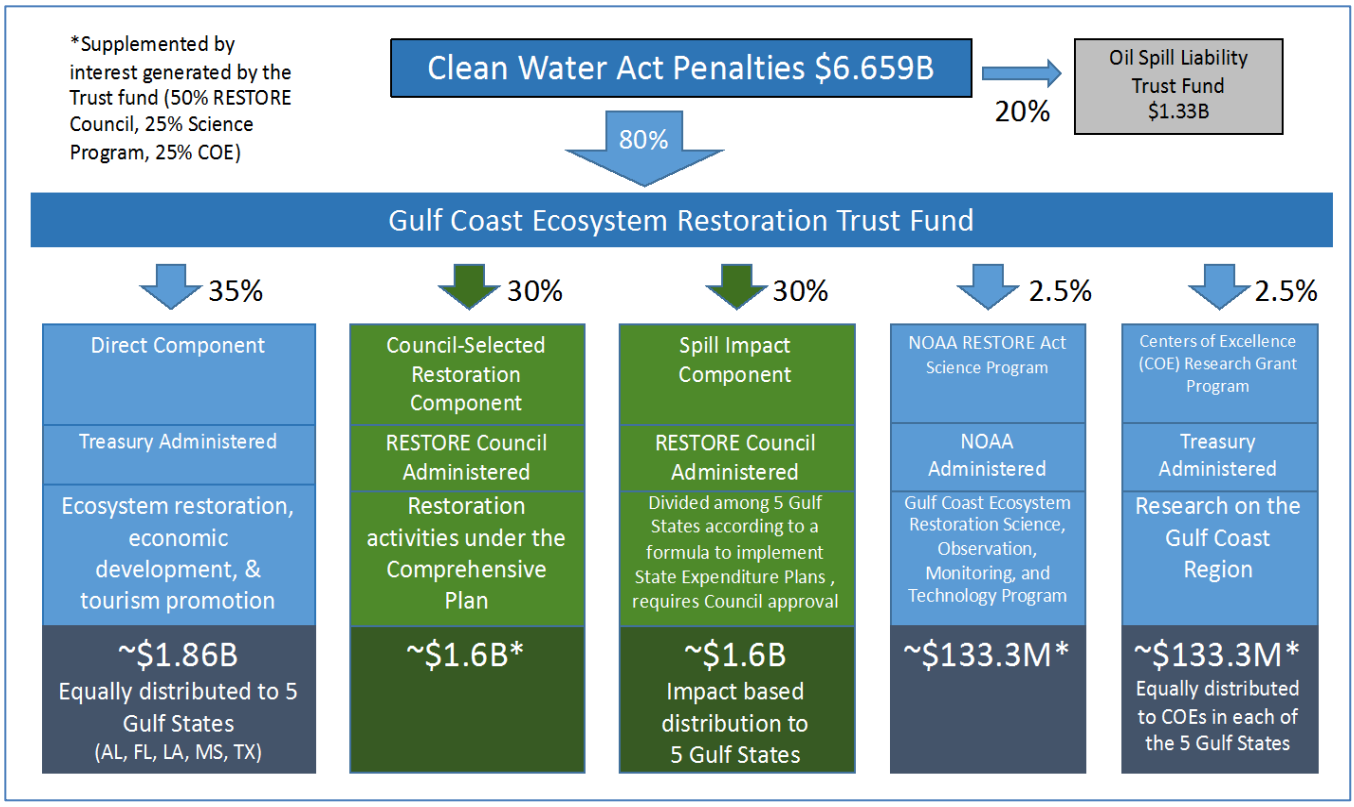

Figure 1. Allocation of the Gulf Coast Restoration Trust Fund based on settlements with BP, Transocean and Anadarko; RESTORE Council oversight components are highlighted in green.

The Council has oversight of the expenditure of 60 percent of the Trust Fund (green highlighted areas, Figure 1). Under the *Council-Selected Restoration Component*, 30 percent of available funding is administered for Gulf-wide ecosystem restoration and protection according to the Initial Comprehensive Plan, initially developed by the Council in 2013. Under the *Spill Impact Component,* 30 percent is allocated to the States. The remaining funds are allocated as follows: 35 percent under the *Direct Component,* divided equally among the five Gulf States for ecological and economic restoration; 2.5 percent to a *NOAA Science Component* (plus 25 percent of interest earned) dedicated to the Gulf Coast Ecosystem Restoration Science, Observation, Monitoring and Technology Program; and 2.5 percent to a *Centers of Excellence Component* (plus 25 percent of interest earned) dedicated to the Centers of Excellence Research Grants Program.

The Council's Initial FPL, developed under the Council-Selected Restoration Component, was approved on December 9, 2015, and consists of $156.6 million in restoration activities in 10 key watersheds as well as several critical Gulf-wide programs. The Council determined that a watershed/estuary approach would be an effective tool for guiding the selection of projects and programs in a way that advances comprehensive restoration. By identifying and focusing on watersheds, the Council was able to make difficult funding decisions in a way that leverages limited restoration resources for maximum effectiveness, while also supporting planning, science and other activities that can set the stage for future success.

The remaining 30 percent of the Trust Fund under the Council's purview is allocated to the States under the Spill Impact Component, according to a formula established by the Council and implemented through a regulation, and spent according to individual State Expenditure Plans (SEPs) to contribute to the overall economic and ecological recovery of the Gulf. The SEPs must adhere to four basic criteria set forth in the RESTORE Act and are subject to approval by the Council in accordance with those criteria. On December 15, 2015, the Council published the Spill Impact Component regulation which was approved by the Council on December 9, 2015. The allocations for the Spill Impact Component became effective on April 12, 2016, following the April 4, 2016 consent decree entered by the US District Court for the Eastern District of Louisiana.

The Council approved an Initial Comprehensive Plan in August 2013, which set forth goals and objectives for advancing comprehensive Gulf restoration. There have been important developments that warrant an update of the Council's Comprehensive Plan. Specifically, the resolution of civil claims against BP has provided clarity regarding the amount and timing of funds available to the Council enabling the development of a Ten-Year Funding Strategy, as required by the RESTORE Act. In addition, the Council gained valuable knowledge during the process of developing and approving the first set of foundational restoration activities in its Initial FPL. In the spring of 2016, the Council decided to capture this valuable information through an intensive review of the Initial FPL including an internal Council review process and public feedback components. Following completion of these reviews, the Council decided to move forward with updating its Comprehensive Plan, which is intended to improve future actions and decisions by:

- Ensuring consistency with the Priority Criteria referenced in the Act;
- Reinforcing the Council's goals, objectives and commitments;
- Setting forth a Ten-Year Funding Strategy, including a Council vision for ecosystem restoration;
- Increasing collaboration among Council members and partner restoration programs;
- Refining the process for ensuring that the Council's decisions are informed by the best available science; and
- Improving the efficiency, effectiveness and transparency of Council actions.

Following an extensive public feedback effort, the Council approved the Comprehensive Plan Update on December 16, 2016 (the document is posted on the Council website: www.RestoreTheGulf.gov).

The Council advanced its administrative and programmatic functions during 2016 to address our responsibilities as a federal agency and exercise its fiduciary responsibilities in carrying out the requirements of the RESTORE Act. The Council is committed to transparency to the general public and Gulf restoration stakeholders for all of its activities. The Council launched a web-based grants management system, called the Restoration Assistance and Awards Management System (RAAMS). The system has been configured to meet the specific requirements of the RESTORE Act, and will provide a robust "cradle-to-grave" automated financial assistance (grants) and interagency agreements management system. The accreditation and authorization process for RAAMS was completed November 2015, and the system went live in early December 2015. In addition to robust post-award management features, the system will collect a broad array of metrics on a project by project basis, thus enabling the Council to develop quantifiable outcomes for its efforts in Gulf-wide

ecosystem restoration.

The Council successfully completed its first Enterprise Risk Management assessment and documentation of its internal control structure and program policies and procedures. This assessment was completed to put in place foundational infrastructure and controls to ensure that the Council will effectively exercise its fiduciary responsibilities and properly administer funds received from the Trust Fund. On July 25, 2016, the Council issued notice of its final policy for implementing the local contracting preference requirement of the RESTORE Act.

The Council continued its innovative approach to compliance with federal environmental laws to improve the quality of environmental restoration projects and expedite their implementation for the benefit of Gulf ecosystem restoration. The Council also strengthened Tribal relations through the development of a "Tribal Communication, Collaboration, Coordination and Consultation Policy."

This *Annual Report to Congress* summarizes the Council's policies, strategies, plans and activities for restoring and protecting the Gulf Coast region. This year's Annual Report includes for the first time a summary of activities from all of the Centers for Excellence programs established under Section 1605 of the RESTORE Act.

Accomplishments under the Council-Selected Component during 2016

Initial Funded Priorities List

The RESTORE Act requires creation of an FPL that includes the projects and programs the Council intends to fund through the Council-Selected Restoration Component. The Council completed its Initial FPL during the first quarter of fiscal year 2016 (https://www.restorethegulf.gov/council-selected-restoration-component/funded-priorities-list) using a process that emphasized public input, transparency, coordination with other restoration programs, and rigorous science review.

The Initial FPL originated with an invitation to each Council member during August 2014 to submit up to five proposals. In addition to their five proposals, Council members could also submit proposals on behalf of Federally-recognized Tribes. In total, the Council received 50 submissions (including five proposed on behalf of Tribes). Within the 50 submissions, which totaled nearly $785 million, approximately 380 discrete components, referred to as "activities," were proposed for potential funding and inclusion in the draft Initial FPL. The submissions built upon experience from past ecosystem restoration plans and projects, and reflected public input provided to the Council members during development of the Initial Comprehensive Plan and as part of the Initial FPL development process.

The Council sought to identify activities for the Initial FPL that would either complement each other or have synergistic effects with other restoration projects. Taking a holistic approach to restoration recognizes the interconnected nature of coastal and marine ecosystems, a fundamental organizational principle of watersheds/estuaries, and the importance of addressing system-wide stressors that reduce ecosystem integrity. The Council's selections for the Initial FPL were therefore based on a variety of factors, including the need to respond to widely-recognized ecological stressors, foundational investment needs, substantial public input, support for certain high-value areas, and socioeconomic and cultural considerations. Moving forward, the Council will work to use this holistic approach in order to maximize project benefits and track outcomes.

Given the size and breadth of the Gulf Coast region, it is impossible to address all the ecosystem needs with the funds being made available under the RESTORE Act. However, it is possible to begin making substantial gains in important areas by focusing resources on watersheds and estuaries that have been identified as priorities by the public, Council members, and independent scientists. To that end, the Initial FPL focuses on key watersheds and estuaries across the Gulf, using conservation and restoration techniques that are tailored to the needs of the specific area.

On December 9, 2015, the Council voted to approve the Initial FPL. The Initial FPL is organized around ten key watersheds/estuaries across the Gulf to concentrate and leverage available funds to address critical ecosystem needs in high priority locations (Figure 2). Throughout the entire Initial FPL development process, the members of the Council collaborated to build an Initial FPL that responded to ecosystem needs regardless of jurisdictional boundaries and provided near-term "on-the-ground" ecological results, while also building a planning and science foundation for future success.

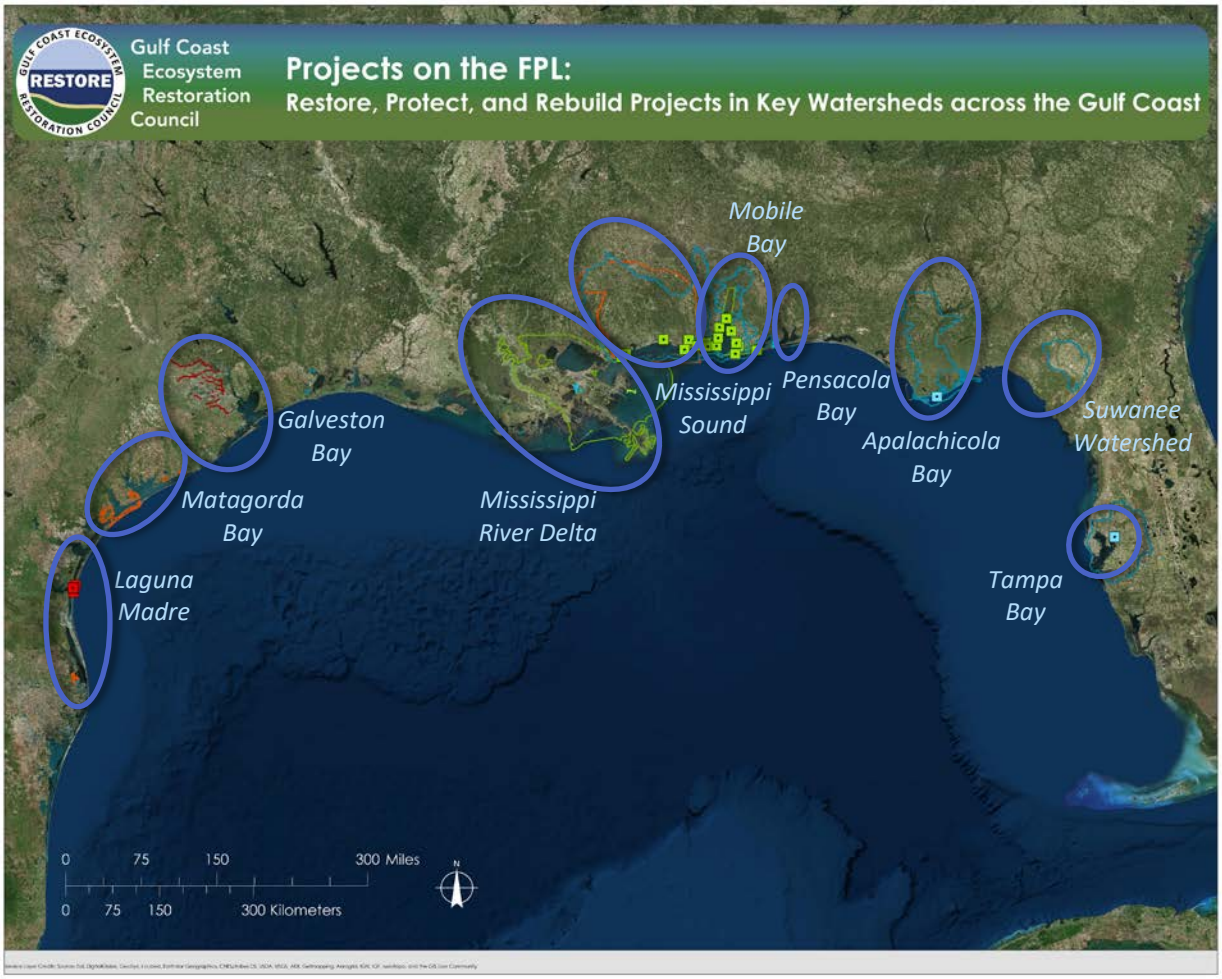

Figure 2. Ten key watershed/estuaries identified in the Initial Funded Priorities List.

The Initial FPL Comprehensive Map Viewer (http://restorethegulf.us/comp_map/) and Story Map (https://restorethegulf.gov/story_map/) were designed to enable the public to interactively query the elements of the Initial FPL. As required under RESTORE Act 31 U.S.C. § 1321(t)(2)(C)(vii)(VII)(bb)(AA), a list of each project and program with associated funding level and recipient is provided in Appendix 1.

The Initial FPL will provide substantial near-term ecological benefits and will help set the stage for future success with large-scale, comprehensive Gulf restoration. This Initial FPL will:

- ***Restore and Conserve Habitat*** by focusing on projects that restore and enhance the health, diversity, and resilience of key marsh habitat and other coastal, estuarine, and marine habitats;
- ***Restore*** over 200,000 acres of valuable forest and wetland habitat through hydrologic restoration activities, for example by backfilling 16.5 miles of abandoned oil and gas canals;
- ***Conserve*** approximately 18,485 acres of high value coastal habitat;
- ***Protect*** existing coastal ecosystems by plugging 11 abandoned oil and gas wells;

- ***Improve*** water quality by working with private land owners to eliminate the use of approximately 16,000 pounds of fertilizer annually up to 15 years, and by funding activities that will result in water pollutant load reductions of approximately 60,000 pounds annually;
- ***Advance*** comprehensive restoration by funding a range of water quality and/or habitat restoration planning efforts in 10 key watersheds and estuaries;
- ***Support*** local communities through workforce development and skills training in restoration related industries; and
- ***Invest*** in Gulf-wide science, coordination, and planning programs.

Activities in this Initial FPL will be conducted in cooperation with other ecosystem restoration and science initiatives occurring in the Gulf, including the ongoing *Deepwater Horizon* Natural Resource Damage Assessment (NRDA) and the National Fish and Wildlife Foundation (NFWF) Gulf Environmental Benefit Fund (GEBF).

The Initial FPL is comprised of two separate categories of activities (Appendix 1). The purpose of these categories is to clearly distinguish between those Initial FPL activities that the Council is currently approving and funding (Category 1 activities) and those that are Council priorities for further review and potential future funding (Category 2 activities). The Initial FPL identified $156.6 million in Category 1 restoration activities such as hydrologic restoration, land conservation, and planning for large-scale restoration projects. For the possible implementation of activities in the future, the Council is reserving approximately $26.6 million for Category 2 activities (see Initial Category 2 Projects moved to Category 1 section, page 16).

The Initial FPL does not represent a precedent for future FPLs. However, the Council does anticipate that now that the full amount of funds ultimately available under the RESTORE Act is certain, that future FPLs will include significantly larger projects and project lists that reflect the amount available to be spent for restoration activities. The types of activities included in future FPLs may differ from the Initial FPL which was based on available funding at the time the Council approved the final list of projects and programs, reflecting priorities relevant at that stage in the Council's planning and restoration efforts.

Initial FPL Projects Approved for Funding during 2016

On December 31, 2015, guidance was published in the *Federal Register* (https://www.federalregister.gov/articles/2015/12/31/2015-32924/request-for-applications-for-funding-for-the-12092015-funded-priorities-list) for members of the Council to apply for funding under the RESTORE Act (33 U.S.C. 1321(t)(2)) to implement Initial FPL projects and programs approved on December 9, 2015. The submission process is composed of two phases: (1) The submission of proposals to the Council for inclusion in an FPL (proposal phase which was completed on December 9, 2015 for the Initial FPL), and (2) once a project or program has been approved by the Council for inclusion in an FPL, the submission of a grant or interagency agreement (IAA) application in order to receive funding (application phase).

During 2016, the following 10 Initial FPL projects, totaling $34.68 million (representing 22.1% of the $156.6 million identified in the Initial FPL) completed the application phase and were awarded funding:

Pensacola Bay Living Shoreline – Phase 1 (Planning) (State of Florida) (FAIN #GNTCP17FL0040)

The Pensacola Living Shoreline Phase I is a multi-phase living shoreline project that totals 24,800 linear feet of rock and oyster reef breakwater and 205 acres of emergent marsh and submerged aquatic vegetation (SAV) habitat at three sites within Pensacola Bay. This component of the project provides $231,314 in funding for planning, engineering, design, environmental compliance, and permitting for three sites. Outcomes and metrics of the planning activity include: planning documents composed of site analyses of wind and wave energy, bank erosion rate and elevation, sediment type, flooding from rain and sea level rise, water quality impacts from anthropogenic sources, and watershed conditions; engineered drawings depicting the location of the living shorelines; monitoring plan; all required local, state, and federal permits; and completion of environmental compliance analysis. The period of performance for this award is 1/1/2017–3/31/2019.

Also, the Initial FPL included an associated Category 2 project, that if funded, would construct a living shoreline at the first of the sites which is adjacent to White Island in northwestern Pensacola Bay (approximately 2,000 linear feet of an offshore rock and oyster reef breakwater and approximately 25 acres of protected emergent marsh and SAV behind the breakwater adjacent to White Island). The other two sites are planned to be constructed on the eastern and southern shores of the Naval Air Station. These projects would leverage $10.8 million of Natural Resource Damage Assessment Early Restoration funds have been received for other living shoreline restoration sites in Pensacola Bay.

West Grand Terre Beach Nourishment and Stabilization (State of Louisiana) (FAIN #GNTCP16LA0024)

Louisiana's Barataria/Plaquemines barrier island system, which extends approximately twenty-five miles along the shoreline from West Grand Terre to Sandy Point, is experiencing island narrowing and land loss due to a complex interaction of environmental factors, hurricane impacts, and human activity. These barrier islands were also heavily impacted by the *Deepwater Horizon* oil spill. The West Grand Terre Beach Nourishment and Stabilization project will restore and enhance dune and back-barrier marsh habitat on the key barrier island of West Grand Terre to provide storm surge and wave attenuation, reducing gulf shoreline erosion, increase storm surge protection, and slow the subsidence of back barrier marshes.

The state of Louisiana's $7.26 million planning project will provide for detailed engineering and design of the project resulting in construction-ready plans and specifications and the development of an adaptive management plan to guide decision-making for future project maintenance activities. The objectives of the current phase for the West Grand Terre Beach Nourishment and Stabilization project are to engineer and design a project that will restore and enhance the dune and back barrier marsh habitat. It is estimated that the design will consist of the building of 12,700 feet of beach and dune with an area of 235 acres, as well as the restoration of up to 66 acres of back barrier marsh and a rock revetment to protect the restored marsh. The project design goals are to increase the width of the island and maintain shoreline integrity through the introduction of sediment in order to increase island longevity. The period of performance for this award is 10/3/2016–6/19/2019.

The West Grand Terre Beach Nourishment and Stabilization project, if implemented in the future, would restore and enhance interior wetlands, which would benefit Gulf estuarine dependent marine species. This project would also protect, restore, and maintain ecologically important breeding and nesting habitat for Gulf species such as colonial nesting waterbirds, including Louisiana's state bird, the brown pelican, and migratory shorebirds, including the endangered piping plover. In addition, the project would promote community resilience and reduce risk to infrastructure by providing storm surge and wave attenuation.

This project, if the planned-for contemplated activities are eventually implemented, would be part of a suite of projects designed to restore, enhance, and protect the Barataria/Plaquemines barrier shoreline. Much of the success of the planning, design, and construction of these projects has been due to leveraging partnerships with multiple federal, state, and parish agencies, including: Coastal Impact Assistance Program (CIAP) - $25,426,247; Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) - $153,192,047; BERM TO BARRIERS - $88,530,852; and NRDA - $149,407,455. The total leveraging of the West Grand Terre program would exceed $416.5 million.

Golden Triangle Marsh Creation (State of Louisiana) (FAIN #GNTCP17LA0013)

The Golden Triangle Marsh Creation project's ultimate objective is to restore and protect wetland, fish, and wildlife habitat and help maintain landscape integrity and enhance community resilience. This $4.35 million planning project by the State of Louisiana includes engineering and design of the Golden Triangle Marsh Creation project, leading to construction-ready plans and specifications and the development of an adaptive management plan to guide decision-making for future project maintenance activities. The proposed Golden Triangle Marsh Creation project, if implemented in the future, would restore and protect approximately 600 acres of valuable wetland, fish, and wildlife habitat within the Golden Triangle, a narrow band of brackish marsh directly east of New Orleans between Lake Borgne and the confluence of the Mississippi River Gulf Outlet and the Gulf Intracoastal Waterway. Because the Inner Harbor Navigation Canal/Lake Borgne Surge Barrier stretches across the Golden Triangle Marsh, these wetlands provide an important natural buffer in the multiple lines of defense protecting geographically and socially vulnerable communities in New Orleans from storm surge. In addition, the Golden Triangle Marsh falls within – and would enhance if fully implemented – the Bayou Sauvage National Wildlife Refuge, which includes fresh and brackish marshes, coastal hardwood forest, and serves as valuable fish and wildlife wetland habitat.

The Golden Triangle Marsh Creation project grant will provide plans and specifications and the development of an adaptive management plan to guide decision-making for future project maintenance activities. Deliverables include a full set of plans and specifications, a completed design report and an actionable adaptive management plan. The period of performance for this award is 11/1/2016–1/2/2020. This proposed project, if implemented, would directly create approximately 600 acres of marsh near the western side of Lake Borgne, where there is currently little marsh acreage between the lake and the Greater New Orleans Metropolitan Area. Because wetlands can help reduce the effects of storm surge and wave action, restoring and maintaining this marsh area would protect nearby levee systems and local communities. In particular, the Golden Triangle Marsh Creation project is immediately

adjacent to the Inner Harbor Navigation Canal/Lake Borgne Surge Barrier and would help buffer and protect this critically important protection feature.

If fully implemented in the future, this project would create important habitat for a wide variety of fish and wildlife species. Many of these species support recreationally- and commercially-important fishing and hunting industries, which are of major economic importance to the region. Because the project resides partially within the Bayou Sauvage National Wildlife Refuge boundary (the largest urban wildlife refuge in the United States), it would greatly benefit the fish and wildlife populations that utilize the refuge and enhance recreational opportunities in the area.

Biloxi Marsh Living Shoreline (State of Louisiana) (FAIN #GNTCP17LA0025)

The State of Louisiana received $3.22 million in planning funds to support engineering and design of the Biloxi Marsh Living Shoreline project, leading to construction-ready plans and specifications and the development of an adaptive management plan to guide decision-making for future project maintenance activities. The period of performance for this planning award is 11/1/2016–5/31/2019.

The Biloxi Marshes consist of approximately 49,000 hectares of brackish and salt marshes, which provide important storm buffer for New Orleans (a world-famous cultural and economic center for the Gulf region) as well as key habitat and ecosystem services. The marshes have been greatly impacted by shoreline erosion from wind-driven waves. The proposed Biloxi Marsh Living Shoreline project, if implemented in the future, would create approximately 47,000 feet of bioengineered oyster barrier reef fringing the marshes, which would reduce shoreline erosion and recession, prevent further marsh degradation, promote community resilience, and enhance local fisheries and oyster production.

The shell reefs created by oysters provide unique, structurally-complex habitat that support distinct and diverse aquatic communities, function as nursery habitat for many fish and shellfish species, and enhance local productivity. Because these reefs provide abundant and concentrated prey resources, they are valuable foraging sites for transient, predatory fishes such as flounder, drum, and speckled trout; therefore, oyster reefs likely enhance recreational fisheries. Oysters also enhance water quality by filtering large volumes of water daily to feed. By removing large amounts of carbon, phosphorus, and nitrogen incorporated into phytoplankton biomass, oysters can mitigate nutrient loading and help prevent eutrophication and hypoxia.

In addition to these ecosystem benefits, oyster reefs help protect marsh habitats by reducing shoreline recession. Oyster reefs frequently occur just offshore of the marsh edge, and their vertical structure serves to attenuate wave energies and reduce water velocities resulting in reduced erosion as well as increased sediment deposition behind the reef, both of which act to stabilize the shoreline. However, many marsh-fringing, vertical oyster reefs have been lost due to saltwater intrusion, disease, and overharvest, and there has been a concomitant loss in shoreline erosion control.

The Biloxi Marsh Living Shoreline project will be deemed successful if monitoring shows that it reduces shoreline recession and supports good oyster recruitment and survival, such that the reefs are self-sustaining.

Sea Grant Education and Outreach (State of Mississippi) (FAIN #GNTCP17MS0020)

The State of Mississippi will undertake education and outreach activities to describe the values of land protection for habitat, water quality improvement and for securing the future of the Gulf of Mexico in Mississippi. The $750,000 program to support Extension, Outreach and Education (EOE) for land protection and conservation education is important to ensure conservation and restoration of coastal systems. This project will provide an EOE program in Mississippi that will ensure that the objectives and purposes of land conservation towards habitat stewardship and water quality improvement are being met by funding EOE activities with interested groups that have critical roles in land conservation and restoration. This project will serve as a project for the Council to consider expanding Gulf-wide when future funds become available. The period of performance for this award is 12/1/2016–11/30/2019.

The project consists of three main components:

- Build a state specific EOE group that includes members for Extension (Land Grant and Sea Grant programs), Outreach (communicators from land acquisition programs), educators (K-12 and higher education), and state representatives to establish EOE priorities in Mississippi;
- Coordinate the development of and execution of a competitive process to fund EOE programs under the advisement of the established EOE group; and
- Coordinate and collaborate in a Gulf-wide EOE conference on land protection and conservation in year 3, in which grant recipients can meet to review EOE deliverables and products, and to create EOE partnerships for future collaborations in land protection and conservation.

Enhancing Opportunities for Beneficial Use of Dredge Sediments (State of Mississippi) (FAIN #GNTCP17MS0022)

This $2.18 million planning grant will be used to enhance Mississippi's abilities to beneficially use dredge sediments by providing funding for planning, engineering and design, and permitting. Coastal retreat caused by land subsidence, lack of sediment accretion, sea-level rise and storm-related erosion is resulting in a loss of coastal habitat. Sediments from dredging activities are readily available and if properly managed, can be beneficially used as a sediment source for coastal wetland restoration, specifically for marsh creation. This project will provide funding for beneficial use (BU) planning, design, engineering, feasibility, and permitting to get sites construction ready so that a significant amount of habitat can be created when additional funds become available.

This project purposefully connects and leverages the existing NFWF GEBF Utilization of Dredge Material for Marsh Restoration in Coastal Mississippi ($21.6M) by spatially separating these two efforts within the estuarine landscape of Mississippi. The NFWF project is interested in creation and restoration of marsh in Mississippi priority bays and estuaries (St Louis Bay, Back Bay of Biloxi, and Pascagoula / Escatawpa systems). This project is focused solely on planning, engineering and design creating shelf-ready marsh restoration projects in the Mississippi Sound and not in Mississippi priority bays and estuaries, thus complementing the NFWF proposal. A list of prioritized marsh creation sites, list of schedule and location of available dredge materials, preliminary engineering and design plans and permits for a subset list of construction-ready marsh creation sites will be developed.

The outcome of this planning, prioritization and technical assistance project is to establish beneficial-use specific receipt sites in Mississippi, for projects that would be foundational in maintaining long-term coastal resiliency of habitats and coastal wetlands. The period of performance for the award is 12/1/2016–11/30/2019.

Matagorda Bay System Priority Landscape Conservation (State of Texas) (FAIN #GNTCP17TX0009)

The Matagorda Bay System Priority Landscape Conservation project aims to conserve strategic lands adjacent to the Matagorda Bay/San Antonio Bay complex to help ensure long-term native diversity, productivity and resiliency of the entire bay estuary complex. In this activity, the State of Texas will use the $6.01 million grant to acquire approximately 6,554 acres of high-quality coastal habitats including emergent marshes, tidal flats, lagoons and coastal prairie with several miles of frontage on the Matagorda Bay system. The period of performance for the project is 4/28/2016–11/30/2018.

The ecological benefits of this component of the project consist of removing a large swath of coastal wetlands and bay front from development that would be detrimental to a range of ecological values, including emergent marshes that are important nurseries for crustaceans and finfish; critical habitat for piping plovers; habitats modeled as extremely high quality for expanding populations of whooping cranes; nesting and foraging habitat for sea turtles; nearshore oyster reefs and seagrass beds; storm surge absorption and buffering; and sediment and nutrient attenuation. Threats to the property include wind farm development, ranching and potentially residential development.

The Matagorda Bay System Priority Landscape Conservation project is unique in garnering additional funding to support this project beyond those provided by the Council Selected Component of the RESTORE Act. The Knobloch Foundation has committed to provide 10% of the project cost, estimated at approximately $668,000 including purchase price and all due-diligence costs, which will be higher than normal due to the complex surface and mineral history of the subject tract.

This project also builds upon the recent $34.5 million acquisition of the Powderhorn Ranch that lies within the area targeted for conservation in this proposal. This property was obtained through funding provided to the State of Texas by the NFWF GEBF and the Texas Parks and Wildlife Foundation.

Bahia Grande (State of Texas) (FAIN #GNTCP17TX0010)

Three properties totaling approximately 1,998 acres are expected to be purchased in the Bahia Grande area of Texas by The Nature Conservancy (TNC) from willing sellers. Two of the properties are expected to be purchased with $4.38 million in RESTORE funds. An additional tract is expected to be partially funded with RESTORE funds as well as with private funds from the Knobloch Foundation. The added properties will be a corridor of conservation lands that include the Laguna Atascosa and Lower Rio Grande Valley National Wildlife Refuge. The period of performance for the award is 4/28/2016–8/31/2019.

Through a subaward, The Nature Conservancy (TNC) is expected to acquire three tracts of land through a fee simple purchase: the 910 acre Thomas tract; the 910 acre Zarate tract; and the 178 acre Kava Farms

tract. The Thomas and Zarate tracts are expected to be purchased with RESTORE funds and the Kava Farms tract is expected to be purchased with a combination of RESTORE funds and with co-funding from the Knobloch Family Foundation in the amount of $486,500. Each of the three parcels is a critical link of the Bahia Grande Coastal Corridor project.

The project builds upon the existing network of international, federal, state and local conservation areas to meet the goals and objectives of restoring, conserving and protecting habitat and enhancing long term conservation objectives. It will complete a critical brush corridor historically used by endangered ocelots and conserve coastal prairie and marsh currently occupied by a breeding Northern Aplomado Falcon population vital to the endangered falcon's recovery.

The lands purchased for the project is expected to ultimately be held by the United States Fish and Wildlife Service (USFWS) and become part of the Laguna Atascosa National Wildlife Refuge (Refuge). Long term management of the property will be accomplished in accordance with plans specific to the Refuge that have been adapted for this project.

Baseline Flow, Gage Analysis and On-Line Tool to Support Restoration (EPA and DOI/USGS) (FAIN #IAACP17DI0001)

This $5.8 million joint planning and implementation project between EPA and DOI/USGS will result in a comprehensive, large-scale project to provide vital information on the timing and delivery of fresh water to streams, bays, estuaries, and wetlands of the Gulf States. Adequate freshwater flow to the rivers and estuaries is not only critical to the health and function of those ecosystems, but it is also important for the support of a thriving state, local and coastal economy. This proposal includes the installation and operation of eighteen streamgages, based on a flow alteration gap analysis, to create a more robust gage network and help to minimize flow alteration predictions in future analyses. The period of performance for the award is 12/1/2016–11/30/2023.

The project will provide:

- Streamflow metrics from over 950 streamgages will be summarized using widely accepted metrics describing magnitude, timing, duration, frequency, and rate-of-change of flow;
- Regional assessment of streamflow alteration in streams and rivers to describe trends in streamflow data and assess how climate and human disturbance have changed natural flow conditions through time, including recommendations on an optimal streamgage network for assessing flow alteration will be provided;
- Online streamflow alteration mapping tool;
- Eighteen streamgages will be installed to complement the existing gage network in the Gulf States; and
- A focus watershed study in Mississippi to evaluate how resource management actions change streamflow metrics in a large river basin in Mississippi.

Gulf of Mexico Habitat Restoration via Conservation Corps Partnerships; Tribal Youth Component (DOI) (FAIN #IAACP16DI0002)

The Gulf Coast Conservation Corps (GCCC) Program (Program) will establish a regional workforce-training program to benefit local communities and support long-term Gulf coast restoration implementation. Individuals trained under the program will help to execute priority restoration projects selected for funding and implementation under *Deepwater Horizon*-related recovery programs, including other activities funded in the Initial FPL. The GCCC Program will have two primary activities – the first ($7.5M) overseen by DOC/NOAA and tailored to the unique needs and communities of each State, and the second ($0.5M) overseen by DOI/Bureau of Indian Affairs (BIA) focused on tribal youth. DOI/BIA will work with the Federally Recognized Tribes within the Gulf Region to engage tribal youth in support of environmental restoration and implementation of projects selected by the Council.

Working closely with Tribes, the BIA will support the creation of Tribal Youth Conservation Corps in the Gulf region. Participants will benefit from employment opportunities working on conservation and restoration projects that also incorporate lessons in environmental education, history and culture. The program will not only help restore the Gulf but also provide meaningful job opportunities for youth, create powerful connections to nature and help prepare the next generation of environmental stewards. The first set of projects will focus on coastal tribal community restoration priorities and will provide employment opportunities for young people across five Gulf Coast tribal nations, including the Chitimacha Tribe of Louisiana, Miccosukee Tribe of Indians of Florida, Seminole Tribe of Florida, Mississippi Band of Choctaw Indians and Poarch Band of Creek Indians of Alabama. The period of performance for the award is 5/15/2016–12/30/2017.

Initial FPL Category 2 Projects Moved to Category 1

As noted above, the Council's Initial FPL includes projects and programs approved for funding under the Council-Selected Restoration Component, along with activities that the Council identified as priorities for potential future funding. Activities approved for funding in the Initial FPL are included in "Category 1." The priorities for potential future funding are in "Category 2." The Council approved approximately $156.6 million in Initial FPL Category 1 restoration and planning activities, and prioritized twelve Initial FPL Category 2 activities for possible funding in the future, subject to environmental compliance and further Council and public review.

The Council reserved approximately $26.6 million for implementing priority activities in the future. These reserved funds may be used to support some, all or none of the activities included in Category 2 of the Initial FPL and/or to support other activities not currently under consideration by the Council. As appropriate, the Council intends to review each activity in Category 2 in order to determine whether to: (1) move the activity to Category 1 and approve it for funding, (2) remove it from Category 2 and any further consideration, or (3) continue to include it in Category 2. A Council decision to amend the Initial FPL to move an activity from Category 2 into Category 1 must be approved by a Council vote after consideration of public and Tribal comments using the process outlined in Figure 3.

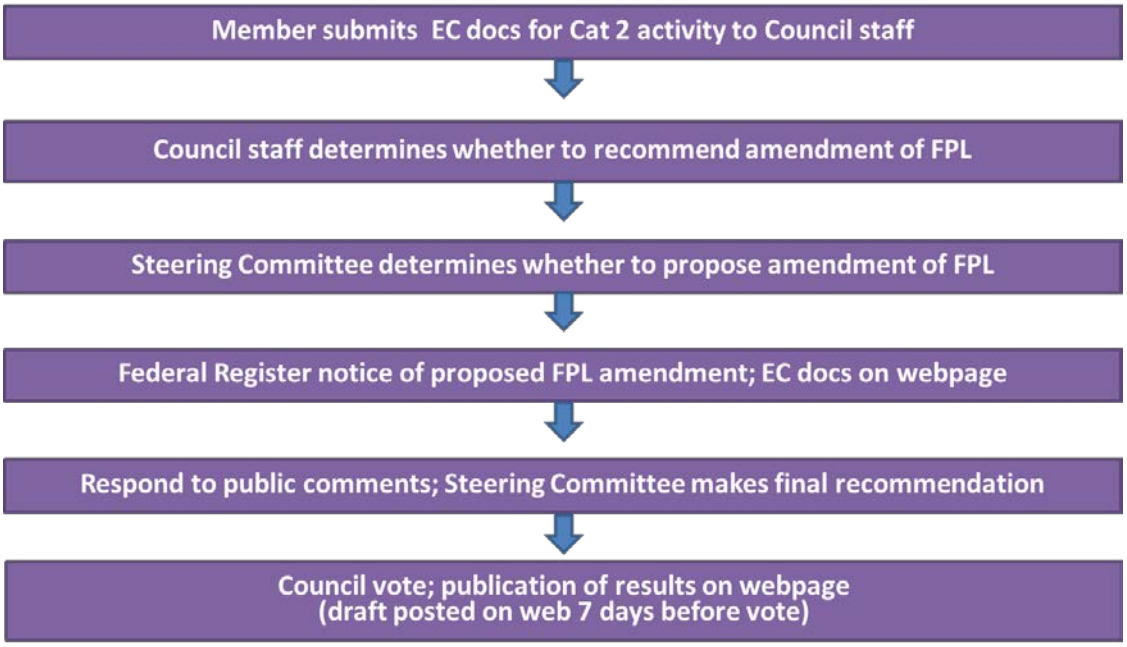

Figure 3. Council process for approving an Initial FPL Category 2 project to Category 1; EC docs = Environmental Compliance Documentation.

Apalachicola Bay Oyster Restoration (State of Florida)

The Initial FPL included an Apalachicola Bay oyster restoration project in the State of Florida which included planning activities in Category 1 and implementation activities for the project in Category 2 of the Initial FPL. On August 24, 2016, the Council amended its Initial FPL to approve implementation funding for the Apalachicola Bay Oyster Restoration project in Florida. The Council approved $3,978,000 in implementation funding for this project. The Council also approved reallocating $702,000 from project planning to project implementation, after any remaining planning expenses have been met. The total amount available for implementation of the Project is therefore $4,680,000. These funds will be used to restore approximately 251 acres of oyster beds, which is an increase from the 219 acres originally proposed in the Initial FPL.

To comply with the National Environmental Policy Act (NEPA), the Council has adopted an existing Army Corps of Engineers Environmental Assessment (EA) that addresses the activities in the project. In so doing, the Council is expediting project implementation, reducing planning costs and increasing the ecological benefits of this project by using the savings in planning funds to expand the Project by approximately 32 acres.

Oyster reefs are important to Apalachicola Bay's future; it has been estimated that 85% of oyster reefs have been lost globally, with Apalachicola Bay being one area with significant remaining reefs. Therefore, placing substrate or "cultch" in bays where natural reproduction occurs is among the most effective techniques used to: 1) create reef infrastructure; 2) stimulate spat setting; 3) sustain oyster fisheries; 4) enhance community functions; 5) increase natural productivity; and 6) accelerate the

recovery process. This project, which is an expansion of a *Deepwater Horizon* NRDA Phase III Early Restoration project, would restore approximately 251 acres of natural oyster reefs through the addition of approximately 50,258 cubic yards of cultch material to support successful oyster spat settlement and ultimately, adult oysters.

Performance Metrics for Council-Funded Programs and Projects

The Council has currently identified 52 performance-level metrics for grants to states and IAAs with the federal members funded through the Council-Funded Component of the RESTORE Act. These metrics (**Appendix 2**) will be used to monitor and evaluate the efficacy of projects and programs in meeting mission goals and objectives of the Council and track annual performance. For each of the performance metrics, the associated seven Council Objectives (see pages 32 and 33) supported by that metric is provided, along with the supporting activity/outcomes, metric description and the overarching concomitant approach to support ecosystem restoration.

- **Habitat Conservation**: Activities, projects and/or programs that protect critical freshwater, estuarine and near-shore coastal habitats that are fully functional (i.e., remain unaffected by storms, oil spill, or other man-made or natural disruptions)(e.g., land acquisition; conservation easements);

- **Habitat Restoration:** Activities, projects, and/or programs that rebuild the critical habitats that have been lost through either man-made or natural impacts (e.g., living shorelines, beneficial use);

- **Habitat Management:** Activities**,** projects and/or programs which focus on long-term sustainability using a variety of techniques intended to increase tidal exchange, freshwater availability, and water quality all needed to improve habitat function and longevity (e.g., restoration of freshwater flow by removal of blockages);

- **Capacity, Outreach, Incentives:** Activities, projects and/or programs which provide educational and engagement opportunities for stakeholders that live, work or recreate in the Gulf of Mexico region to enable a better understanding of the Council member's ecosystem restoration efforts;

- **Planning, Research, Monitoring:** Activities, projects and/ or programs which are forward-looking to investigate the feasibility and best practices for an ecosystem restoration effort (e.g., planning and/or research to determine the efficacy for a sediment diversion), or setting up monitoring protocols to ensure accuracy to support data sharing and adaptive management;

- **Economic Benefits:** Activities, projects and/or programs which are designed to determine the financial or other economic indicators of the value of ecosystem restoration efforts to local, city, county, state and national stakeholders.

Accomplishments under the Spill Impact Component during 2016

Background

Spill Impact Component funds will be invested in projects, programs, and activities developed by the States and identified in approved State Expenditure Plans (SEPs). The RESTORE Act allocates 30 percent of the Trust Fund to the Gulf Coast States under a formula established by the Council through a regulation, and spent according to individual SEPs. Each State will develop one or more SEPs describing how it will disburse the amounts allocated to it under the Spill Impact Component. These projects and programs will be implemented through grants to the States in a manner that is consistent with the requirements of the RESTORE Act as well as the goals and objectives of the Comprehensive Plan.

The RESTORE Act provides the scope of activities eligible for funding under the Spill Impact Component. As described in the RESTORE Act, these activities can include:

- Restoration and protection of the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast region.
- Mitigation of damage to fish, wildlife, and natural resources.
- Implementation of a federally-approved marine, coastal, or comprehensive conservation management plan, including fisheries monitoring.
- Workforce development and job creation.
- Improvements to or on State parks located in coastal areas affected by the *Deepwater Horizon* oil spill.
- Infrastructure projects benefitting the economy or ecosystem resources, including port infrastructure.
- Coastal flood protection and related infrastructure.
- Planning assistance.
- Administrative costs of complying with the Act.
- Promotion of tourism in the Gulf Coast region, including recreational fishing.
- Promotion of the consumption of seafood harvested from the Gulf Coast region.

On September 29, 2015, the Council published a draft Spill Impact Component regulation in the *Federal Register* for a 30-day public comment period. The draft regulation was published pursuant to the RESTORE Act's requirement that the Council establish by regulation a formula, implementing the criteria set forth in 33 U.S.C. § 1321(t)(3)(A)(ii) for allocation of Spill Impact Component funds and disbursed to each State, that is based on a weighted average of the following three criteria:

- 40 percent based on the proportionate number of miles of shoreline in each Gulf Coast State that experienced oiling on or before April 10, 2011, compared to the total number of miles of shoreline that experienced oiling as a result of the *Deepwater Horizon* oil spill.

- 40 percent based on the inverse proportion of the average distance from the mobile offshore

drilling unit *Deepwater Horizon* at the time of the explosion to the nearest and farthest point of the shoreline that experienced oiling of each Gulf Coast State.

- 20 percent based on the average population in the 2010 decennial census of coastal counties bordering the Gulf of Mexico within each Gulf Coast State.

Finalization of State Expenditure Plan Allocations

On December 9, 2015, the RESTORE Council voted to approve the formula allocating funds made available from the Gulf Coast Restoration Trust Fund among the Gulf Coast States pursuant to Sec.1603(3) of the RESTORE Act for the Spill Impact Component (https://www.restorethegulf.gov/sites/default/files/SICR_FINAL_Approved_Dec_9.pdf). The final regulation was published in the *Federal Register* on December 15, 2015 (https://www.federalregister.gov/agencies/gulf-coast-ecosystem-restoration-council).

On April 4, 2016, the United States District Court for the Eastern District of Louisiana entered a consent decree among the United States; the states of Alabama, Florida, Louisiana, Mississippi and Texas; and BP Exploration and Production Inc. with respect to the civil penalty and natural resource damages in case number MDL No. 2179. The Council regulation implementing the Spill Impact Component was effective as of April 12, 2016.

Using the formula and information set forth in the Rule, the allocation of Spill Impact Component funds among the five States is:

- Alabama – 20.40 percent
- Florida – 18.36 percent;
- Louisiana – 34.59 percent;
- Mississippi – 19.07 percent; and
- Texas – 7.58 percent.

Development of State Expenditure Plans and Updated Guidelines

The Council recognizes that each Gulf Coast State is unique and may have a distinct set of priorities. State Expenditure Plans may include the following information, and must comply with the RESTORE Act and applicable regulations:

- The amount of funding needed for each project, program, and activity selected by the State for planning and implementation; the proposed start and completion dates; and specific mechanisms that will be used to monitor and evaluate the outcomes and impacts of each project, program, and activity.
- A description of how the best available science, as applicable, informed the State's project, program, and activity selection.
- A statement that all included projects, programs, and activities are eligible activities under the RESTORE Act.

- A statement that all included projects, programs, and activities do not exceed the 25 percent funding limit for infrastructure, unless the State Expenditure Plan documents an exception in accordance with the RESTORE Act.
- A description of how all included projects, programs, and activities contribute to the overall ecosystem and economic recovery of the Gulf Coast.
- A description of how all projects, programs, and activities are consistent with the Goals and Objectives of the Comprehensive Plan. The Council views "consistent" to mean that the Gulf Coast States will implement eligible projects, programs, and activities that will further one or more of the five Goals and will be implemented in a manner that does not have a negative impact on the Gulf Coast ecosystem restoration projects and programs selected for implementation by the Council.
- A description of the process the State will use to ensure appropriate public and Tribal participation and transparency in the project, program, and activity selection process.
- A description of the financial controls and other financial integrity mechanisms to be used for the purposes of the RESTORE Act.
- A description of the methods the State will use to measure, monitor, and evaluate the outcomes and impacts of funded projects, programs, and activities.
- To the extent known, a description of any certain or prospective collaborations or partnerships.
- To the extent known, a description of any additional resources that will be leveraged to meet the goals of the State Expenditure Plan.

The Council will review each SEP to ensure that it is consistent with Goals and Objectives set forth in the Comprehensive Plan and that all applicable requirements are met. The States will make SEPs available to the public and Tribes for a period of 45 days. Once submitted by the States, the Council will approve or disapprove an SEP within 60 days. If an SEP does not meet the applicable requirements, the Council will work with the State to address any outstanding issues.

On March 17, 2016, the Council updated the SEP Guidelines to further describe the required elements of an SEP, the process for submitting an SEP, and the standards by which the Council Chair will evaluate the SEP. The Guidelines also describe the requirements for a Planning SEP authorized by the RESTORE Act Spill Impact Component Planning Allocation Final Rule (80 FR 1584). (https://www.restorethegulf.gov/sites/default/files/SEP-Guidelines__Approved-20160317.pdf).

On November 16, 2016, the Council's Steering Committee clarified Section 6.1 of the SEP Guidelines with respect to economic projects under the Spill Impact Component. The approved revised language states: "**Criterion 3: Takes into consideration the Comprehensive Plan and is consistent with the goals and objectives of the Comprehensive Plan:** The Council staff will determine whether the State Expenditure Plan as a whole is consistent with the goals and objectives of the Comprehensive Plan. The Council staff will evaluate whether each project contained in the State Expenditure Plan will further one or more of the five goals set forth in Section 4.1.2 and that no project is incompatible with any of the seven objectives set forth in Section 4.1.3; and will look to see if the projects will be implemented in a manner that does not have a negative impact, direct or indirect, on the Gulf Coast ecosystem restoration projects and programs selected for implementation by the Council under the Comprehensive Plan. For clarity, the

absence of an economic objective in Section 4.1.3 does not preclude Chairperson approval of an SEP containing economic projects that, along with the other projects in the SEP, are compliant with the requirements and criteria of the RESTORE Act and these Guidelines."

Planning State Expenditure Plans (PSEPs)

In August 2014, the Council published an Interim Final Rule in the *Federal Register* for Gulf Coast States and the Florida Gulf Consortium to receive funding for development of SEPs. The Final Rule was published on January 13, 2015 and provides access to up to five percent of the funds available to each state under the Spill Impact Component for SEP development. It is presumed that a planning State Expenditure Plan will takes into consideration the Comprehensive Plan and is consistent with the goals and objectives of the Comprehensive Plan (Criterion 3 above) if it describes activities related to drafting a full State Expenditure Plan. Planning State Expenditure Plans and SEPs (once approved) can be found at: https://www.restorethegulf.gov/spill-impact-component.

Florida Planning State Expenditure Plan (FAIN #GNTSP16FL0021)

The Florida PSEP was approved on May 21, 2015, and a $4,640,675 grant agreement was executed in June 2016 with a performance period of 8/23/2014–6/30/2018. The Gulf Consortium (Consortium) is the designated entity responsible for the development of the Florida SEP. The Consortium is a public entity created in October 2012 through an Inter-local Agreement between Florida's 23 Gulf Coast counties – from Escambia County in the western panhandle of Florida to Monroe County on the southern tip of Florida - to meet the requirements of the RESTORE Act.

To formalize the role of the Consortium, the Consortium entered into a Memorandum of Understanding (MOU) on June 12, 2013 to establish a process of coordinating with the Governor's office on the development of the Florida SEP. The MOU provides for the coordinated review and input by the Florida Department of Environmental Protection, the Water Management Districts, other applicable state agencies, and the Governor during the development of the Florida SEP. In addition, the MOU requires the Consortium to conduct its activities with full transparency and adhere to all legal requirements including, but not limited to, those relating to open meetings, public records, contracting, audits, and accountability. Finally, the MOU requires the Consortium to meet the following minimum requirements in selecting and prioritizing projects, programs, and other activities for inclusion in the Florida SEP:

- A review for consistency with the applicable laws and rules;
- Prioritization based on criteria established by the Consortium;
- Consideration of public comments; and
- Approval by an affirmative vote of at least a majority of the Consortium Directors present at a duly noticed public meeting of the Consortium.

Development of a RESTORE Act compliant Florida SEP will require an iterative and goal oriented process that integrates both technical analysis and production, as well as intensive public involvement and stakeholder coordination. The sequence of the various project tasks, which includes public involvement and stakeholder coordination throughout the entire project, is divided into four phases, including:

- Funding and Goal Setting;
- Project Nomination;

- Project Evaluation; and
- Florida SEP Development.

Mississippi Planning State Expenditure Plan (FAIN #GNTSP16MS0019)

The Mississippi PSEP was approved on November 2, 2015, with grant award of $1,374,612 approved June 2016 for a 5/13/2016 to 4/30/2018 period of performance. The proposed scope of work involves a series of activities that create an iterative process in developing a Mississippi State Expenditure Plan (MSEP) while maintaining transparency to stakeholders. This process is divided into five phases with distinct tasks occurring in each phase. The period of performance for this award is 5/13/2016–4/30/2018. The activities occurring within each phase are designed to achieve the following criteria:

- Identify eligible projects, programs, and activities for inclusion on the MSEP;
- Ensure that eligible projects, programs, and activities included on the MSEP contribute to overall ecological and economic recovery of the Gulf Coast;
- Ensure the MSEP takes into consideration and is consistent with the goals, objectives and commitments of the RESTORE Council's Comprehensive Plan; and
- Promote funded projects to be as successful and sustainable as possible.

The five phases of the Mississippi PSEP include:

- Establishing a Foundation;
- Project Contribution, Benefit and Coordination;
- Project Filtering;
- Project Vetting; and
- Development of Mississippi SEP(s).

Texas Planning State Expenditure Plan

A Texas PSEP was approved on July 29, 2016. The significant portion of the PSEP-related efforts will involve varied activities associated with developing a list of projects that Texas, through the SEP, will request approval of RESTORE funds. The planning activities to develop the SEP will include opportunities for input from the state's federal, state and local elected officials, while engaging the participation of the public representing the varied interests of Texas coastal communities. The selected projects will be consistent with the eligibility requirements in both the Spill Component of the RESTORE Act (33 U.S.C., section 1321(t)(1)(B)(i)(III)) and the Council's Comprehensive Plan.

Projects for inclusion in the SEP will be selected on a competitive basis, using a Request for Grant Applications (RFGA) process. The selection of the projects will be based on Texas' priorities for the state's gulf coast region. The priorities and selection criteria are based on discussion and exchanges with federal, state and local elected officials, as well as the general public, in particular those challenges faced by the Texas coastal region. The phases of the Texas PSEP include:

- Finalize Priorities Document;
- Develop Request for Grant Applications (RFGA);
- Post RFGA and Outreach Efforts;
- Application Workshops;

- Review Process;
- Develop Draft Language for SEP;
- Develop Draft Selected Project List (SPL) for inclusion in SEP;
- Post for Public Comment;
- Finalize SEP/SPL;
- Submit SEP/SPL to RESTORE Council; and
- SEP Approval.

Updating the Initial Comprehensive Plan

The task of restoring the Gulf environment is a multi-generational undertaking. A comprehensive approach to Gulf restoration must include the engagement of a wide and diverse array of stakeholders, including federal, state and local governments, Tribes, private businesses, non-governmental organizations (NGOs) and the general public. By working closely with our restoration partners, the Council believes it can make significant progress towards comprehensive Gulf restoration and provide substantial environmental and economic benefits to current and future generations.

A significant component in assisting the Council achieve ecosystem restoration of the Gulf is through its Comprehensive Plan. The Council updated its 2013 Initial Comprehensive Plan (Initial Plan) during 2016 with the intention to provide strategic guidance that will help the Council more effectively address complex and critical challenges inherent to ecosystem restoration in the Gulf of Mexico by:

- Ensuring consistency with the Priority Criteria referenced in the Act;
- Reinforcing the Council's goals, objectives and commitments;
- Setting forth a Ten-Year Funding Strategy, including a Council vision for ecosystem restoration;
- Increasing collaboration among Council members and partner restoration programs;
- Refining the process for ensuring that the Council's decisions are informed by the best available science; and
- Improving the efficiency, effectiveness and transparency of Council actions.

The importance of an updated Comprehensive Plan is further amplified considering resolution of the civil claims against BP which has clarified the amount and timing of funds available to the Council. On April 4, 2016, the federal court in New Orleans entered a consent decree resolving civil claims against BP arising from the *Deepwater Horizon* oil spill. This historic settlement resolves, among other things, the U.S. government's civil and administrative claims under the Clean Water Act, the governments' claims for natural resources damage under the Oil Pollution Act, and also involves a related settlement of economic damage claims of the Gulf States and local governments. Taken together this resolution of civil claims totals more than $20 billion (see Figure 4) and is the largest civil penalty ever paid by any defendant under any environmental statute, and the largest recovery of damages for injuries to natural resources.

Under the consent decree, over a fifteen-year period, BP will pay a Clean Water Act civil penalty of $5.5 billion (plus interest), $8.1 billion in natural resource damages (this includes $1 billion BP already paid for early restoration), up to an additional $700 million (some of which is in the form of accrued interest) for adaptive management (including planning activities or to adapt, enhance, supplement, or replace existing restoration projects selected by the Trustees) or to address injuries to natural resources that were unknown to the Trustees as of July 2, 2015, and $600 million for other claims, including claims under the False Claims Act, royalties, and reimbursement of NRDA costs and other expenses due to this incident.

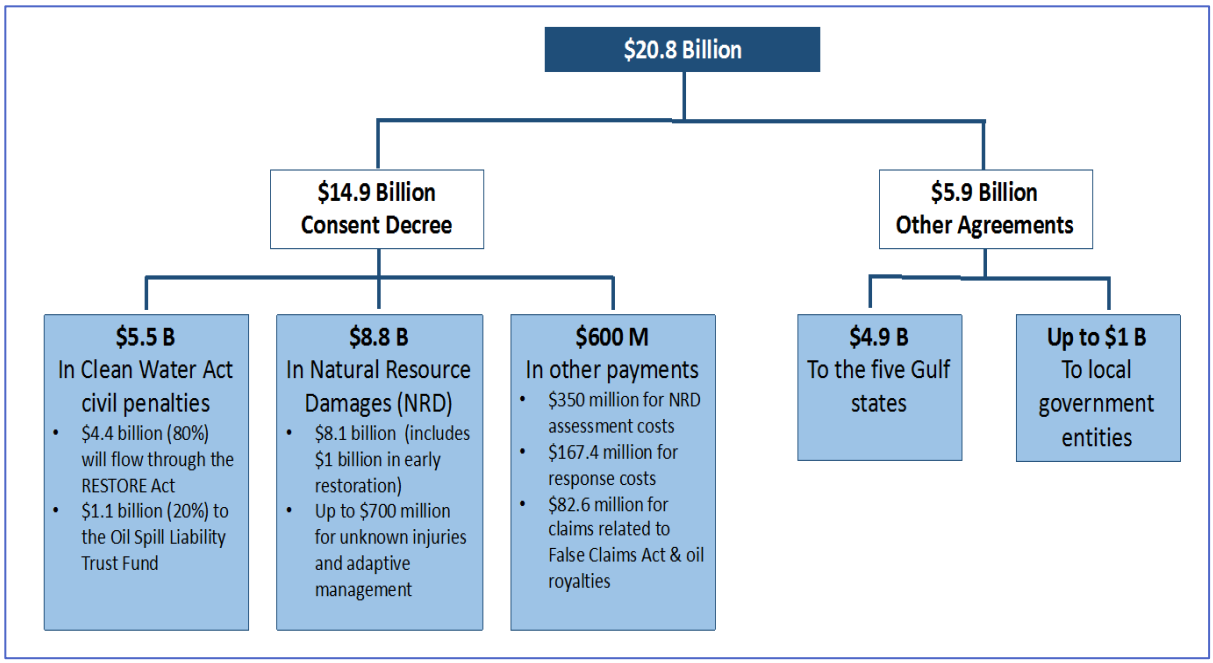

Figure 4. Allocation of settlement payments under the final BP consent decree entered on April 4, 2016.

YEAR	Council-Selected Restoration Component ($M)	Spill Impact Component ($M)
2011-2015	$244.824	$244.824
2016	$38.329	$38.329
2017	$91.034	$91.034
2018	$45.517	$45.517
2019	$91.034	$91.034
2020	$91.034	$91.034
2021	$91.034	$91.034
2022	$91.034	$91.034
2023	$91.034	$91.034
2024	$91.034	$91.034
2025	$91.034	$91.034
2026	$91.034	$91.034
2027	$91.034	$91.034
2028	$91.034	$91.034
2029	$91.034	$91.034
2030	$91.034	$91.034
2031	$91.034	$91.034
	$1,603.146*	**$1,603.146**

***Note:** Amounts do not include future interest to be paid into/generated by the Trust Fund.

Table 1. Annual funds ($ millions) available under the Council-Selected Restoration and Spill Impact Components.

Lessons Learned: Improving the Efficiency, Effectiveness and Transparency of Council Actions

As a first step in updating the Comprehensive Plan, the Council reviewed the process it used to develop the Initial FPL. The goal was to determine what aspects of the process worked best and to see where improvements might be needed to enhance the efficiency and effectiveness of future FPLs. The Council conducted a retrospective review of the Initial FPL process in the spring of 2016.

As part of this process, the Council also hosted a series of webinars to solicit feedback from the public. A total of 229 stakeholders attended the three webinars. During the webinars, the Council solicited feedback through polling and written comments. On May 10, 2016, four Federally-recognized Tribes provided feedback during a Tribal Engagement Meeting in New Orleans.

The input garnered from the webinars was captured and published on the Council website in the *Lessons Learned and Path Forward Summary Report*. This review helped identify and reinforce important lessons applicable to future Council activities. A summary of the salient issues raised through the webinars include the following:

Initial FPL Development Process and Areas for Improvement

The majority of webinar participants felt that while the Council's Initial FPL development process was successful, minor adjustments to the process were needed. Participants noted that there were areas for improvement in project development and selection, in the application of best available science, and incorporating public input and transparency.

Participants suggested there are several factors Council members should consider during the proposal development process for the next FPL. Many highlighted their desire for the funding of large-scale restoration projects. Some suggested funding should go to the areas of greatest need, and toward projects that maximize long-term ecosystem benefits. Many participants suggested that Council members should collaborate on the development of future proposals.

Some participants noted that the existing Comprehensive Plan Objectives and Priority Criteria should be further developed and/or refined in order to drive project selection. Many participants stressed the importance of leveraging funding across restoration programs (*e.g.,* Natural Resource Damage Assessment (NRDA) Trustee Council and the National Fish and Wildlife Foundation (NFWF)) to avoid duplication, standardize data collection and monitoring, and address Gulf-wide ecosystem needs.

Some participants suggested that the Council should dedicate more funding for restoration and conservation on private lands. Others stressed the need for better outreach and engagement with minority communities while ensuring funding for workforce development and job training. A number of participants suggested the need for improved guidance and transparency during the early stages of project proposal development.

Use of Watershed and Estuary-Based Approach

The use of a watershed/estuary-based approach for comprehensive ecological restoration was favored by the vast majority of participants. Many noted that linking projects to environmental stressors by watershed or estuary is scientifically sound and offers operational advantages. Some stakeholders suggested that the selection of priority watersheds should be based on a scientific analysis as well as on the importance of ecosystem benefits (*e.g.,* economic and cultural) to the surrounding communities. Others felt that the use of a watershed/estuary-based approach is a good framework, but noted that there are features of the Gulf system that extend beyond coastal watershed boundaries, including private lands in upper watersheds, and marine and offshore habitats. Many participants noted that the watershed/estuary-based approach should allow for regional projects that address similar issues across watersheds.

Public Input during the Initial FPL Development Process

While participants appreciated the Council's efforts to be transparent and engage the public, many suggested that public engagement during the Initial FPL process could have been more robust. The majority of participants noted that the next FPL process should allow for additional opportunities for public review and comment. Many called for more public input during the project development stage, while others felt there was not sufficient time or process for the Council to respond to public comments on the draft Initial FPL. Several participants expressed that it was not clear how the Council weighed or considered public comments in the final decisions for the Initial FPL and suggested that the Council provide a clearer framework for incorporating public comments for future FPLs.

Best Available Science Review Process

The majority of participants suggested that the best available science (BAS) review approach used during the Initial FPL should be maintained, but that there is room for improvement. Many participants noted that the BAS review process could be refined by improving review evaluation questions, comparing science reviewer input through the use of an expert panel, and by scoring/ranking projects scientifically. Support was also expressed for a transparent and science-based method for cross-proposal review and identifying possible interactions leading to maximum ecosystem benefit. A number of participants suggested a more equitable distribution of social scientists in subsequent review processes.

Measuring Success

A number of participants noted that the Council should measure the success of funded projects at both the project level as well as at a larger scale (*e.g.*, by watershed or region). Some participants suggested that measures of success should be developed before project selection and the impact of projects on the community at large, in particular minority communities, must also be considered. Several participants highlighted the need for regional, long-term monitoring to measure comprehensive success, and requested ecosystem services be considered in the Council's evaluation of projects/programs.

Development of the Comprehensive Plan Update

In early 2016, the Council carefully reviewed the *Lessons Learned and Path Forward Summary Report* and responses by members to the retrospective review of the Initial FPL process. These evaluations helped identify and reinforce important lessons applicable to future Council activities. The Council decided to capture these lessons by updating the Initial Comprehensive Plan. The goal was to position the Council to most effectively use future funds.

After an internal, collaborative writing process, the Council issued its draft Comprehensive Plan Update in the *Federal Register* on August 23, 2016. A series of public hearings and webinars were held during September and October 2016:

Sept. 8, 2016	**Webinar**	5:00 p.m. CST
Sept. 12, 2016	**Gulf Coast State College** 5230 West US Hwy. 98 Panama City, FL	6:00 p.m. CST
Sept. 19, 2016	**University of New Orleans** **Homer L. Hitt Alumni Center** 2000 Lakeshore Driver New Orleans, LA 70148	6:00 p.m. CST
Sept. 20, 2016	**5 Rivers Delta Resource Center** 30945 Five Rivers Boulevard Spanish Fort, AL 36527	6:00 p.m. CST
Sept. 22, 2016	**Morgan City Municipal Auditorium** 728 Myrtle Street Morgan City, LA 70381	6:00 p.m. CST
Sept. 26, 2016	**University of Southern Mississippi** **Gulf Coast** Fleming Education Center Auditorium 730 East Beach Boulevard Long Beach, MS 39560	6:00 p.m. CST
Sept. 29, 2016	**Sea Scout Base** 7509 Broadway Galveston, TX, 77554	6:00 p.m. CST
Oct. 4, 2016	**Webinar**	2:00 p.m. CST

In additional to the public meetings and webinars, there were three other options available to Gulf stakeholders to make public comment on the draft Comprehensive Plan update:

- Online at: www.RestoreTheGulf.gov
- By mail to: Gulf Coast Ecosystem Restoration Council; and

- By e-mail to frcomments@restorethegulf.gov.

Full meeting details and the draft Comprehensive Plan Update 2016 can be found on the Council's website at www.RestoreTheGulf.gov.

Over 300 people attended the six public meetings and two webinars and offered over 50 unique comments. In addition, the Council received more than 65,000 written comments from private citizens, businesses, other government entities (such as state, county and local), non-governmental organizations (NGOs), and others. The number of stakeholders engaged during the public comment period, occurring over six years after the *Deepwater Horizon* oil spill, clearly shows that people continue to care deeply about Gulf restoration and are paying close attention to actions and decisions being made by the Council.

The Council received positive public feedback on the draft Comprehensive Plan Update. In particular, there was strong support for the collaboration and coordination workshops and meetings discussed in the draft Comprehensive Plan Update. Many people who support this concept urged the Council to ensure transparency and tangible results from these collaboration and coordination efforts. The Council modified the draft Comprehensive Plan Update in response to this public input. Similarly, there was strong support for the proposed changes to the science review process. The Council modified the Comprehensive Plan in response to this public input. In addition, the Council provided written responses to the public comments on its website.

In a public meeting held in New Orleans, Louisiana, on December 16, 2016, the Council voted to approve the Comprehensive Plan Update. This update, described in more detail below, will help guide future Council funding decisions.

Contents of the 2016 Comprehensive Plan Update

Council Goals and Objectives

In the final Comprehensive Plan Update, the Council recommitted to the original five goals, with one important clarifying amendment. Specifically, the Council included "water quantity" in the existing Goal 2 on water quality. Restoring water quality and habitat can at times require efforts to address water quantity issues. For example, restoring freshwater inflows to bays and estuaries is essential for restoring coastal waters and habitats by re-establishing natural salinity levels and sediment regimes. By referencing water quantity in the water quality goal, the Council is making this connection more explicit.

Council Goals

To provide the overarching framework for an integrated and coordinated approach for region-wide Gulf Coast restoration and to help guide the collective actions at the local, state, Tribal and federal levels, the Council established the following five goals in the Initial Plan:

- Goal 1: Restore and Conserve Habitat - Restore and conserve the health, diversity, and resilience of key coastal, estuarine, and marine habitats;

- Goal 2: Restore Water Quality and Quantity - Restore and protect the water quality and quantity of the Gulf Coast region's fresh, estuarine, and marine waters;

- Goal 3: Replenish and Protect Living Coastal and Marine Resources - Restore and protect healthy, diverse, and sustainable living coastal and marine resources;

- Goal 4: Enhance Community Resilience - Build upon and sustain communities with capacity to adapt to short- and long-term changes; and

- Goal 5: Restore and Revitalize the Gulf Economy - Enhance the sustainability and resiliency of the Gulf economy.

To achieve all five goals, the Council supports ecosystem restoration that can enhance local communities by giving people desirable places to live, work, and play, while creating opportunities for new and existing businesses of all sizes, especially those dependent on natural resources. A strong economy is based on a healthy environment. By investing in ecosystem restoration projects in the Council-Selected Restoration Component, the Council is helping maintain the environmental and economic foundation for Gulf coastal communities. In addition to the many economic benefits that are derived from the coastal environment, the implementation of restoration projects and programs also creates jobs locally and across the Gulf, both directly in the form of restoration-related jobs and indirectly as a result of a healthier and more productive ecosystem.

Council Objectives

- Objective 1: Restore, Enhance, and Protect Habitats - Restore, enhance, and protect the extent, functionality, resiliency, and sustainability of coastal, freshwater, estuarine, wildlife, and marine habitats. These include barrier islands, beaches, dunes, coastal wetlands, coastal forests, pine savannahs, coastal prairies, submerged aquatic vegetation, oyster reefs, and shallow and deepwater corals.

- Objective 2: Restore, Improve, and Protect Water Resources - Restore, improve, and protect the Gulf Coast region's fresh, estuarine, and marine water resources by reducing or treating nutrient and pollutant loading; and improving the management of freshwater flows, discharges to and withdrawals from critical systems.

- Objective 3: Protect and Restore Living Coastal and Marine Resources - Restore and protect healthy, diverse, and sustainable living coastal and marine resources including finfish, shellfish, birds, mammals, reptiles, coral, and deep benthic communities.

- Objective 4: Restore and Enhance Natural Processes and Shorelines - Restore and enhance ecosystem resilience, sustainability, and natural defenses through the restoration of natural

coastal, estuarine, and riverine processes, and/or the restoration of natural shorelines.

- Objective 5: Promote Community Resilience - Build and sustain Gulf Coast communities' capacity to adapt to short- and long-term natural and man-made hazards, particularly increased flood risks associated with sea-level rise and environmental stressors. Promote ecosystem restoration that enhances community resilience through the re-establishment of non-structural, natural buffers against storms and flooding.

- Objective 6: Promote Natural Resource Stewardship and Environmental Education - Promote and enhance natural resource stewardship efforts that include formal and informal educational opportunities, professional development and training, communication, and other actions for all ages.

- Objective 7: Improve Science-Based Decision-Making Processes - Improve science-based decision-making processes used by the Council.

Council-Selected Restoration Component

Activity, Project and Program Definitions

In reviewing the Initial FPL process, the Council identified a need for clearer definitions of the terms "project" and "program." Refining these terms will help ensure consistency among member submissions, simplify the planning and evaluation process, and facilitate compliance with applicable environmental laws. In addition, the Initial Plan did not provide a definition for "activity"—a term that was used extensively in the Initial FPL. These refined and additional definitions are provided below.

Activity: A general term that includes both projects and programs, and may also be used to describe components of a project or program. For example, on the Initial FPL, all the funded projects and programs on the list could be referred to as restoration "activities."

Project**:** A single ecosystem restoration and/or conservation activity that cannot be separated into stand-alone sub-activities. A project may be "scalable," meaning that its scope, size, and/or cost can be expanded or reduced as needed and appropriate. A project can be separated into a "planning" or "implementation" phase or can include both. One or more members can conduct a project. For example, a single project might restore marsh in a specific geographic location. Another example of a project might be the planning, engineering, and design required to advance a marsh restoration proposal to a construction-ready status.

Program**:** A suite of intrinsically-linked restoration and/or conservation activities that must be implemented together in order to achieve the desired outcome. A program should generally be covered by one unified Council environmental compliance review and should have a common set of performance measures to effectively assess and measure outcomes. A program's sub-activities may be related in terms of geography, environmental stressors, resources, restoration and/or protection activities, and more. A program can be separated into a "planning" or "implementation" phase or can include both.

One or more members can conduct a program. For example, a single program might be a Gulf-wide environmental monitoring effort.

Strengthening Coordination and Collaboration

Council members and the public suggested a number of improvements during the Council's 2016 review of the development of the Initial FPL and during the 45-day public comment period where the Council received nearly 65,000 comments. In particular, many recommended improving collaboration among Council members in the development of proposed restoration activities. The RESTORE Act inherently promotes such collaboration by joining the five Gulf States and six federal agencies together in a shared effort to advance comprehensive Gulf restoration. Consistent with the RESTORE Act provision encouraging integrated project implementation and funding, Council members may develop joint- or multi-member project or program proposals.

The Council recognizes that a key component of effective collaboration is facilitating meaningful engagement with local, state, regional and federal governments, Tribes, private businesses, academics and technical/science communities, NGOs, and the public. In particular, there is also a clear need to coordinate closely with other Gulf restoration and conservation funding efforts including NRDA, NFWF, and other federal programs. As demonstrated in the Initial FPL, such coordination can help leverage resources and integrate complementary restoration efforts.

The Council believes that further promoting collaboration and coordination will help it leverage the broad range of expertise and resources among its members and partners. This will ultimately improve both the development and implementation of restoration activities under the Council-Selected Restoration Component. The Council will take the following actions beginning in 2017 and continuing into 2018 to improve collaboration and coordination:

- Sponsor and participate in meetings and workshops to foster coordination and collaboration among members and our restoration partners (*e.g.*, NRDA and NFWF).
    - By serving as the connector between funding sources, the Council believes it may more effectively meet its own goals and objectives.
    - Inherent in this effort is a commitment to investigate how project funding across these various funding streams, without duplicating efforts, can maximize restoration outcomes. Early coordination of regulatory efforts across Council membership will also be a focus of this work.
    - The purpose of this effort is to ensure that Gulf restoration has the greatest impact possible due to the collaboration of *Deepwater Horizon*-related funding and other relevant programs in developing, funding, and implementing restoration strategies.
    - The Council anticipates that the results of this work will inform the identification of priority issues and outcomes in key watersheds/regions and future funding decisions, as well as the development of specific projects, programs, and partnerships to achieve those outcomes.

- Provide opportunities for input from interested stakeholders and the general public in this collaboration and coordination process.

- Evaluate the efficacy of concepts, lessons learned and best practices for potential inclusion in the next FPL development process, as appropriate.

- Continue to improve Submission Guidelines for proposal submissions in order to facilitate the development of effective and coordinated proposals that contain the appropriate information staff and other reviewers need to determine: (1) how a proposal meets basic eligibility criteria; (2) how the proposal utilizes best available science, engineering, and processes; and (3) the likelihood that a proposal will lead to measurable and lasting ecosystem benefits, including, for example, a determination of whether a project restores critical natural processes and/or enhances ecosystem function. The Submission Guidelines are a critical element of the Council's evaluation and review process, and will be periodically updated to clearly specify the type and level of detail needed to perform a robust and objective review and assist the Council in developing future FPLs.

The actions described above will lead to better projects and programs and ultimately a more resilient and sustainable environment. The Council will continuously work to strengthen partnerships, identify leveraging opportunities, and help ensure the most effective use of the resources entrusted to it.

Ten-Year Funding Strategy

The RESTORE Act requires the Council to provide a description of the manner in which amounts projected to be made available to the Council from the Trust Fund will be allocated for the succeeding ten years. As a result of the litigation with BP and other responsible parties in 2013, the Council did not include a Ten-Year Funding strategy in the Initial Plan due to the uncertainty over of the amounts and timing of funds that might be made available. With the final amount and timing of these funds now settled, the Council is in a position to provide an initial Ten-Year Funding Strategy in this Comprehensive Plan update.

In developing its Ten-Year Funding Strategy, the Council seeks to accomplish the following:

- Ensure compliance with the RESTORE Act;
- Provide finer granularity regarding how the Council will address the goals and objectives over the next ten years;
- Provide increased certainty, predictability, and guidance for project and program planning;
- Maintain flexibility to adapt to new information such as environmental changes, scientific advances, and feedback on the effectiveness of past and ongoing on-the-ground restoration actions; and
- Build on lessons learned in the development of the Initial FPL.

To accomplish these objectives, the Council's Ten-Year Funding Strategy is comprised of a vision statement, a discussion of the frequency of future FPLs, and enhancements to the Council's commitments from the Initial Plan.

The Ten-Year Funding Strategy will not identify specific projects or programs, as that will be done through subsequent FPLs. The Council recognizes the urgent need to move forward with comprehensive restoration and is dedicated to achieving results in an effective and efficient fashion. However, identifying specific activities at this point could limit the Council's ability to adapt to new science and otherwise improve the way in which it develops, funds and implements projects over the next ten years and beyond.

Ten-Year Funding Strategy Vision

The Council recognizes that a clear and concise vision statement can help direct and shape future funding decisions. The Council believes that its vision statement for the Ten-Year Funding Strategy should include reference to both the desired environmental outcome and the process used to get there. Furthermore, the Council will build upon the tremendous restoration experience, science expertise, and other capabilities of its diverse membership of state and federal agencies. The Council's collective wisdom is greater than the sum of its individual parts.

The Council sought to capture this sentiment as well as other key elements as it developed the following vision statement:

> ***A healthy and productive Gulf ecosystem achieved through collaboration on strategic restoration projects and programs.***

Funded Priorities List Frequency

For the next FPL, the Council envisions an approximately three-year development process beginning with the approval of the initial FPL and including the update of the Comprehensive Plan, the aforementioned collaboration and coordination workshops, and a proposal submission and review process. In addition to guiding the creation of the next FPL, moving forward, the Council will consider developing future FPLs approximately every three years; however, the Council will evaluate this schedule in the coming years to determine whether it should be modified to more effectively advance comprehensive Gulf restoration.

Supporting Large-Scale Projects and Programs

The Council will seek to optimize ecosystem restoration benefits by advancing large-scale solutions that take into account the environmental conditions of the given region of the Gulf. This could be achieved through the synergy of multiple connected projects or a single large project or program. Large-scale projects and programs could be facilitated by collaboration with NRDA, NFWF and/or other federal funding programs.

Limiting the number of FPLs allows the Council to pool BP's annual settlement payments over the course of several years before disbursing them for restoration activities. In addition, the Council is also exploring alternative financing approaches and leveraging opportunities that could be used to support large-scale activities.

The ability to support large-scale projects and maximize use of available resources, as well as the Council's anticipation that future FPLs will include significantly larger projects and project lists that

reflect the amount available to be spent for restoration activities, were key considerations in developing the Comprehensive Plan Update's path forward. The Council is also cautious of setting a firm and irreversible schedule for the frequency and number of FPLs over the life of the Council-Selected Restoration Component. Here again, the Council wishes to maintain flexibility to adapt and modify the FPL process in order to continuously improve and optimize ecosystem restoration outcomes.

Council Commitments

A foundational element of the Initial Plan was the inclusion of five Council commitments to provide overarching guidance for the Council's path forward. These commitments are just as relevant today and provide a valuable framework from which to build the Ten-Year Funding Strategy. In January 2016, the Council began a retrospective review of the Initial FPL development process. This review, which included feedback from Council members, the public and Tribes, helped identify and reinforce important lessons applicable to future Council activities. In its review of the Initial FPL process, some members and stakeholders recommended developing strategic principles/commitments that could help guide Council actions over the next ten years. The following discussion provides greater refinement and amplification of the Council's foundational commitments.

Commitment to a Regional Ecosystem-based Approach to Restoration

The Council recognizes that upland, estuarine, and marine habitats are intrinsically connected. Therefore, the Council will promote an ecosystem-based and landscape-scale restoration approach without regard to geographic location within the Gulf Coast region. A regional approach to restoration will more effectively leverage the resources of the Gulf Coast and promote holistic Gulf Coast recovery. The Council recognizes that regional ecosystem restoration activities can also have multiple human (*e.g.*, social, economic, and cultural) and environmental benefits, such as restoring habitats that sustainably support diverse fish and wildlife populations, while also providing an array of commercial, recreational, and other human uses of the ecosystem.

Watershed/Estuary-Based Approach

A watershed/estuary-based approach is a way to address regional environmental challenges by considering environmental stressors, involving stakeholders, and strategically addressing priority goals. The Council determined that a watershed/estuary-based approach would be an effective tool for guiding the selection of projects and programs in support of habitat restoration and water quality (Goals 1 and 2 which were the focus of the Initial FPL). By identifying and focusing on watersheds (see Figure 2), the Council was able to make difficult funding decisions in a way that leveraged limited restoration resources for maximum effectiveness, while also supporting planning, science and other activities that set the stage for future success. The Council may also consider other planning approaches that complement the watershed/estuary-based approach and that might be appropriate with respect to the scale and complexity of Gulf restoration.

Addressing Risk, Sustainability and Resilience

Healthy and sustainable ecosystems are essential for thriving and resilient coastal communities. Across the Gulf coast, cultures, economies and societies are built upon and sustained by natural ecosystem services that provide clean water, abundant fisheries, storm protection and more. Further loss and degradation of the Gulf environment can reduce these social, cultural and economic benefits. By restoring and protecting the Gulf environment, the Council can help communities enhance their ability to recover from natural and man-made disasters and thrive in the face of changing environmental conditions.

Commitment to Leveraging Resources and Partnerships

The Council will continue to encourage partnerships and welcomes additional public and private financial and technical support to maximize outcomes and impacts. Such partnerships will add value through integration of public and private sector skills, knowledge and expertise.

If all activities are fully implemented, the Initial FPL leverages approximately $1.27 billion in Gulf investments by other entities. This includes co-funding projects with entities such as the Knobloch Family Foundation, building on the Gulf restoration activities of our many partners including NRDA, NFWF, and the existing capacities of the members and others around the Gulf of Mexico.

Coordinating, Collaborating and Connecting Gulf Restoration Activities

Coordination and collaboration among members and our restoration partners is critical to the success of Gulf restoration. The Council hereby reaffirms its commitment to such coordination and collaboration. The Council also recognizes that it has an important opportunity to help facilitate dialogue among Gulf restoration partners by identifying potential gaps that limit our collective ability to achieve large-scale restoration and by serving as the connector between funding sources.

Explore Opportunities for Creative Conservation Funding

Successfully combating all of the ecological stressors in the Gulf is a complex challenge that greatly exceeds existing and expected restoration funding. The Council is committed to maximizing the effectiveness of funds within its purview, while also trying to help identify and leverage new sources of funding to support current and future restoration work. In addition to our existing restoration partners discussed in the Comprehensive Plan update, there are other parties that have a growing interest in participating in ecosystem restoration. For example, private-sector and non-profit entities are actively exploring new and innovative ways to bring capital to restoration activities. Given its own limitations relative to the size and scope of the Gulf restoration challenge, the Council welcomes these potential partners and is interested in exploring ways in which such endeavors can potentially help the Council advance its mission. The Council is committed to open dialogue and future collaboration with such partners in this emerging arena.

Commitment to Engagement, Inclusion, and Transparency

It is the Council's intent to seek broad participation and input from the diverse stakeholders who live, work, and play in the Gulf Coast region in both the continued development of this Plan and the ultimate selection and funding of ecosystem restoration activities. The Council will continue to provide opportunities to facilitate the formation of strategic partnerships and collaboration on innovative ecosystem restoration projects, programs, and approaches. The Council intends to continue offering public engagement opportunities that reflect the richness and diversity of Gulf Coast communities to ensure ongoing public participation in the Council's restoration efforts.

Maintain and Enhance Public Engagement and Transparency

The Council fully appreciates the importance of strong, productive and predictable public engagement and maintaining transparency throughout its operations and decision-making. The Council is committed to setting and maintaining the highest standard for public engagement and transparency. The Council will continue to explore the use of webinars and other creative tools to increase transparency and opportunities for public participation.

Efficient, Effective and Transparent Environmental Compliance

As with all federal agencies, the Council must comply with applicable federal environmental laws, regulations and Executive Orders. Compliance with these laws and other requirements is critical for avoiding unintended adverse impacts, informing funding decisions and providing important public engagement opportunities. It is vital that the Council look for ways to improve the efficiency and timeliness of permitting and regulatory reviews while also meeting statutory requirements and providing sound analyses of Gulf restoration projects. The Council is committed to meeting the highest standard for efficient, effective and transparent environmental compliance.

The Council will participate in the Gulf Coast Interagency Environmental Restoration Working Group to facilitate early, consistent and effective interagency coordination; concurrent environmental compliance reviews of proposed restoration projects; sharing of scientific and other information critical to project review and permitting; resolution of issues and barriers to efficient implementation of restoration projects across Gulf ecosystem restoration funding streams; and development of efficiency tools and processes.

The Council believes that it can increase both efficiency and transparency through a commitment to succinct and readable environmental compliance documentation. Consistent with the Council on Environmental Quality's NEPA regulations, the Council will seek to make environmental compliance documentation concise, clear and without unnecessary information. This will improve transparency for the public and speed the delivery of restoration to the Gulf.

Commitment to Science-Based Decision-Making

The decisions made pursuant to this Plan will be based on the best available science, and the Plan will evolve over time to incorporate new science, information and changing conditions. The Council will

coordinate with the scientific community to improve decision-making and facilitate scientific coordination across various Gulf restoration efforts.

Best Available Science in Selecting Projects and Programs

The RESTORE Act requires the Council to "undertake projects and programs, using the best available science that would restore and protect the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, coastal wetlands, and economy of the Gulf Coast." The Council remains committed to ensuring that its decisions are informed by the best scientific information available.

To evaluate projects and programs submitted during the Initial FPL development process, the Council utilized expert reviewers from within the Gulf region and across the country to evaluate each proposal—three separate reviews per proposal. While these reviewers provided excellent information, the process can be improved and expanded upon to incorporate a panel charged with reconciling disparate reviews and assessing project interactions. Moving forward, the Council will continue to seek and utilize external ecosystem restoration-based science support, including external expert reviews to ensure its decisions are based on the best available science and support holistic ecosystem restoration. To that end, the Council will update and improve the process for applying best available science to FPL proposals. Such measures will include updating the review process questions, continuing the use of external science reviewers, and exploring one or more science review panels. These efforts will assist the Council staff in reconciling disparate reviews, assessing the potential interactions among projects and programs, identifying opportunities for synergies and maximizing benefits, and using a systematic approach to convey the results of science reviews to the Council and the public.

Commitment to Delivering Results and Measuring Impacts

The Council recognizes the importance of measuring outcomes and impacts in order to achieve tangible results and ensure that funds are invested in a meaningful way. The Council will consider a variety of methods to measure and report on the results and impacts of Council-Selected Restoration Component activities and will include project- or program-specific measurement and reporting requirements in funding agreements with Council members.

Measuring and Ensuring Success

As noted in the Council's Programmatic Environmental Assessment for the Initial Comprehensive Plan, "…the Council is planning to utilize science-based restoration targets for the Gulf ecosystem that will: (1) apply natural systems and socio-economic modeling tools to analyze and prioritize restoration options; (2) consider opportunities for leveraging benefits of projects implemented by others carrying out complementary projects; and (3) utilize adaptive management to build upon opportunities that arise as a result of the monitoring and new science to enhance the benefits to the nation." The Council will continue to work towards fulfilling that commitment, as well as seek to improve delivery of ecosystem science, monitoring, and data management across disciplines to report on the overall success of restoration. For example, all funded Council projects and programs will have data management and

monitoring plans to help assess long-term success of projects and ensure data is managed and publicly available.

The Council is also funding a Council Monitoring and Assessment Work Group (CMAWG) and coordinating with our restoration partners including academic, non-profit, and other Gulf stakeholders interested in science-based restoration. Support for the CMAWG and coordination activities is occurring through two Initial FPL projects: the Council Monitoring and Assessment Program (CMAP) and the Gulf of Mexico Alliance (GOMA) Monitoring Community of Practice (CoP). Overall, these activities will fund the development of basic foundational components for Gulf region-wide monitoring in order to measure the beneficial impacts of investments in restoration, ensure projects and programs are evaluated and reported to the Council, advance coordination with the scientific community to improve decision-making, and improve science-based adaptive management and project-level and regional ecosystem monitoring.

The Council will utilize its staff, CMAWG, CoP, and coordination with other entities as a means to develop common standards and monitoring protocols for Council projects and programs; indicators and metrics of restoration and conservation success (including ecological function, benefits, and services) by project, region and/or watershed; identify data gaps in the assessment of the success of Gulf-wide restoration; and evaluate tools to measure Gulf-wide benefits. The Council will also explore the development of new tools, where applicable, to support the Council's work and address critical uncertainties in restoration actions. The CMAWG will also aid in the development of a Council adaptive management plan and work with Council staff to draft a Council data management plan to ensure data is available for the long-term, utilized to assess project success, and support future project selection. In addition, the Council will explore opportunities to create consistency and collaborate with NRDA and NFWF GEBF efforts where appropriate. For example, the intersection between the CMAWG efforts with the NRDA Cross-TIG Monitoring and Adaptive Management Workgroup may yield important programmatic and science efficiencies.

Other Programmatic Accomplishments during 2016

Environmental Compliance

The Federal government has a long-standing commitment to working with the Gulf states to restore coastal ecosystems. Prior to the *Deepwater Horizon* oil spill, the Administration worked to address environmental needs through the March 2010 *"Roadmap for Restoring Ecosystem Resiliency and Sustainability."* This work was greatly expanded in the aftermath of the oil spill and priority strategies and activities are described in the September 2010 report titled "*America's Gulf Coast: A Long Term Recovery Plan after the Deepwater Horizon Oil Spill*," the December 2011 "*Gulf of Mexico Regional Ecosystem Restoration Strategy*," and the August 2013 RESTORE Council's "*Initial Comprehensive Plan: Restoring the Gulf Coast's Ecosystem and Economy*." The 2016 update to the Council's Comprehensive Plan furthers these efforts.

With the recent completion of the $20.8 billion *Deepwater Horizon* oil spill settlement, Federal agency staffs will experience increased permitting and environmental review workloads over the next decade that will be challenging to address. It is vital that the agencies find ways to improve efficiency and timeliness of permitting and reviews while also meeting statutory requirements and providing sound analyses of Gulf restoration projects.

To date, the Federal agencies responsible for permitting and environmental review of Gulf restoration projects have coordinated through the Gulf Coast Interagency Environmental Restoration Working Group. The Federal government is committed to a whole-of-government effort in allocating resources to ecosystem restoration projects. By building on the work of the Interagency Working Group, the Federal government can provide efficient and coordinated project review, environmental review and permitting, and project authorization while achieving the best possible outcomes for the people and ecosystems throughout the region. Responding to this continued need, and in coordination with the White House Office of Management and Budget and the Council on Environmental Quality, the Council is investigating specific actions to continue and improve upon coordination early in the process of developing and permitting restoration projects, to collaborate in managing workloads so that high priority projects receive priority attention, and to share information across the Federal government and with states and others as appropriate to achieve shared goals. The purpose of these actions is to improve the quality of environmental restoration projects and to expedite their implementation for the benefit of Gulf ecosystem restoration.

A Working Example: Apalachicola Bay Oyster Restoration, Regulatory Efficiency and Increased Ecosystem Benefits

In 2016, the Council used existing regulatory efficiency tools to reduce planning costs, accelerate implementation and increase the ecosystem benefits of the Apalachicola Bay Oyster Restoration project. The Council adopted existing NEPA documentation and used programmatic environmental compliance analyses associated with a U.S. Army Corps of Engineers (Corps) Clean Water Act (CWA) Section 404 general permit for aquaculture in Florida.

In its Initial FPL, the Council approved planning funds for the Apalachicola Bay Oyster Restoration project, while also categorizing the implementation component as a priority for potential future funding. The approved planning funds were to be used to comply with NEPA and other environmental laws that must be addressed before the Council could consider approving implementation funding.

Shortly after Initial FPL approval, the State of Florida – the project sponsor – coordinated with the Corps to identify an existing CWA Section 404 general permit and associated compliance documentation that could be used to help the Council address the environmental laws applicable to this project. Recognizing an opportunity to expedite the project and reduce planning costs, Florida requested that the Council consider using this documentation to approve implementation of this oyster restoration work. After reviewing the matter and providing an opportunity for public input, the Council voted to use this existing documentation and approve implementation funding for the Apalachicola Bay Oyster Restoration project. In so doing the Council was able to reallocate as much as $702,000 in planning cost savings to project implementation, thereby increasing the size of this project from 219 to 251 acres. To ensure transparency, the Council posted its documentation for this action in its on-line environmental compliance library.

The Council thanks the Corps, the Departments of Commerce and the Interior, and the State of Florida for having dedicated the time and resources to collaboratively develop the regulatory efficiency tools that were the foundation of this success. The Council plans to look for similar opportunities to efficiently, effectively and transparently meet its environmental compliance responsibilities and looks to Congress for its critical support in these endeavors.

Regulatory Efficiency, Effectiveness and Transparency

Effectively addressing increased regulatory workloads is critical for ensuring timely implementation of Gulf restoration. The Council's Comprehensive Plan update reiterates and reinforces its commitment to efficient, effective and transparent environmental compliance. To that end, the Council remains committed to robust interagency coordination and collaboration, as well as utilization of regulatory efficiency tools including programmatic compliance; nationwide, regional and programmatic general permits; and adoption of existing National Environmental Policy Act (NEPA) documentation. (See the summary of the Apalachicola Bay Oyster Restoration project elsewhere in this Annual Report for an example of the Council's use of regulatory efficiency tools.)

This issue was the focus of an October 20, 2016 Memorandum for Executive Departments and Agencies from OMB and CEQ. The purpose of the memorandum was to provide "guidance to agencies to facilitate the timely review and permitting—where appropriate—of Gulf coast environmental restoration projects. Additionally, the Gulf Coast Interagency Environmental Restoration Working Group is formalized as the coordinating body for Federal agencies with regard to environmental review and permitting of projects in the region."

The memorandum also notes the "Federal agencies responsible for permitting and environmental review of Gulf Coast restoration projects have coordinated through the Gulf Coast Interagency Environmental Restoration Working Group. The Federal government is committed to a whole-of-government effort in allocating resources to ecosystem restoration projects. By building on the work of the Interagency

Working Group, the Federal government can provide efficient and coordinated project review, environmental review, permitting, and project authorization while achieving the best possible outcomes for the people and ecosystems throughout the region. Responding to this continued need, this memorandum directs executive departments and agencies to take specific actions to continue and improve upon coordination early in the process of developing and permitting restoration projects, to collaborate in managing workloads so that high priority projects that will deliver significant ecosystem restoration benefits receive the right levels of attention, and to share information across the Federal government and with Gulf Coast states and National Fish and Wildlife Foundation to achieve shared goals."

Three actions are outlined by the OMB/CEQ memorandum:

- Coordination: The memorandum formalized and expands upon the Gulf Coast Interagency Environmental Restoration Working Group[1]originally initiated by the U.S. Army Corps of Engineers. The purpose of this Working Group is to achieve more effective and efficient interagency coordination, particularly with regards to the environmental review and permitting of projects in the region. Federal departments and agencies are directed to continue participation in the Working Group and increase coordination as appropriate. Agencies should use the Working Group to facilitate early, consistent, and effective interagency coordination for the review of projects; timely and efficient environmental compliance reviews; sharing of scientific and other information critical to project review and permitting; and early and timely identification and elevation of issues and barriers to efficient implementation of restoration projects across Gulf ecosystem restoration funding streams (including National Fish and Wildlife Foundation, RESTORE, NRDA, and other sources). The agency representatives on the interagency team, acting together, are to provide an annual briefing to CEQ and OMB on agency efforts to resolve issues and barriers to efficient implementation of ecosystem restoration projects. More broadly, as Federal agency staff anticipate increased workload related to Gulf Coast restoration activities, increased coordination can yield efficiency gains to help offset staffing and budgetary constraints.

- Prioritization of Gulf ecosystem restoration: Agencies should consider ecosystem restoration projects a priority. Where allowable under an agency's policy and existing authority, agency leadership should incorporate appropriate project permitting and environmental review costs into project costs to allow them to direct adequate resources to staff and ensure that field and regional offices can review and complete permitting and project authorizations in a timely manner. In particular, potentially complex restoration projects, including sediment diversions, have the potential to deliver significant ecosystem benefits but will likely require additional effort in order to coordinate cross-agency permitting timelines and the engagement of leadership to resolve policy decisions that need to be addressed to allow restoration funds to be used to their fullest benefit for the ecosystems and communities of the Gulf. As necessary,

[1] The Working Group is comprised of representation from the U.S. Department of Agriculture, U.S. Department of the Army, U.S. Department of Commerce, including the National Oceanic and Atmospheric Administration, U.S. Environmental Protection Agency, and U.S. Department of the Interior.

agencies should ensure that their respective national leaderships are aware of progress and engage with that leadership where necessary to resolve major project review issues that cannot be resolved in the field. Resolution of policy differences will help ensure that restoration projects are implemented in a timely manner and can begin to provide benefits to Gulf Coast ecosystems and communities. Additionally, CEQ guidance encourages agencies to conduct straightforward and concise NEPA reviews with supporting documentation that is proportionate to potential impacts and effectively conveys the relevant considerations to the public and decision-makers in a timely manner while rigorously addressing the issues presented.

- Collaboration across restoration efforts: To the extent practicable and permitted by law, federal agencies should look to leverage other Gulf restoration programs, including the *Deepwater Horizon* Natural Resources Damage Assessment, when working with the RESTORE Council to determine their priorities for the allocation of RESTORE funding. Recognizing that programs are designed with slightly different priorities, legal requirements, administrative structure, and flexibility, agencies should also collaborate closely with states and the National Fish and Wildlife Foundation to maximize investment in and support for large scale ecosystem restoration. By coordinating during the planning stage of project development, agencies will have more options to effectively manage environmental review and permitting for projects that are funded."

Tribal Relations

The Council committed to strengthening Tribal relations during 2016 and made significant progress in that regard. It is important to recognize there are 11 Federally Recognized Tribes (Tribes) that reside within the five Gulf Coast States and 27 Federally Recognized Tribes whom have ancestral lands within the Gulf Coast States. These Sovereign Tribal Nations require Government-to-Government relations and the Council proudly accepts this responsibility. In an effort to ensure Tribes are made aware of the Council's activities, the Council hosted three Tribal engagement meetings and participated in the annual United Southern and Eastern Tribes (USET) meeting. The meetings received strong support from the Tribes and Federal agency staff that work on Gulf restoration activities.

Tribal Policy

During 2016, Council staff worked with the Tribes to develop a draft "Tribal Communication, Collaboration, Coordination and Consultation Policy" (Policy) to establish the manner in which the Council works with federally recognized tribes on a government-to-government basis. The purpose of this Policy is to provide a foundation for building durable relationships; addressing issues concerning Tribes including self-government, Tribal trust resources, Tribal treaty and other rights; and enhancing, protecting and preserving Tribal cultural and environmental resources. Communication, collaboration, coordination, and consultation must be mutually supportive and lead to information exchange, mutual understanding, and informed decision-making. The Council recognizes Tribal self-government and supports Tribal sovereignty and self-determination.

The Council recognizes the unique legal relationship, as established in the Constitution, statutes, treaties, and federal court decisions, between Tribal governments and the Federal government. In recognition of that special relationship, and pursuant to Executive Order 13175 of November 6, 2000, the Council is

developing this Policy to ensure government-to-government exchange of information and promote enhanced communication that emphasizes trust, respect, and shared responsibility.

Accomplishments of the RESTORE Act Centers of Excellence during 2016

The 2016 Council Annual Report to Congress includes for the first time a summary of activities for Centers for Excellence (COE) programs established under Section 1605 of the RESTORE Act. This information is required in addition to the financial and performance reports necessary to comply with the Office of Management and Budget "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards" at 78 Fed. Reg. 78,590 (December 26, 2013). Highlights of accomplishments are provided below with the full Annual Reports from each Center of Excellence posted on the Council website at https://www.restorethegulf.gov/reports-and-plans.

Florida Center of Excellence

Summary of FLRACEP Creation, Administrative Assignment and Structure

The RESTORE Act established five components, including the *Centers of Excellence Research Grant Program* (CERGP). The Florida Institute of Oceanography (FIO) serves as the Florida Gulf coast state entity, hosting its CERGP, formally designated as the Florida RESTORE Act Centers of Excellence Program (FLRACEP). FLRACEP activities are governed by the official *Rules and Policies*, which are based on the RESTORE Act, Department of Treasury Rulemaking and guidance (2014), public comments and approval by the FLRACEP Program Management Team (PMT). They provide an operational framework for program implementation including subsequent Requests for Proposals (RFPs).

FIO, itself, is an Academic Infrastructure Support Organization (AISO) of the State of Florida approved by the State University System's Council of Academic Vice Presidents and approved by the Florida Board of Governors. By Memorandum of Understanding, FIO is hosted by the University of South Florida (USF), which provides administrative support and fiscal accounting functions while FIO remains a separate and discreet organization. As describe above, FIO is the Gulf coast state entity for administering Florida's RESTORE Act Centers of Excellence Program.

Functionally, FLRACEP includes a program office, a program management team, ad hoc science review panels, and the Centers of Excellence (COEs) themselves. Within the program office, the FIO Director is ultimately responsible for program funds and performance, while the Program Director (reporting directly to the FIO Director) is responsible for programmatic tasks including coordination of the CE competitive selection process, developing COE award terms and conditions, monitoring performance based on required deliverables and metrics, and coordination with other Gulf restoration programs. Notably, the Program Director represents Florida's COEs on various regional coordination efforts (e.g., NOAA RESTORE Science Program advisory working group, Centers of Excellence Research Grant Programs coordination calls, etc.).

The Program Management Team (PMT) is a body of senior-level advisors appointed by the FIO Director based on their knowledge of marine science, ocean technology and coastal zone resource management needs for the state of Florida. The PMT reviews and approves FLRACEP RFPs, letters of intent (if required), final proposals for funding and program plans. Members are not eligible to submit proposals

or participate in FLRACEP grants or contracts. The Science Review Panels (SRPs), are an ad hoc group of regional marine science experts brought together for specific technical review of proposals solicited under FLRACEP RFPs. Scientists that serve on SRPs are not eligible to participate as principle investigator's or collaborators in proposals submitted under RFPs. The COEs are the Florida-based institutions that have been awarded research grants via the FLRACEP RFP process. A COE may be awarded more than one research project, and in fact the first FLRACEP RFP process awarded multiple grants to two COE institutions.

Summary of FLRACEP Research Grants

Based on public input, FLRACEP identified RESTORE Act discipline 2, coastal fisheries and wildlife research and monitoring, and discipline 5, ecosystem monitoring and mapping in the Gulf of Mexico region as priority eligible activities for funding. The PMT determined that the initial RFP in 2015 would focus on discipline 2 and aim to support a wide number of research grants where a significant return on an investment in research was most likely to be realized at the end of 2 years. In 2015, RFP I committed $2.72 million for support of eight COEs and ten science and technology projects focused on fisheries and wildlife research. Work on these grants began in early 2016.

The PMT elected to issue a second RFP in 2016 to focus on discipline 5. Specially, the RFP focus was to monitor the Gulf ecosystem in order to assess recovery, support adaptive management of Florida's Gulf Coast marine fisheries resources, and aid response to future events that may impact living resources. The RFP sought to address a major data gap in understanding early life history stages of marine fisheries resources. In 2016, RFP II committed $900,000 to a fisheries project that will develop and test innovative approaches for independently estimating population sizes for Florida's offshore reef fish – aimed primarily at snappers and groupers. Although experimental, these approaches could provide a novel and cost-effective way to monitor Florida's important reef fish populations over time and if successful will significantly improve stock assessment accuracy and fisheries management efforts. We anticipate the CE grant to begin work in the end of 2016.

FLRACEP has obligated all of the Transocean and Anadarko settlement funding, and is committed to putting as much of that money as possible into high quality research grants that fill gaps in our scientific understanding under the two eligible disciplines. The program has an indirect cost (IDC) agreement with USF that caps these expenses at 10% (currently averaging 9%) and has tried to keep program administrative expenses to a minimum. Over the past year, program administration costs averaged about 13% (inclusive of data management, staff salary, fringe, benefits and travel, PMT and SRP stipends, travel and meeting expenses, and supplies/technology).

Conclusion

The FLRACEP is now firmly established within the FIO with transparent and independent processes to allow timely and efficient expenditures of RESTORE Act funds. After soliciting public input and identifying two priority disciplines, FIO and FLRACEP have successfully executed two request for proposal processes expected to deliver science and research that is relevant to Florida, timely for management, and innovative in its approach. With the promise of 15 additional years of funding, FLRACEP will develop future funding strategies and RFPs to fill additional needs for the state and the Gulf of Mexico marine ecosystem.

Louisiana Center of Excellence

On January 6, 2014 The Water Institute of the Gulf, in collaboration with academic partners from Louisiana, submitted a proposal to the Coastal Protection and Restoration Authority (CPRA) that introduced a phased approach to systematically (1) develop and implement the Center of Excellence program, (2) administer a competitive grant program that rewards the best and most relevant research proposals, and (3) provide the appropriate coordination and oversight to ensure success metrics are tracked and achieved. On April 8, 2014, CPRA announced the Institute as Louisiana's Center of Excellence.

CPRA has been awarded funding for its Center and the Center has begun activities for its competitive grants program to support research directly relevant to the implementation of Louisiana's Coastal Master Plan.

The mission of the RESTORE Act Center of Excellence for Louisiana is to support research directly relevant to implementation of Louisiana's Coastal Master Plan by administering a competitive grants program and providing the appropriate coordination and oversight support to ensure that success metrics are tracked and achieved. The Center is a separate program within The Water Institute of the Gulf, which is a not-for-profit, independent research institute dedicated to advancing the understanding of coastal, deltaic, river and water resource systems, both within the Gulf Coast and around the world.

The Center has solicited public feedback on an initial Research Strategy. The Research Strategy guides the competitive research that the Center supports and its focus is issues pertinent to Louisiana, with emphasis on advancing Louisiana's Coastal Master Plan. The Research Strategy identifies key topical near-term (< 2 years) and mid-term (2–5 years) research needs including articulation of the scientific and technical problems underlying these needs, potential outcomes, and multi-disciplinary opportunities. The draft Research Strategy was developed in coordination with the Coastal Protection and Restoration Authority (CPRA), a Technical Working Group comprised of researchers from Louisiana academic institutions, Research Strategy Contributing Experts, and participants of a Coastal Research Priorities Town Hall meeting held in conjunction with Louisiana Sea Grant.

The Center is currently receiving proposals from coastal researchers for competitive grant awards to support research directly related to the implementation of Louisiana's Coastal Master Plan.

Texas Centers of Excellence

In January 2015, the Texas Commission on Environmental Quality (TCEQ) competitively selected two consortia, the Texas A&M University Corpus Christi - Texas OneGulf Consortium and University of Houston (UofH) - Subsea Systems Institute. The mission of the Texas OneGulf Center of Excellence is to gather and improve knowledge about the Gulf of Mexico to inform decision making around the challenges to environmental and economic sustainability of the Gulf of Mexico and its impact on the health and well-being of Texans and the nation. Texas OneGulf is designed with the capacity and flexibility to address all five focus disciplines denoted in Section 1605 of RESTORE. This Center has

been awarded funding and has begun activities on four of the six tasks outlined in the federal application. Highlights include:

- Gathering and analyzing input for the Strategic Research and Action Plan (SRAP);
- Identifying foundational activities needed for developing the Texas OneGulf Disaster Research Response (DR2) program; and
- Data collecting by a research group using a glider within a die-off event that may be due to a hypoxia.

The Subsea Systems Institute (SSI) is a collaborative endeavor aimed at advancing safe technologies, best practices, public policies and regulations for the development of the deepwaters of the Gulf of Mexico. The work of the center is intended to reduce the risk of offshore accidents, oil spills and other deepwater disasters. The SSI is addressing offshore energy development, including research and technology to improve the sustainable and safe development of energy resources in the Gulf of Mexico as its focus on one of the disciplines denoted in Section 1605 of RESTORE. This Center has been awarded funding and has begun activities on five projects. Highlights include:

- Began the design, fabrication and feasibility testing of thin-film Li ion batteries and thin-film supercapacitors for the Remote High Power for Subsea Emergencies project;
- Initiated the physics based annular model at University of Houston for the A Model-Based Real-Time Annular Blowout Preventer (BOP) Monitoring System project;
- Completed laboratory work which investigated and confirmed the application of seismic instrumentation for the monitoring of the integrity of drilling and production systems through the use of Distributed Acoustic Systems (DAS), Sonar, and Ocean-bottom seismometers (OBS) for the Marine Drilling Hazard Mitigation and Production Facility Monitoring using Seismic and Sonar Imaging project; and
- Held user forum to engage industry with Subsea Systems Institute (SSI) and National Aeronautics and Space Administration (NASA) to define the upcoming workshop's objectives and began construction of updated prototype AUV in the RiSYS lab for Autonomous Underwater Vehicles (AUV) for Subsea Energy Applications project.

Administrative Accomplishments to Support the Council During 2016

Background

The Council has managed the fiscal resources required to carry out its administrative and operational activities through a strategy of incremental growth to correspond to the development of its Council-Selected Restoration Component and the Spill Impact Component programs. Mindful of the fact that the Council must oversee projects and programs during the post-completion operations and maintenance phase (which in some cases could take as long as twenty years), the Council has forecast its administrative and operational expenses through the projected closeout of all grants.

In 2016, the services provided by Council members diminished as the Council put in place its own personnel and funded its own administrative, financial, and financial assistance activities. The on-board staff increased by 7 members in support of the increasing responsibilities arising from the approval of the Initial FPL, the publication of the Final Rule for the Spill Impact Program, the update to the Comprehensive Plan, and the issuance of the first grants and interagency agreements for projects and programs.

In December 2015 the Council completed implementation of its Restoration Assistance and Awards Management System (RAAMS), a web-based grants management system based on an existing off-the-shelf system and customized for the Council's operations. The RAAMS system is configured to meet the specific requirements of the Act and provides a robust "cradle-to-grave" automated system. In addition to robust post-award management features, this system will collect a broad array of metrics on an individual project basis, enabling the Council to develop quantifiable outcomes for its efforts in Gulf-wide ecosystem restoration.

In July 2016 the Council completed and adopted its first enterprise risk assessment and a suite of written policies and procedures to document its internal controls and its grants, budget, finance, human resources and administrative programs. The assessment, controls and procedures were instituted in order to ensure that the Council diligently exercises its fiduciary responsibilities with respect to Trust Fund expenditures and other responsibilities under the Act.

In July 2016, the Council also finalized its policy for implementing the local contracting preferences requirement under the Act. Additionally, in 2016, the Council developed its Tribal Communication, Collaboration, Coordination and Consultation Policy in collaboration with federally recognized Indian tribes. The Council expects to finalize and adopt this policy in fiscal year 2017.

In 2017 the Council will continue its grant-making and other financial assistance operations, and will begin the process of updating the Initial FPL as the first annual installment of funding from the Consent Decree becomes available from the Trust Fund.

Additional information regarding the Council's budget and finances can be found in the Council's fiscal year **2016 Agency Financial Report** (AFR) published on the RESTORE Council website: https://www.restorethegulf.gov/sites/default/files/20161115_FY2016_AFR.pdf

Restoration Assistance and Awards Management System (RAAMS)

The Restoration Assistance and Awards Management System (RAAMS) is the Council's web-based grants management system. The system has been configured to meet the specific requirements of the statute, and will provide a robust "cradle-to-grave" automated financial assistance (grants) and interagency agreements management system. Completion of the Accreditation and Authorization process was targeted for late November 2015, and was live in early December 2015. In addition to robust pre- and post-award management features, this system will collect a broad array of metrics on a project by project basis, thus enabling the Council to develop quantifiable outcomes for its efforts in Gulf-wide ecosystem restoration (see Performance Metrics for Council-Funded Programs and Projects Section).

The RAAMS system is designed to provide information to meet the Council's federal reporting and data management requirements, including requirements mandated by the following:

- GPRA Modernization Act (P.L. 111-352)
- OMB guidance (2 C.F.R. §200.328)
- RESTORE Act (33 U.S.C. §1321(t)(2)(C)(vii)(VII)(dd))
- Digital Accountability and Transparency Act (S.994; i.e., Data Act of 2014)
- OMB Memorandum (9 May 2013): *Open Data Policy -Managing Information as an Asset*
- White House (22 February 2013) *Office of Science and Technology Policy Memorandum.*

The system also tracks the following application/award requirements:

- Organizational Assessment
    - One-time requirement; updated annually
    - §200.205 Risk Posed by Applicant; §200.302 Financial Management; §200.303 Internal Controls
- Milestones (see Performance Metrics for Council-Funded Programs and Projects section below) / Functional Budget
    - §200.301 Performance Measurement
- Outcome Metrics
    - §200.301 Performance Measurement; §200.210 Information Contained in a Federal Award
- Cash Forecast
    - Informs Trust Fund investment strategy; OMB outlay forecast

Risk Assessment

The Council completed its first Enterprise Risk Management (ERM) assessment and documentation of its internal control structure and program policies and procedures. The Council initiated this project to ensure it has the foundational infrastructure and controls in place to exercise its fiduciary responsibilities and properly administer funds received from the Trust Fund.

As expected, the initial risk assessment disclosed several critical risks that must be reduced in the near term, especially in light of pending funding for projects, to bring the Council current and future risk

exposure to a more tolerable level. Given the impact that sound ERM has on effective and efficient government operations, and maintaining a credible reputation, the Council will hire additional personnel to effectuate the ERM process, sustain the gains made over its internal control framework, implement Member Technical Assistance (MTA), and to immediately take action to address the most critical risk.

Key recommendations for 2017

Activities for 2016 and 2017 relate to the results of the Risk Assessment and center on risk mitigation strategies that collectively represent actions considered necessary to reduce the impact and likelihood of risks negatively affecting Council reputation and operations. These recommendations provide specifics on responding to strategic, operational, compliance, and financial and reporting risks. Key recommendations to reduce reputational and operational risk to Council from mismanagement or misuse of funds include:

- Expanding Audit Committee function to include Enterprise Risk Management;
- Creating an Enterprise Risk Management staff function;
- Aligning mission objectives with Council partners to optimize outcomes;
- Developing a contingency plan to meet surge requirements; and
- Acquiring sufficient information technology resources to support operations.

To address these key recommendations, the Council moved forward with the following actions in 2016 and will address remaining recommendations in 2017:

- Discussed results of Risk Audit with Council Steering Committee (July 2016).
- Expanded the Audit Committee function to include Enterprise Risk Management (July 2016).
- Recruited a Deputy Chief Financial Officer – selection made in December 2016.
- Recruited a GS 13 IT Security Officer; selection made in November 2016 and estimated on-board date is expected for January 2017, pending finalization of security clearance.
- Developing the hiring package for a GS 13 enterprise risk management specialist.

Department of Treasury Inspector General (OIG) Audits

The results of various Treasure OIG audits can be found on the Council's website (www.RestoreTheGulf.gov). In summary, these audits found:

- An independent public accountant, working under OIG supervision, issued an unmodified opinion on the Council's Fiscal Year 2015 and 2016 financial statements, as required by the Chief Financial Officer's Act, as amended by the Accountability of Tax Dollars Act of 2002. The audit found that:
    - The financial statements were fairly presented, in all material respects, in accordance with accounting principles generally accepted in the United States of America;
    - No instances of reportable noncompliance with laws, regulations, contracts, and grant agreements tested; and

- Overall, the audit did not identify any matters involving internal control and its operation that are considered material weaknesses in internal control over financial reporting. No instances of reportable noncompliance with laws, regulations, contracts, and grant agreements tested were identified (OIG-17-015, November 15, 2016).

- An audit of the Council's programmatic environmental assessment completed in connection with the Initial Comprehensive Plan concluded that our PEA complied with the RESTORE Act and with NEPA although it was noted that as of the date of field work (2013) the Council's records management system needed improvement. In December 2016, the OIG noted the great effort that Council has undertaken to be compliant with NARA's records management regulations and that the Council has met or are near completion of all corrective measures required.

- An audit of Council's Funded Priorities List evaluation criteria and selection processes in connection with activities to be funded under the Council-Selected Restoration Component indicated that these processes complied with the RESTORE Act, Treasury's RESTORE Act regulations, the Council's Initial Comprehensive Plan requirements and the Council's policies and procedures

- An audit of the Council's progress in establishing the organizational infrastructure, operational policies and procedures, and information technology (IT) necessary for carrying out its responsibilities under the RESTORE Act concluded that the Council has made progress implementing the plan but that challenges remain in the areas of IT management and internal control over financial and administrative activities; specifically that IT personnel were not yet on board as required by FISMA and an IT strategic plan completed; and the enterprise risk assessment had not yet been completed. As of this date, an IT staff person has been recruited, the IT Strategic Plan has been drafted, and the enterprise risk assessment has been completed.

GAO Review

During 2016 the Government Accountability Office (GAO) began a review of agencies for which Congress has granted authority to collect and obligate fees, fines, penalties, and other types of collections without further congressional action.

A total of five entities were selected as case studies for this work, one of which was the Gulf Coast Restoration Trust Fund. The review assessed what is known about the extent to which selected entities with these authorities have and comply with policies and procedures to manage funds and facilitate oversight of their collections and obligations. Results of the GAO audit are complete and can be found at: http://www.gao.gov/assets/690/681538.pdf.

Local Contracting Preference

On July 25, 2016, the Council issued notice through the *Federal Register* (https://www.federalregister.gov/articles/2016/07/22/2016-17328/local-contracting-preference) of its

final policy for implementing the local contracting preference requirement of the RESTORE Act. The RESTORE Act requires the Council to "develop standard terms to include in contracts for projects and programs awarded pursuant to the Comprehensive Plan that provide a preference to individuals and companies that reside in, are headquartered in, or are principally engaged in business in a Gulf Coast State." 33 U.S.C. 1321(t)(2)(C)(vii)(V). Due to differing legal requirements in the various jurisdictions, the Council will apply the local contracting requirement at the Federal level while permitting each State to apply any local contracting preference in conformity with local requirements. The Council will therefore not impose on the States any special grant award conditions requiring a local contracting preference or related contractual certifications.

Conclusion

Six years after the unprecedented disaster in the Gulf, four years after passage of the RESTORE Act, and thanks to the leadership, foresight and cooperation of a bipartisan Congress, we are poised to begin implementing projects that will benefit the natural resources, economy and communities of the Gulf Coast region. The Council is committed to the success of this effort in the long-term and coordination with our restoration partners. More than process, more than any individual project, this effort is about fostering a stronger, healthier, and more resilient region for Gulf Coast communities and future generations to come.

Appendix 1 Projects and Programs Selected in the Initial FPL

As required under RESTORE Act 31 U.S.C. § 1321(t)(2)(C)(vii)(VII)(bb)(AA) List of each project and program

	Initial Funded Priorities List				
Activity	**Watershed/ Estuary**	**Activity Focus**	**Responsible Council Member(s)/Partnering Council Member(s)**	**Initial FPL Category[2]**	**Cost**
Bahia Grande Coastal Corridor	***Laguna Madre, TX***	Implementation	State of Texas/Department of Interior (DOI)	1	$4,378,500
Plug Abandoned Oil and Gas Wells		Implementation	DOI/State of Texas	1	$1,317,567
Bahia Grande Wetland System Restoration		Planning	Department of Commerce and National Oceanic and Atmospheric Administration (DOC-NOAA)/DOI and State of Texas	1	$404,318
Bahia Grande Wetland System Restoration		Implementation	DOC-NOAA/DOI and State of Texas	2	$968,863
Matagorda Bay System Priority Landscape Conservation	***Matagorda Bay, TX***	Implementation	State of Texas	1	$6,012,000
Bayou Greenways	***Galveston Bay, TX***	Planning & Implementation	State of Texas	1	$7,109,000
Texas Beneficial Use/Marsh Restoration		Planning	State of Texas	1	$968,000
Jean Lafitte Canal Backfilling	***Mississippi River Delta, LA***	Implementation	DOI	1	$8,731,000
West Grand Terre Beach Nourishment and Stabilization		Planning	State of Louisiana	1	$7,259,216
Golden Triangle Marsh Creation		Planning	State of Louisiana	1	$4,347,733

[2] See pages 9 and 16-18 for explanation of Initial FPL Category

Biloxi Marsh Living Shoreline		Planning	State of Louisiana	1	$3,220,460
Mississippi River Reintroduction into Maurepas Swamp		Planning	State of Louisiana	1	$14,190,000
Lowermost Mississippi River Management		Planning	State of Louisiana/U.S. Army Corps of Engineers (USACE)	1	$9,300,000
Bayou Dularge Ridge, Marsh & Hydrologic Restoration		Planning	U.S. Department of Agriculture (USDA) on behalf of Chitimacha Tribe of Louisiana	1	$5,162,084
Deer Island Beneficial Use Site	***Mississippi Sound, MS***	Implementation	USACE/State of Mississippi	1	$3,000,000
Strategic Land Protection, Conservation, and Enhancement of Priority Gulf Coast Landscapes		Planning & Implementation	State of Mississippi/USDA and DOI	1	$15,500,000
SeaGrant Education and Outreach		Planning & Implementation	State of Mississippi/USDA, Environmental Protection Agency (EPA) and DOI	1	$750,000
The Mississippi Sound Estuarine Program		Planning & Implementation	State of Mississippi	1	$2,270,000
Enhancing Opportunities for Beneficial Use of Dredge Sediments		Planning	State of Mississippi/USACE and State of Alabama	1	$2,180,000
Coastal Alabama Comprehensive Watershed Restoration Planning Project	***Mobile Bay, AL***	Planning	State of Alabama/EPA	1	$4,342,500
Alabama Living Shorelines Program		Planning	State of Alabama/USACE	1	$908,500
Comprehensive Living Shoreline Monitoring		Planning	State of Alabama	1	$25,000

Alabama Submerged Aquatic Vegetation Restoration & Monitoring Program		Implementation	State of Alabama	1	$875,000
Marsh Restoration in Fish River, Weeks Bay, Oyster Bay & Meadows Tract		Planning	DOC-NOAA/State of Alabama	1	$907,954
Mobile Bay National Estuary Program		Planning	EPA/State of Alabama	1	$358,000
Upper Mobile Bay Beneficial Use Wetland Creation Site		Planning	USACE/State of Alabama, DOI and DOC	1	$2,500,000
Enhancing Opportunities for Beneficial Use of Dredged Sediments		Planning	State of Alabama/State of Mississippi and USACE	1	$3,000,000
Alabama Living Shorelines Program		Implementation	State of Alabama	2	$5,341,500
Comprehensive Living Shoreline Monitoring		Implementation	State of Alabama	2	$3,975,000
Marsh Restoration in Fish River, Weeks Bay, Oyster Bay & Meadows Tract		Implementation	DOC-NOAA/State of Alabama	2	$2,250,089
Mobile Bay National Estuary Program		Implementation	EPA/ State of Alabama	2	$1,742,000
Pensacola Bay Living Shoreline - Phase I	***Pensacola Bay, FL***	Planning	State of Florida	1	$231,314
Beach Haven - Joint Stormwater & Wastewater Improvement Project - Phase II		Implementation	State of Florida	1	$5,967,000
Bayou Chico Contaminated Sediment Removal- Planning, Design, and Permitting		Planning	State of Florida	1	$356,850

Pensacola Bay Living Shoreline - Phase I		Implementation	State of Florida	2	$1,564,636
Apalachicola Watershed Agriculture Water Quality Improvements	***Apalachicola Bay, FL***	Implementation	State of Florida/USDA	1	$2,219,856
Tate's Hell Strategy 1		Planning & Implementation	USDA/ State of Florida	1	$7,000,000
Money Bayou Wetlands Restoration		Planning	DOC-NOAA/ State of Florida	1	$387,726
Apalachicola Bay Oyster Restoration		Planning	State of Florida	1	$702,000
Money Bayou Wetlands Restoration		Implementation	DOC-NOAA/ State of Florida	2	$852,653
Apalachicola Bay Oyster Restoration		Implementation	State of Florida	2	$3,978,000
Suwannee River Partnership Irrigation Water Enhancement Program	***Suwannee Watershed, FL***	Implementation	State of Florida/USDA	1	$2,884,000
Palm River Restoration Project Phase II, East McKay Bay	***Tampa Bay, FL***	Planning	State of Florida	1	$87,750
Robinson Preserve Wetlands Restoration		Planning	DOC-NOAA/ State of Florida	1	$470,910
Tampa Bay National Estuary Program		Planning	EPA/ State of Florida	1	$100,000
Palm River Restoration Project Phase II, East McKay Bay		Implementation	State of Florida	2	$497,250
Robinson Preserve Wetlands Restoration		Implementation	DOC-NOAA/ State of Florida	2	$1,319,636

Tampa Bay National Estuary Program		Implementation	EPA/ State of Florida	2	$2,000,000
Council Monitoring & Assessment Program Development	***Gulf-wide***	Planning	DOC-NOAA and DOI-U.S. Geological Survey (USGS)/All Council Members	1	$2,500,000
GOMA Coordination		Planning	State of Alabama/DOC and DOI	1	$375,000
Strategic Conservation Assessment Framework		Planning	DOI/All Council Members	1	$1,879,380
Baseline Flow, Gage Analysis & On-Line Tool to Support Restoration		Planning & Implementation	EPA and DOI-USGS/All Council Members	1	$5,800,000
Gulf Coast Conservation Reserve Program		Planning & Implementation	USDA/States of Alabama, Florida, Mississippi	1	$6,000,000
Gulf of Mexico Conservation Enhancement Grant Program		Planning	EPA/All Council Members	1	$375,000
Gulf of Mexico Habitat Restoration via Conservation Corps Partnerships		Implementation	DOC/DOI and States of Alabama, Florida, Louisiana, Mississippi and Texas	1	$8,000,000
Gulf of Mexico Estuary Program		Planning	EPA/State of Florida	1	$2,200,000
Gulf of Mexico Conservation Enhancement Grant Program		Implementation	EPA/All Council Members	2	$2,125,000

Appendix 2 Metrics

Strategic Metric Number	Metric Name	Activity/Outcome	Comprehensive Plan Objective Supported	Approach to Support Ecosystem Restoration	Metric Description
1	Acres protected under easement	Conservation easements - Acres protected	Objective(s): (1),(2)	Habitat Conservation	Number of acres protected under long-term easement (permanent or >30- yr)
2	Miles under long-term easement	Conservation easements - Miles under easement	Objective(s): (1), (2)	Habitat Conservation	Number of miles under long-term easement (permanent or>30yr)
3	Acres acquired in fee	Land acquisitions - Acres acquired in fee	Objective(s): (1), (2)	Habitat Conservation	Number of acres acquired in fee
4	Miles acquired	Land acquisitions - Miles acquired	Objective(s): (1), (2)	Habitat Conservation	Number of miles acquired
5	Wells plugged	Wellhead Protection - Well Plugged	Objective(s): (1)	Habitat Conservation	Number of abandoned wells plugged
6	Number of grants/agreements	Subgrants or agreements - # grants/agreements - habitat conservation activities	Objective(s): (1), (2)	Habitat Conservation	Number of grants or agreements disseminated
7	Acres restored	Erosion control - Acres restored	Objective(s): (4)	Habitat Restoration	Number of acres restored
8	Miles restored	Erosion control - Miles restored	Objective(s): (4)	Habitat Restoration	Number of miles restored
9	Miles restored (turbidity)	Erosion control - Miles restored (turbidity)	Objective(s): (1), (2), (4)	Habitat Restoration	Number of miles restored to a certain level of turbidity

Strategic Metric Number	Metric Name	Activity/Outcome Name	Comprehensive Plan Objective Supported	Approach to Support Ecosystem Restoration	Metric Description
10	Acres restored	Land restoration - Acres restored	Objective(s): (1)	Habitat Restoration	Number of acres restored
11	Acres restored	Marine habitat restoration - Acres restored - Artificial reefs	Objective(s): (1), (3)	Habitat Restoration	Number of marine habitat acres restored to artificial reefs
12	Acres restored	Marine habitat restoration - Acres restored – Oysters	Objective(s) (1), (3)	Habitat Restoration	Number of marine habitat acres restored to oyster reefs
13	Acres restored	Marine habitat restoration - Acres restored – SAV	Objective(s): (1), (3)	Habitat Restoration	Number of acres of SAV restored
14	Acres restored	Removal of invasive vegetation species - Acres restored	Objective(s): (1)	Habitat Restoration	Number of acres restored with native vegetation
15	Acres with restored hydrology	Restoring hydrology - Acres with restored hydrology	Objective(s): (1)	Habitat Restoration	Number of acres with restored hydrology
16	Miles restored	Riparian restoration (i.e., buffers) - Miles restored	Objective(s): (1), (2)	Habitat Restoration	Number of miles restored riparian habitat
17	Miles restored	Marsh restoration - Miles restored - backfilling of canals	Objective(s): (1)	Habitat Restoration	Number of miles of canals backfilled

Strategic Metric Number	Metric Name	Activity/Outcome Name	Comprehensive Plan Objective Supported	Approach to Support Ecosystem Restoration	Metric Description
18	Miles restored	Living Shoreline restoration - Miles restored	Objective(s): (4)	Habitat Restoration	Number of miles living shoreline installed
19	Acres restored	Wetland restoration - Acres restored	Objective(s): (1)	Habitat Restoration	Number of acres restored
20	Lbs N avoided (annually)	BMP implementation for nutrient or sediment reduction - Lbs N avoided (annually)	Objective(s): (2)	Habitat Management	The amount of nitrogen prevented from entering system annually
21	Lbs nutrients or sediment avoided (annual)	BMP implementation for nutrient or sediment reduction - Lbs nutrients avoided (annually)	Objective(s): (2)	Habitat Management	The amount of nutrients prevented from entering system annually
22	Lbs P avoided (annually)	BMP implementation for nutrient or sediment reduction - Lbs P	Objective(s): (2)	Habitat Management	The amount of phosphorous prevented from entering system annually
23	Lbs sediment avoided (annually)	BMP implementation for nutrient or sediment reduction - Lbs sediment avoided (annually)	Objective(s): (2)	Habitat Management	The amount of sediment prevented from entering system annually
24	Acres under contracts or agreements	BMP implementation on ag lands -Acres under BMPs - contracts or agreements	Objective(s): (2)	Habitat Management	Number of acres under contract(s) or agreement(s)

Strategic Metric Number	Metric Name	Activity/Outcome Name	Comprehensive Plan Objective Supported	Approach to Support Ecosystem Restoration	Metric Description
25	Acres under improved management	Improved management practices - Acres under improved management	Objective(s): (1), (2)	Habitat Management	Number of acres under improved management
26	Miles under improved management	Improved management practices - Miles under improved management	Objective(s): (1), (2)	Habitat Management	Number of miles under improved management
27	Acres with reduced impacts	Land Use Planning - Acres with reduced impacts	Objective(s): (1), (2), (7)	Planning, Research, Monitoring	Number of acres with reduced impacts
28	Miles with reduced impacts	Land Use Planning - Miles with reduced impacts	Objective(s): Birds; (1), (2), (7)	Planning, Research, Monitoring	Number of miles with reduced impacts
29	# plans developed	Management or Governance Planning - # plans developed	Objective(s): (1), (2), (7)	Planning, Research, Monitoring	Number of plans developed that had input from multiple stakeholders
30	# monitoring programs	Monitoring - # monitoring programs implemented	Objective(s): (1), (2), (7)	Planning, Research, Monitoring	Number of monitoring programs established or underway
31	# monitoring programs	Monitoring - # monitoring plans developed	Objective(s): (1), (2), (7)	Planning, Research, Monitoring	Number of monitoring plans developed

Strategic Metric Number	Metric Name	Activity/Outcome Name	Comprehensive Plan Objective Supported	Approach to Support Ecosystem Restoration	Metric Description
32	# streams/sites being monitored	Monitoring - # streams/sites being monitored	Objective(s): CM, BE, BD; (1), (2), (7)	Planning, Research, Monitoring	# streams/sites being monitored
33	Acres being monitored	Monitoring - Acres being monitored	Objective(s): (1), (2), (3), (7)	Planning, Research, Monitoring	Number of acres being monitored
34	Miles being monitored	Monitoring - Miles being monitored	Objective(s): (1), (2), (3), (7)	Planning, Research, Monitoring	Number of miles being monitored
35	# studies/models reported to mgmt.	Research - # studies reported to mgmt.	Objective(s): (7)	Planning, Research, Monitoring	Number of studies completed whose findings are reported to management
36	# studies/model used to inform mgmt.	Research - # studies used to inform mgmt.	Objective(s): (1), (7)	Planning, Research, Monitoring	Number of studies completed whose findings are used to adapt management/ inform mgmt. decisions
37	# E&D plans developed	Restoration planning/design/permitting - # E&D plans developed	Objective(s): (1), (2), (4)	Planning, Research, Monitoring	Number of Engineering and Design plans developed. Generally there will be 1 plan per project to be constructed.
38	# tools developed	Tool development for decision-making - # tools developed	Objective(s): (1), (4), (7)	Planning, Research, Monitoring	Number of tools developed

Strategic Metric Number	Metric Name	Activity/Outcome Name	Comprehensive Plan Objective Supported	Approach to Support Ecosystem Restoration	Metric Description
39	# compliance documents produced	Restoration planning/design/permitting - # environmental compliance documents	Objective(s): (1), (2), (4)	Planning, Research, Monitoring	Number of environmental compliance documents produced/compile d
40	Density (# individuals/acre)	Population - Density (# individuals/acre) - Oysters	Objective(s): (1) or (3)	Species Outcome	The density in terms of individuals per acre
41	# FTE with sufficient training	Building institutional capacity - # FTE with sufficient training	Objective(s): (1), (6)	Capacity, Outreach, Incentives	Number of staff or full-time equivalents with sufficient training and skills engaged in conservation
42	# people reached	Outreach/ Education/ Technical Assistance - # people reached	Objective(s): (1), (2), (6), (7)	Capacity, Outreach, Incentives	Number of people reached by outreach, training, or technical assistance activities
43	# people enrolled to implement BPMs	Outreach/ Education/ Technical Assistance - # people enrolled - BMPs	Objectives (2) (6)	Capacity, Outreach, Incentives	Number of unique individuals enrolled to implement BMPs
44	# users engaged online	Outreach/ Education/ Technical Assistance - # users engaged online	Objective(s): (6)	Capacity, Outreach, Incentives	Number of unique users engaging websites, social media tools used to disseminate information about the
45	# volunteers participating	Volunteer participation - # volunteers participating	Objective(s):; (1), (2)	Capacity, Outreach, Incentives	Number of volunteers participating in projects
46	# grants/agreements	Subgrants or agreements - # grants/agreements - dissemination of EOE materials	Objective(s): (6)	Capacity, Outreach, Incentives	Number of subgrants or agreements disseminated for EOE materials

Strategic Metric Number	Metric Name	Activity/Outcome Name	Comprehensive Plan Objective Supported	Approach to Support Ecosystem Restoration	Metric Description
47	# of participants that completed training	Building institutional capacity - # of participants that successfully completed training	Objective(s): (6)	Capacity, Outreach, Incentives	Expected number of participants that successfully attended and completed the training and attained restoration and conservation skills.
48	# jobs created	Economic benefits - # jobs created - full time permanent jobs	Objective(s): (1), (2), (3), (4), (5), (6), (7)	Capacity, Outreach, Incentives	Number of full-time permanent jobs created
49	# jobs created	Economic benefits - # jobs created - part- time permanent jobs	Objective(s): (1), (2), (3), (4), (5), (6), (7)	Capacity, Outreach, Incentives	Number of part-time permanent jobs created
50	# jobs created	Economic benefits - # jobs created - temporary jobs	Objective(s): (1), (2), (3), (4), (5), (6), (7)	Capacity, Outreach, Incentives	Number of temporary jobs created
51	# local contracts	Economic benefits - # local contracts	Objective(s): (1), (2), (3), (4), (5), (6), (7)	Capacity, Outreach, Incentives	Number of contracts or agreements with local firms
52	% of program funding to local organizations	The percentage of total program funding anticipated to be contracted with local companies	Objective(s): (1), (2), (3), (4), (5), (6), (7)	Economic Benefits	The percentage of total program funding contracted to existing local organizations