ENVIRONMENTAL LAW INSTITUTE

Building Bridges

Connecting the Overlapping
Goals, Resources, and
Institutions of Gulf of Mexico
Restoration and Conservation

—Federal Programs—

April 2014



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Building Bridges: Connecting the Overlapping Goals, Resources, and Institutions of Gulf of Mexico Restoration and Conservation.

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I. INTRODUCTION

On April 20, 2010, an explosion rocked the *Deepwater Horizon* mobile offshore drilling unit. Eleven crewmen lost their lives in the blast, and the rig burned for the next thirty-six hours. Then, forty-one miles off the southeast coast of Louisiana, the *Deepwater Horizon* sank. Back at the wellhead, a quarter-mile away and 5,000 feet beneath the surface of the Gulf of Mexico, the environmental disaster was just beginning. Oil gushed for the next three months, during which millions of barrels of oil mixed with millions of gallons of dispersant to contaminate more than 1,000 miles of coast.

Several processes have been developed to initiate restoration and recovery of the Gulf of Mexico region after the *Deepwater Horizon* spill. The goals and objectives of these recovery programs necessarily overlap with the goals and objectives of existing restoration and conservation policies and programs. To maximize the benefits realized by these efforts, the programs should not simply exist in parallel. Rather, it is important to find linkages between them to ensure that the current influx of funds for Gulf restoration achieves long-term environmental protection goals, along with developing the institutional capacity to sustain progress made in the recovery from the *Deepwater Horizon* disaster.

This assessment focuses on one key opportunity to create such linkages—language in the Resources and Ecosystems Sustainability, Tourist Opportunities and Revived Economies of the Gulf Coast States Act (RESTORE Act) that allows funds directed to the states and/or local governments to qualify as nonfederal matching funds for other federal grants. In some instances, it may be difficult for states to raise or allocate matching funds, especially given the uncertain status of some state budgets and limitations on borrowing authority inherent in some state laws. In other instances, the match fund requirements may cause state governments to spend more on a program than they otherwise would, which could "constrain [the states'] ability to spend their own revenues according to their own policy priorities," possibly making the states' goals subservient to the federal program goals. The RESTORE Act match provision could allow states to avoid some of these concerns and constraints while also facilitating the achievement of environmental, ecological, and economic restoration and recovery objectives.

¹ Deepwater Horizon Accident and Response, BP.COM, http://www.bp.com/en/global/corporate/gulf-of-mexico-restoration/deepwater-horizon-accident-and-response.html (last visited Jan. 20, 2014).

² Complaint at 1–2, SEC v. B.P. plc, No. 2:12-cv-02774 (E.D. La. Nov. 15, 2012).

³ NATIONAL COMMISSION ON THE BP DEEPWATER HORIZON OIL SPILL AND OFFSHORE DRILLING, DEEP WATER: THE GULF OIL DISASTER AND THE FUTURE OF OFFSHORE DRILLING 169 (2011).

⁴ See Alice C. Ortmann et al., Dispersed Oil Disrupts Microbial Pathways in Pelagic Food Webs, 7 PLoS ONE 1 (2012) (finding that greater than 1.8 million gallons of dispersant were used in the Gulf of Mexico).

⁵ Mace G. Barron, *Ecological Impacts of the Deepwater Horizon Oil Spill: Implications for Immunotoxicity*, 40 TOXICOLOGIC PATHOLOGY 315 (2012).

⁶ CONG. BUDGET OFF., FEDERAL GRANTS TO STATE AND LOCAL GOVERNMENTS, Pub. No. 4472 9 (2013), available at http://www.cbo.gov/sites/default/files/cbofiles/attachments/43967_FederalGrants.pdf.

⁷ See id. at 2.

The assessment begins with an overview of the primary funding mechanisms for Gulf recovery, including the RESTORE Act, the ongoing Natural Resource Damage Assessment (NRDA), and the settlements with some of the parties responsible for the spill. After a brief examination of their goals and the current allocation of project funding, the assessment describes and analyzes existing federal grant programs with similar objectives. Our conclusion is that there are many instances in which existing state and federal environmental programs could be utilized to leverage *Deepwater Horizon* funds and link them with existing restoration efforts.

In sum, the assessment aims to build bridges between funding mechanisms that can be used to accelerate recovery from the *Deepwater Horizon* disaster and to help achieve the long-term health of Gulf of Mexico ecosystems. In the process, it is intended to help build a bridge from the 2010 environmental disaster to a future with a healthy, thriving Gulf.

II. GULF RESTORATION & RECOVERY PROGRAMS

After the *Deepwater Horizon* disaster, the Gulf of Mexico was in peril. In the Gulf itself, ecosystem productivity plummeted due to direct mortality from spilled oil and response efforts, along with indirect impacts that may take decades to understand fully. Along the coast, oil washed up in all five Gulf States, with Louisiana receiving the most—and oil continues to be discovered to this day, especially after storm events. Even as the spill's aftermath continues to unfold, activities to restore and protect the Gulf's natural resources have commenced.

The three funding mechanisms discussed in this section—the Natural Resource Damage Assessment (NRDA), the National Fish and Wildlife Foundation (NFWF) settlement funding, and the RESTORE Act—attempt to address the environmental damage. This report builds on our white paper, *Deepwater Horizon Restoration and Recovery Funds: How Much, Going Where, For What?*, which examines the specifics of each of the restoration programs in detail. Here, the discussion is limited to the stated goals of the programs and the current projects that are funded or proposed pursuant to those goals.

Table 1. Stated Goals of Restoration and Recovery Programs

Table 1. Stated Goals of Restoration and Recovery Programs		
	Stated Goal(s)	
NRDA (Oil Pollution Act)	"To make the environment and public whole for injuries to natural resources and services resulting from an incident involving a discharge or substantial threat of a discharge of oil." The goal is achieved by returning injured natural resources and services to their baseline condition, in addition to compensating for interim losses. To that end, each responsible party for a vessel or a facility from which oil is discharged is liable for removal costs and "[d]amages for injury to, destruction of, loss of, or loss of use of, natural resources, including the reasonable costs of assessing the damage."	
NFWF (settlement funds)	"To remedy harm and eliminate or reduce the risk of future harm to Gulf Coast natural resources," NFWF shall use funds "in order to remedy harm to resources where there has been injury to, or destruction of, loss of, or loss of use of those resources resulting from the [Deepwater Horizon] spill" in the	

⁸ See Press Release, Nat'l Academy of Sci., Comprehensive Assessments of Deepwater Horizon Spill and Restoration Plans Need to Include Social and Economic Effects, Report Says (July 10, 2013),

http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=18387 (describing a 20% decline in commercial fish catch and noting that "[p]roductivity of the fish populations could be impacted by the spill's toxic effects on reproduction and development, which may take years or decades to determine").

⁹ Katherine Sayre, *Tar Mat Discovered at Fourchon Beach after Tropical Storm Karen*, THE TIMES PICAYUNE (Oct. 16, 2013), http://www.nola.com/environment/index.ssf/2013/10/tar_mat_discovered_at_fourchon.html.

¹⁰ ENVTL. L. INST., DEEPWATER HORIZON RESTORATION AND RECOVERY FUNDS: How Much, Going Where, For What? (white paper forthcoming 2014). This white paper explores the overlaps and gaps between the *Deepwater Horizon* restoration and recovery processes, reviewing potential challenges, synergies, and opportunities.

¹¹ 15 C.F.R. § 990.10.

¹² *Id*.

¹³ Ia.

¹³ Oil Pollution Act, 33 U.S.C. § 2702(b)(2)(A); see also 15 C.F.R. § 990 (NRDA regulations promulgated by NOAA).

Stated Goal(s)

following proportions:

- Half of the payments will be used "to conduct or fund projects in Alabama, Florida, Mississippi, and Texas"
- Half of the payments will be used "to create or restore barrier islands off the coast of Louisiana and/or to implement river diversion projects on the Mississippi and/or Atchafalaya Rivers for the purpose of creating, preserving, and restoring coastal habitat"¹⁴

RESTORE Act (Clean Water Act fines)

The RESTORE Act creates five separate processes, which have varying scopes and purposes. Roughly 95% of the funds that flow through the processes are designated for efforts to "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." ¹⁵

Information on all approved or proposed restoration projects, including location, cost, contact information, and a project description, is compiled in our *Deepwater Horizon Restoration*Projects Database, a searchable and sortable list of all projects under the funding mechanisms described in this section. ¹⁶

A. NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA)

A brief review of the NRDA process is instructive because its purpose and goals overlap with other Gulf restoration programs, presenting an opportunity for coordinated recovery efforts. Mandated by the Oil Pollution Act, a NRDA is the tool that is used to ascertain the injuries caused by an oil spill to natural resources, determine how to restore them, and then implement a restoration plan.¹⁷ A NRDA compensates the public for (1) injuries to natural resources; (2) the public's loss of use of those resources while they are injured (often referred to as "lost use"); and (3) the costs of assessment.¹⁸

1

¹⁴ Plea Agreement, U.S. v. Transocean Deepwater Inc., Case 2:13-cr-00001 (E.D. La. 2013), *available at* http://www.nfwf.org/whoweare/mediacenter/Documents/transocean-plea-agreement%20p2.pdf.

¹⁵ Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act of 2012, 126 Stat. 588, 33 U.S.C. § 1321(t)(2)(B)(i) (2012) [hereinafter RESTORE Act].

¹⁶ Deepwater Horizon Restoration Projects Database, ENVTL. L. INST., http://eli-ocean.org/gulf/restoration-projects-database.

¹⁷ See Oil Pollution Act, 33 U.S.C. § 2702(b)(2)(A); see also 15 C.F.R. § 990 (NRDA regulations promulgated by NOAA).

¹⁸ 33 U.S.C. § 2702(b)(2)(A) (defining natural resources damages as "[d]amages for injury to, destruction of, loss of, or loss of use of, natural resources, including the reasonable costs of assessing the damage, which shall be recoverable by a United States trustee, a State trustee, an Indian tribe trustee, or a foreign trustee"). Natural resources are defined broadly to be "land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources." *Id.* § 2701(20).

The NRDA process for restoring injuries caused by *Deepwater Horizon* is ongoing. In 2011, BP agreed to fund up to \$1 billion for "early restoration" projects while the overarching NRDA continues. Of this \$1 billion, \$71 million was devoted to projects selected during the first two phases of early restoration; another \$627 million worth of early restoration projects have been negotiated for the third phase. Determination of total natural resource damages and implementation of a comprehensive restoration plan will occur in the coming years.

The early restoration projects approved so far run the gamut from protecting marsh habitat and preventing erosion to compensating for lost recreational use. Projects focused on habitat restoration include, for example, the Marsh Island Marsh Creation Project in Mobile County, Alabama. That \$11.28 million project focused on protecting 24 acres of existing salt marsh and creating 50 additional acres through land acquisition and environmental engineering. Meanwhile, projects focused on the lost use prong include, for example, infrastructure projects such as the Florida Boat Ramp Enhancement and Construction Project in Escambia County. That project cost \$5.07 million and funded the construction of four boat ramps.

For each early restoration project implemented, BP receives "NRDA offsets"—that is, credit against its ultimate natural resource damages liability. To date, offsets have been calculated in one of three ways: habitat equivalency, resource equivalency, and monetary valuation (used for loss of use projects). Figure 1 shows the total spending by the method used for offsets calculation, including both actual and pending projects, during Phases I, II, and III of early restoration. In total, 8 projects are included in Phase I, 2 projects in Phase II, and 44 projects in Phase III. Figure 2 presents actual project funding by both state and offsets type.

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¹⁹ DEEPWATER HORIZON NATURAL RESOURCE TRUSTEES, DEEPWATER HORIZON OIL SPILL PHASE II EARLY RESTORATION PLAN AND ENVIRONMENTAL REVIEW ES-3 (2012), available at http://www.gulfspillrestoration.noaa.gov/wp-content/uploads/Phase-II-ERP-ER-12-21-12.pdf (referencing the \$1 billion "down payment"), ES-8 (listing the \$8.96 million worth of projects in Phase II). See also DEEPWATER HORIZON NATURAL RESOURCE TRUSTEES, DEEPWATER HORIZON OIL SPILL PHASE I EARLY RESTORATION PLAN AND ENVIRONMENTAL ASSESSMENT ES-8 (2012), available at http://www.gulfspillrestoration.noaa.gov/wp-content/uploads/Final-ERP-EA-ES-041712.pdf (listing \$62 million worth of projects in Phase I).

DEEPWATER HORIZON NATURAL RESOURCE TRUSTEES, DRAFT PROGRAMMATIC AND PHASE III EARLY RESTORATION PLAN AND DRAFT EARLY RESTORATION PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT (2013), available at http://www.gulfspillrestoration.noaa.gov/wp-content/uploads/Draft_ERP-PEIS_Executive_Summary.pdf.

²¹ Phase I Early Restoration Plan, *supra* note 19, at 40–41.

²² See id.

²³ *Id.* at 47–49 ("The project would address the reduced quality and quantity of recreational activities (e.g., boating and fishing) that resulted from natural resource injuries caused by the Spill.").

²⁵ DEEPWATER HORIZON NATURAL RESOURCE TRUSTEES, *supra* note 20, at 7.

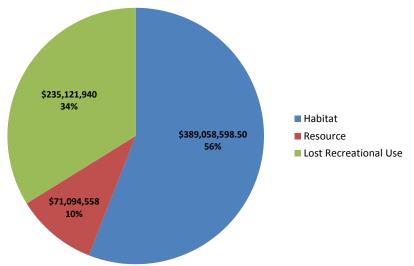


Figure 1. NRDA Early Restoration Spending by Offsets Category*

* Note: When projects included more than one category of NRDA offsets, the total cost was split between the two categories.²⁶

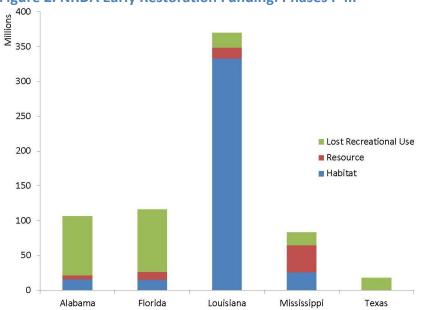


Figure 2. NRDA Early Restoration Funding: Phases I-III

Note: When a project occurs within more than one state, the funds are divided in the same proportion as the offsets.²⁷

²⁶ Thus far, habitat offsets have been quantified in discount service acre-years (DSAYs), resource offsets have been quantified in discounted kilogram years (DkgY), and lost recreational use offsets have been quantified in dollars. Because the units are not the same, total cost was split evenly between the offsets categories when more than one category was present. For example, the Pensacola Bay Living Shoreline project received \$10,828,063, with 86.63 DSAYs of Salt Marsh Habitat offsets and 28,813 DKg-Ys of benthic secondary productivity offsets. Thus, both the habitat and resource categories were credited with \$5,414,032.

²⁷ For example, \$4,658,118 was allocated for the NRDA Phase II project "Comprehensive Program for Enhanced Management of Avian Breeding Habitat Injured by Response in the Florida Panhandle, Alabama, and Mississippi."

NRDA projects are being carried out by state and federal trustees, which include most of the relevant natural resource agencies. The trustees quantify natural resource injuries, identify possible restoration projects, and implement the final restoration plan.²⁸

Table 2. NRDA Trustees²⁹

Table 2. NKDA	Trustees	
NRDA State Trustees	Alabama	 Department of Conservation and Natural Resources Geological Survey
	Florida	 Department of Environmental Protection Fish and Wildlife Conservation Commission
	Louisiana	 Coastal Protection and Restoration Authority Oil Spill Coordinator's Office Department of Environmental Quality Department of Wildlife and Fisheries Department of Natural Resources
	Mississippi	Department of Environmental Quality
	Texas	Parks and Wildlife DepartmentGeneral Land OfficeCommission on Environmental Quality
NRDA	Department	t of the Interior—United States Fish and Wildlife
	· ·	
Federal	Service (FWS), National Park Service, and Bureau of Land	
Trustees	Manageme	
	 Departmen 	t of Commerce—National Oceanic and Atmospheric
	Administration (NOAA)	
	Department of Defense ³⁰	
	 Environmer 	ntal Protection Agency (EPA)
		t of Agriculture

B. National Fish and Wildlife Foundation (NFWF) and Other Settlement Funds

Restoration funding is also being channeled through settlements that the federal government (led by the Department of Justice) reached with several parties involved in the *Deepwater Horizon* disaster. In February 2012, MOEX, the minority owner of the oil well, settled certain civil claims for \$90 million, which included \$20 million in supplemental environmental

Project habitat offsets were divided between FL, AL, and MS, with 1352 DSAYs for beach and nesting birds in FL, 52 in AL, and 272 in MS. The funding was divided proportionally based on the habitat offsets, with FL being credited with \$3,757,622, AL with \$144,524, and MS with \$755,971.

²⁸ 15 C.F.R. § 990.

²⁹ Phase I Early Restoration Plan, *supra* note 19, at ES-2.

³⁰ To date, the Department of Defense has not been a part of the early restoration trustee council.

projects.³¹ In November 2012, BP settled federal criminal charges for \$4 billion.³² Within months of that agreement, Transocean, the owner of the *Deepwater Horizon* drilling unit, settled federal criminal charges for \$400 million and Clean Water Act civil penalties for \$1 billion.³³ The total amount of \$5.47 billion will be channeled through various institutions and distributed as shown in the table below.

Table 3. Allocation of Settlement Funds

Recipient	Total Funds (millions)	Goal
NFWF (for Louisiana)	\$1,272	Create or restore barrier islands off the coast of Louisiana and/or to implement river diversion projects
NFWF (for TX, MS, AL, FL)	\$1,272	Conduct or fund projects to remedy harm to resources where there has been injury to, or destruction of, loss of, or loss of use of those resources
National Academy of Sciences (NAS)	\$500	Develop a program focused on human health and environmental protection, including issues relating to offshore oil drilling
Oil Spill Liability Trust Fund (OSLTF)	\$1,495	Cover the costs of future oil spills
North American Wetlands Conservation Fund	\$100	Wetlands restoration and conservation projects benefitting wildlife and habitat impacted by the spill
RESTORE Fund	\$800	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

A total of \$2.544 billion of the criminal settlement funds from BP and Transocean will go to the Gulf Environmental Benefit Fund to be implemented by **NFWF**, a non-profit organization created by Congress in 1984 "to protect and restore fish and wildlife and their habitats." ³⁴ Half of this money is to be used for projects in Louisiana, focusing on creating or restoring barrier

³¹ ENVTL. LAW INST., MOEX SETTLEMENT FACT SHEET (2013), available at http://eli-ocean.org/gulf/files/MOEX-Settlement.pdf; Consent Decree Between the U.S. and MOEX Offshore LLC at 10, 12, No. 10-4536 (E.D. La. 2012), available at http://www.epa.gov/compliance/resources/decrees/civil/caa/moex-cd.pdf.

³² ENVTL. LAW INST., BP CRIMINAL PLEA AGREEMENT FACT SHEET (2013), available at http://eli-ocean.org/gulf/files/BP-Criminal-Plea-Agreement.pdf; Guilty Plea Agreement at 4, U.S. v. BP Exploration and Production (E.D. La. 2013), available at http://www.justice.gov/iso/opa/resources/43320121115143613990027.pdf.

³³ ENVTL. LAW INST., TRANSOCEAN SETTLEMENT FACT SHEET (2013), available at http://eli-ocean.org/gulf/files/Transocean-Settlement.pdf; Cooperation Guilty Plea Agreement at 3, U.S. v. Transocean Deepwater Inc. (E.D. La. 2013), available at http://www.justice.gov/opa/documents/transocean-plea-agreement.pdf.

³⁴ ENVTL. LAW. INST., U.S. SETTLEMENTS AT A GLANCE (2013), available at http://eli-ocean.org/gulf/files/US-Settlements.pdf.

islands and/or implementing river diversion projects. 35 The remaining funds will be split among the other Gulf States to conduct or fund projects to remedy harm to resources where there has been injury to, or destruction of, loss of, or loss of use of those resources.³⁶

In November 2013, NFWF announced its first phase of projects, whose costs totaled \$108.1 million. Figure 3 presents the NFWF Phase I funding by state and project type.

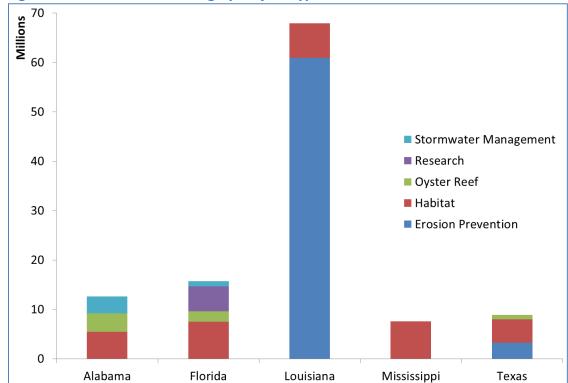


Figure 3. NFWF Phase I Funding by Project Type*

*Note: Project types are defined based on the authors' interpretation of the project permitting documents. When a project involves more than one of the identified project types, the funds are split evenly between those types.³⁷

Under the terms of the settlement, Louisiana funding is primarily for barrier island project planning and design, leading to the higher percentage of erosion prevention projects there. In April 2014, Louisiana received an additional \$144.5 million for Caminada Beach and Dune construction and restoration,³⁸ and Mississippi received \$3.6 million to "develop a

³⁶ *Id*.

³⁵ *Id.*

³⁷ For example, the "Galveston Island State Park Marsh Restoration & Protection" project received \$2,489,200 to create 30 acres of marsh and protect "critically eroding" shorelines. Our accounting of this amount is split, with \$1,244,600 to both habitat (the marsh creation component) and erosion prevention (the shoreline protection component).

³⁸ Caminada Beach and Dune Increment II: Construction, NFWF, http://www.nfwf.org/gulf/Documents/lacaminada-construction.pdf.

comprehensive plan for restoring and conserving Mississippi's coastal natural resources."³⁹ It is also important to recall that under the terms of the settlements, Louisiana receives half of all the NFWF funds, Alabama, Florida, and Mississippi receive 14% each, and Texas receives 8%. The remainder of NFWF settlement payments will occur over a five-year period.

Beyond NFWF, the **North American Wetlands Conservation Fund** (NAWCF) will receive a total of \$100 million to further wetlands projects benefitting wildlife and habitat in the Gulf impacted by the spill. ⁴⁰ As described further below, ⁴¹ NAWCF is also an existing federal grant program that matches state funds for qualifying projects. ⁴² The new funds will be disbursed to NAWCF over a five-year period and will fund the standard and small grant programs discussed later in this report. ⁴³

The \$90 million **MOEX settlement** included \$20 million for land acquisition and habitat protection in the Gulf States. ⁴⁴ These MOEX funds have been used for six projects—including two in both Texas and Florida, and one each in Louisiana and Mississippi. ⁴⁵ Other settlement funds are not directly relevant to ecological restoration projects, and will not be discussed in this assessment. ⁴⁶

The **RESTORE Act Gulf Coast Restoration Trust Fund**, administered by the U.S. Department of the Treasury, 47 will receive 80% of any Clean Water Act penalties collected through settlement or trial. 48 To date, \$800 million plus interest has been obligated to the Fund through settlements. It is the focus of the next section.

C. THE RESTORE ACT

http://www2.epa.gov/sites/production/files/documents/moexsepproperties 1.pdf.

³⁹ Mississippi Coastal Restoration Plan, NFWF, http://www.nfwf.org/gulf/Documents/ms-coastal-restoration-plan.pdf.

⁴⁰ Id

⁴¹ See Federal Grant Programs: Wetlands, infra.

⁴² See North American Wetlands Conservation Act, 16 U.S.C. § 4401 et seq. NAWCF pays between 30 and 60% of costs for qualifying projects. *Id.* § 4407.

⁴³ The North American Wetlands Conservation Act, U.S. FWS: GULF RESTORATION, http://www.fws.gov/gulfrestoration/nawca.html (last updated Sept. 23, 2013). ⁴⁴ *Id*.

⁴⁵ SEP Properties, ENVTL. PROT. AGENCY,

⁴⁶ The **National Academy of Sciences (NAS)** will receive \$500 million to conduct a 30-year "program focused on human health and environmental protection[,] including issues relating to offshore oil drilling." U.S. Settlements at a Glance, *supra* note 34. Similar research activities could also qualify under RESTORE and NRDA, though the NAS program will likely be most important for coordinating scientifically rigorous response efforts that further human health and environmental protection in the context of offshore drilling. The **Oil Spill Liability Trust Fund** will receive \$1.495 billion under the settlements to cover the cost of future oil spills. *Id.* This goal does not overlap with other current funding mechanisms.

⁴⁷ See Gulf Coast Restoration Trust Fund, 78 FED. REG. 54,801 (Sept. 6, 2013).

⁴⁸ U.S. Settlements at a Glance, supra note 34.

In 2012, Congress passed the Resources and Ecosystem Sustainability, Tourist Opportunities and Revived Economies of the Gulf Coast States (RESTORE) Act.⁴⁹ The RESTORE Act established a novel funding structure, and it is the focus of the remainder of this assessment.

The RESTORE Act is the only legislation that has been passed as a result of the *Deepwater Horizon* oil disaster. The act targets Clean Water Act civil and administrative fines, which could total as much as \$17.6 billion. ⁵⁰ It parcels out this money through a newly established Gulf Coast Restoration Trust Fund that, administered by the Treasury Department, provides funds to all five Gulf States (through either state leads or local governments), a Gulf Coast Ecosystem Restoration Council, and other entities. ⁵¹

While RESTORE's procedural mechanisms are different than those of NRDA or those created by the settlements, some of its ultimate restoration goals are similar. Like the other programs, recipients of RESTORE funds can use the money for environmental restoration and conservation projects, among other things.

In practice, the RESTORE Act diverts 80% of civil and administrative penalties levied under the Clean Water Act in connection with the *Deepwater Horizon* disaster to support economic and ecological restoration and recovery projects throughout the Gulf of Mexico region. ⁵² The remaining 20% of these penalties will go to the Oil Spill Liability Trust Fund, which normally would receive the full amount. Of the diverted funds, 35% goes to the Gulf of Mexico states in equal shares (Direct Component); 30% goes to a regional Gulf Coast Ecosystem Restoration Council; 30% goes to the states in proportion to their spill impacts (Spill Impact Component); and the remaining five percent is split between two different research programs (the NOAA Restore Act Science Program and Centers of Excellence). To date, \$1 billion in civil and administrative penalties have been determined, \$800 million plus interest of which will flow to the RESTORE Act processes. ⁵³ However the penalties are ultimately tallied, they will likely total many more billions of dollars.

The goals and purposes of the RESTORE Act are broad—the trust fund it creates is intended to fund economic and environmental recovery from damages caused not only by *Deepwater Horizon* but also by decades of regional development. RESTORE funds can support a variety of activities, including restoration and protection of natural resources, coastal flood protection, and mitigation of damage to wildlife habitat.⁵⁴ Not surprisingly, these goals overlap with the

⁴⁹ RESTORE Act, 33 U.S.C. § 1321(t).

⁵⁰ ENVTL. LAW INST., AN OVERVIEW OF THE RESTORE ACT (2013), available at http://eli-ocean.org/gulf/files/RESTORE-Overview.pdf.

⁵¹ See RESTORE Act, § 1602(a).

⁵² RESTORE Act § 1602(b).

⁵³ The amount was included within a partial civil settlement reached between the Department of Justice and Transocean. For more information, see ENVTL. L. INST., TRANSOCEAN SETTLEMENT FACT SHEET (2013), available at www.eli-ocean.org/gulf/files/Transocean-Settlement.pdf.

⁵⁴ See id. § 1603(t)(1)(B)(i),(ii).

goals of numerous existing federal programs, policies, and institutions that have worked to restore and conserve the Gulf for years and decades.

This synergy represents a large opportunity, in part due to a seemingly small yet potentially significant provision in the RESTORE Act. As noted, 65% of the RESTORE Act funds go to the five states, in varying allotments (through the "Direct Component" and the "Spill Impact Component"). Per an explicit provision in the Act, those monies can be used to meet non-federal match requirements for other federal grant programs. ⁵⁵ If used in this manner, RESTORE money can be leveraged by a factor of two or more, depending on the applicable match requirement, by applying the funds to "eligible activities" under existing federal grant programs.

Under RESTORE, "eligible activities" for both the Direct Component and the Spill Impact Component—and thus eligible for the match provision—must fall within one of two groups. The first group encompasses a broad array of projects, including:

- (1) Restoration and protection of the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast region;
- (2) Mitigation of damage to fish, wildlife, and natural resources;
- (3) Implementation of a federally approved marine, coastal, or comprehensive conservation management plan, including fisheries monitoring;
- (4) Workforce development and job creation;
- (5) Improvements to or on State parks located in coastal areas affected by the *Deepwater Horizon* oil spill;
- (6) Infrastructure projects benefitting the economy or ecological resources, including port infrastructure;
- (7) Coastal flood protection and related infrastructure;
- (8) Planning assistance; and
- (9) Administrative costs of complying with this subsection [up to 3% of total funding for a project]. ⁵⁶

The second group encompasses projects designed for:

- (1) the promotion of tourism in the Gulf Coast Region, including recreational fishing; and
- (2) promotion of the consumption of seafood harvested from the Gulf Coast Region.⁵⁷

To illustrate the possibilities introduced by RESTORE's matching provision, consider the Coastal and Estuarine Land Conservation Program (CELCP), which has a match requirement that limits federal spending to 50% of project costs. States could thus use \$1 million in RESTORE Act funds to leverage an additional \$1 million in federal program funds, resulting in \$2 million to acquire and protect wetlands. Likewise, under the Forest Legacy Program (25% of funds must be

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⁵⁵ See id. § 1603(t)(1)(N)(i) (Direct Component matching provision); (3)(F)(i) (Spill Impact matching provision).

⁵⁶ RESTORE Act, § 1603(t)(1)(B)(i); 31 C.F.R. § 34.201(a)-(k).

⁵⁷ *Id.* § 1603(t)(1)(B)(ii).

supplied by the state), \$100,000 in RESTORE Act funds to purchase a conservation easement for protected species habitat could become \$400,000 to protect an entire forest. Obviously, this depends on the availability of funds for the federal programs themselves, but overcoming the hurdle of the nonfederal match requirement comes one step closer to achieving restoration objectives.

Thus, the nonfederal match provision means that RESTORE funds can be leveraged to double (or more) available funds, possibly overcoming policy and revenue concerns and constraints for state and local governments.⁵⁸ In combination with funds from the other processes, the leveraging opportunities may be even greater. Ultimately, this should allow Gulf States to realize more and/or bigger environmental and natural resource projects.⁵⁹

D. SUMMARY

The overlapping recovery and restoration goals of NRDA, the settlement funds, and the RESTORE Act point toward the importance of coordination during project proposal, funding, and implementation. Ideally, a wetlands project under NRDA would be considered in conjunction with a wetlands project under NFWF and/or RESTORE; further, it could be viewed together with a wetlands project under existing federal or state programs. Coordination could take place at both the project and institutional levels.⁶⁰

An example of the cross-cutting goals in practice is the Escribano Point project in Florida, which uses funding from the NRDA process, NFWF, and the MOEX settlement. Escribano Point is an area of diverse coastal ecosystems, providing habitat for rare shorebirds such as the piping plover, Cuban snowy plover, least tern, and black skimmer, among others. In 2012, a 1541-acre parcel was identified under the state's "Florida Forever" program and purchased with \$5 million from the MOEX settlement. Under NRDA, \$2.5 million is currently allocated to improving public access and enjoyment of the resources at Escribano Point. Finally, in November 2013, NFWF dedicated \$1.7 million for ongoing "acquisition, restoration and

⁵⁸ See CONG. BUDGET OFF., supra note 6.

⁵⁹ As described, 65% of the Gulf Coast Restoration Trust Fund (plus 50% of earned interest) will go to state and/or local government leads (these funds are eligible for the match provision). Of the remaining funds, 30% will go to the Gulf Coast Ecosystem Restoration Council. The Council shall publish a Comprehensive Plan to "restore and protect the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast region." Another 2.5% of funds will be used for the NOAA RESTORE Act Science Program. The final 2.5% of the funds will be distributed to states for "Centers of Excellence" research grants. There is no matching provision for these funds.

⁶⁰ See ENVTL. L. INST., supra note 10.

⁶¹ Press Release, Fla. Dep't of Envtl. Prot., DEP Announces \$10 Million for Environmental Recovery (Dec. 7, 2012), http://content.govdelivery.com/bulletins/gd/FLDEP-60f24d.

⁶² DEEPWATER HORIZON NATURAL RESOURCE TRUSTEES, FLORIDA: SANTA ROSA COUNTY PROJECTS (2013), http://www.gulfspillrestoration.noaa.gov/wp-content/uploads/Santa_Rosa_FS.pdf.

maintenance of high quality coastal wildlife habitat" in the area. The NFWF project aims to "complement[] acquisition and restoration activities already underway or planned, using funding from the MOEX settlement and the [NRDA] process. The coordinated funding and implementation demonstrates how the overlapping goals of the different programs allow for complementary restoration efforts.

Institutional overlap presents another opportunity for coordination. For example, under the NRDA process, the *Comprehensive Program for Enhanced Management of Avian Breeding Habitat Injured by Response in the Florida Panhandle, Alabama, and Mississippi* is implemented by NRDA trustees, including the Florida Department of Environmental Protection and the Florida Fish and Wildlife Conservation Commission. ⁶⁵ In November 2013, the first phase of NFWF projects included Comprehensive Panhandle Coastal Bird Conservation—designed to build on the pre-existing NRDA project. ⁶⁶ The NFWF project includes state, federal, and private partners, including the aforementioned Florida Fish and Wildlife Conservation Commission. The goal of the project is to work "in combination with similar NRDA early restoration work" to "create a robust schedule of coastal bird management, research and restoration that can be implemented elsewhere in the Gulf of Mexico." ⁶⁷ This instance of coordination across projects and implementing entities presents a laudable example of synergy between different programs with overlapping goals.

In summary, the similar goals of the NRDA process and the settlement funds point toward the benefits to be gained from increased coordination. For RESTORE, the confluence of the overlapping goals and the unique match provision additionally points toward the opportunity for leveraging funds for maximum impact. The following section lays out the basics of this investment opportunity, outlining existing federal programs for different types of ecological restoration. When the purpose of a federal program and the goals of a proposed project overlap with an eligible activity under RESTORE, the matching provision can, at least theoretically, provide an avenue to leverage RESTORE monies for environmental projects. Even when the matching provision is not applicable—or when a project is not selected for federal funding—this information can be used to facilitate coordination among the different funding programs and implementing agencies.

⁶⁷ *Id*.

⁶³ Management & Restoration of Escribano Point Coastal Habitat – Phase I, NFWF, http://www.nfwf.org/gulf/Documents/fl-escribano-point.pdf.

 $^{^{65}}$ See Phase II Early Restoration Plan, supra note 19, at 24–25.

⁶⁶ Comprehensive Panhandle Coastal Bird Conservation, NFWF, http://www.nfwf.org/gulf/Documents/fl-bird-conservation.pdf.

III. EXISTING FEDERAL GRANT PROGRAMS

Through the NRDA early restoration process and settlement funds, the five Gulf States are already slated to receive billions of dollars for restoration and recovery. Additional funds will be available through the remainder of the NRDA process and the mechanisms set up by the RESTORE Act, although the total amount is yet unknown. Altogether, the restoration funding presents a significant opportunity to achieve meaningful, sustainable ecological restoration in the region.

This assessment focuses on the opportunity to use RESTORE Act funds to leverage other federal funds through the nonfederal match provisions, focusing on environmental grant programs for states and their political subdivisions, along with programs that involve public-private partnerships. ⁶⁸ Grants solely to private individuals, those that likely fall outside RESTORE Act eligible activities, and those that are designated purely for implementation of federal regulatory schemes (such as the Clean Air Act) are omitted.

Thus, the scope of the following section is limited to existing federal programs that appear to match the goals and objectives of the RESTORE Act. It is organized into seven categories of natural resources. The division into seven categories is based on prior ELI research. ⁶⁹ The seven natural resource categories are:

- 1) Wetlands and Estuaries
- 2) Harvested Species Habitat
- 3) Coral Reefs
- 4) Beaches and Dunes
- 5) Protected Species and Protected Places
- 6) Coastal Management
- 7) Water Quality and Water Quantity

For each natural resources category, we identify relevant "Matching Grant Programs" that have nonfederal match requirements; we also identify other "Coordination Programs"—although they do not contain matching provisions—in order to facilitate further synergy among programs, agencies, and funding mechanisms. Among other things, relevant application information and example projects are listed, along with the Catalog of Federal Domestic

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⁶⁸ Given this scope, several Farm Bill programs incentivizing voluntary action of private landowners are not analyzed in depth.

⁶⁹ ENVTL. L. INST., GULF OF MEXICO HABITAT CONSERVATION AND RESTORATION: A LOOK AT THE FIVE U.S. GULF STATES' LEGAL AND INSTITUTIONAL FRAMEWORKS (2011), available at http://www.eli.org/research-report/gulf-mexico-habitat-conservation-restoration-look-five-us-gulf-states-legal-institutional-frameworks; ENVTL. L. INST., GULF OF MEXICO HABITAT CONSERVATION AND RESTORATION: COMPARING THE MEXICAN AND UNITED STATES LEGAL AND INSTITUTIONAL FRAMEWORKS (2011), available at http://www.eli.org/research-report/gulf-mexico-habitat-conservation-restoration-comparing-mexican-united-states. These analyses examine existing legal and institutional frameworks for protecting and restoring habitat in the Gulf of Mexico, highlighting successes, challenges, and opportunities for strengthening programs and increasing capacity.

Assistance (CFDA) number, which refers to a grant database including other information needed for grant applications.

A. WETLANDS AND ESTUARIES

Wetlands and estuaries provide invaluable ecosystem services related to water quality, shoreline protection, flood control, and fish habitat. Due to the interconnections of these ecological systems, the *Deepwater Horizon* spill will likely have long-term, difficult-to-quantify impacts on wetlands, emphasizing the importance of adequately addressing injuries to this resource in the recovery process.

Not surprisingly, NRDA early restoration, NFWF settlement funds, and the RESTORE Act prominently feature wetlands projects and goals. Under NRDA early restoration, six approved or proposed projects totaling more than half the funding proposed so far will go to projects that create wetlands habitat, the most of any of the categories identified. In addition, half of NFWF Phase I projects benefit wetlands and marshes. Similarly, RESTORE lists protection of marine habitat and coastal wetlands as one of the 11 activities eligible for the Direct Component and the Spill Impact Component (and thus eligible for the match provision).⁷²

There are also substantial existing wetlands and estuary protection programs. At least nine federal programs provide matching funds for projects involving wetlands and estuaries. These include the North American Wetlands Conservation Fund (NAWCF) (discussed above) and the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA), ⁷³ both of which are playing a role in the Gulf restoration process.

NAWCF received funds from the BP criminal settlement. The relevance of CWPPRA, meanwhile, is illustrated by a NRDA project focused on Lake Hermitage Marsh Creation in Plaquemines Parish, Louisiana. In that project, approved during NRDA Early Restoration Phase I, the NRDA trustees directed \$14.4 million to construct 104 acres of additional wetlands on top of an existing project authorized under CWPPRA in 2006. This demonstrates the overlapping goals of the pre-existing and recovery-focused Gulf programs, and emphasizes the importance of coordination.

The following table identifies the nine programs identified as match opportunities:

⁷⁰ Nat'l Academy of Sci., An Ecosystem Services Approach to Assessing the Impacts of the Deepwater Horizon Oil Spill in the Gulf of Mexico (2013), *available at* http://dels.nas.edu/resources/static-assets/materials-based-on-reports/reports-in-brief/Ecosystem-Services-Report-Brief-Final.pdf.

⁷¹ See id.

⁷² RESTORE Act, § 1603(t)(1)(B)(i).

⁷³ 16 U.S.C. §§ 3951–56.

⁷⁴ Phase I Early Restoration Plan, *supra* note 19, at 29–30.

	Wetlands and Es	tuaries Federa	l Programs
Program	Eligible Entities	Minimum State Funding Requirement	Types of Projects
North American Wetlands Conservation Fund	Public and private organizations	40%	Land acquisition projects that protect wetlands and waterfowl habitat, along with habitat enhancement, restoration, and other similar activities
Federal Aid to Wildlife Restoration Act	States	25%	Land acquisitions and improvement for wildlife habitat or public use, wildlife introductions into new habitat, research, and hunter education
Coastal Wetlands Planning, Protection, and Restoration Act	Coastal states	15% for Louisiana, 50% for other Gulf States	Coastal wetlands conservation, land acquisition
Estuary Restoration Act	States, political subdivisions, Indian tribes, regional or interstate agencies, or NGOs	35%	On-the-ground restoration, including restoring salt-marsh vegetation and replanting seagrass beds
Coastal and Estuarine Land Conservation Program	Coastal States	50%	Land acquisition and conservation easements
National Estuarine Research Reserve Program	States	50%	Land acquisition, maintenance, and educational activities
Water Resources Development Act	Projects chosen through federal and state agency collaboration	25%	Land acquisition, stream bank stabilization, non-point source pollution control projects, water supply and storage projects
Aquatic Ecosystem Restoration Program	States, political subdivisions, NGOs, and individuals	35%	Habitat restoration and ecosystem protection
Wetland Program Development Grants	States, political subdivisions, NGOs	25%	Developing monitoring and assessment programs, restoring and protecting wetlands

Of the programs identified, some appear to be of more relevance or on firmer fiscal ground than others. NAWCF, for example, received additional funding from the BP criminal settlement and has consistently been used for land acquisition projects in the Gulf. An example NAWCF project is Indian River Lagoon, an effort to protect wetland-dependent resident and migratory birds in Florida by acquiring 9,000 acres of wetlands. The project proposal requested a \$1 million grant to the Indian River Land Trust and private individuals in exchange for a matching contribution of property owned by the Trust and individuals. The proposal detailed the habitat and wildlife protection, economic benefit, and public benefit/access that would be achieved by the project.

Similarly, the Federal Aid to Wildlife Restoration Act,⁷⁷ CWPPRA, and the Coastal and Estuarine Land Conservation Program (CELCP)⁷⁸ have been used to fund Gulf projects in recent years. For example, CELCP is a competitive grant process primarily used for land acquisition projects. In 2011, Florida used a utilized funds from its Florida Forever program to match a \$3 million grant from CELCP to buy Boot Key, a 1,100-acre undeveloped island.⁷⁹ Boot Key is surrounded by the Florida Keys National Marine Sanctuary, and the project is designed to protect coral reefs, shoreline, and seagrass, among other environmental benefits.

The National Estuarine Research Reserve (NERR) program is research-oriented, and thus may be better suited for putting in place critical monitoring and research efforts than for on-the-ground restoration. Meanwhile, the Estuary Restoration Act program and the Water Resources Development Act (WRDA) are on shakier financial footing. WRDA, for example, has been the subject of ongoing debate in Congress, which has failed to reauthorize the Act for five years. The Senate⁸⁰ and House⁸¹ passed dueling WRDAs in 2013, which as of the writing of this report have yet to be reconciled. Statutorily authorized funding in the Estuary Restoration Act expired in 2012,⁸² and funding has dropped significantly in the years since.

Below, each program is analyzed along with its purpose, example projects, match requirement, grant process, and information on public participation. Generally, the goals of each program overlap directly with at least one "eligible activity" under RESTORE and natural resource goal under the NRDA process.

⁷⁵ Indian River Land Trust, North American Wetlands Conservation Act: United States Standard Grant Proposal (2011), http://www.acjv.org/grants/12-01/Indian%20River%20Lagoon%20Coastal%20Wetlands%20-%20Pahse%20I.pdf.

¹⁶ Id

⁷⁷ 16 U.S.C. §§ 669–669k.

⁷⁸ 16 U.S.C. § 1456d.

⁷⁹ 2011 CELCP Projects, NOAA's Off. Of Ocean & Coastal Resource Mgmt., http://coastalmanagement.noaa.gov/land/media/celcpfsfy11.pdf (last visited Jan. 20, 2014).

⁸⁰ Water Resources Development Act of 2013, S. 601, 113th Cong. (2013).

⁸¹ Water Resources Reform and Development Act of 2013, H.R. 3080, 113th Cong. (2013).

⁸² 33 U.S.C. § 2908(a).

1. MATCHING GRANT PROGRAMS:

North American Wetlands Conservation Fund (NAWCF)		
Purpose	"To protect, enhance, restore, and manage an appropriate distribution and diversity of wetland ecosystems and habitats associated with wetland ecosystems and other fish and wildlife in North America" 83	
Types of Projects Funded	Primarily land acquisition projects that protect wetlands and waterfowl habitat, along with habitat enhancement, restoration, and other similar activities	
Matching Requirements	50% ⁸⁴	
Eligible Entities	"Private or public organizations or [] individuals who have developed partnerships to carry out wetlands conservation projects in the U.S., Canada, and Mexico"85	
Funding	FY 2014 appropriations total \$31.175 million. 86 In 2013, appropriations were supplemented by \$31.5 million in additional grant funds from the BP criminal settlement and other penalties under the Migratory Bird Treaty Act. 87 It is estimated that a total of \$70 million will be available in FY 2014. 88	
CFDA Number	15.623	
Funding Cycle	In 2014, standard grant proposals of more than \$75,000 are due on February 28 and July 8. Small grant proposals up to \$75,000 are due on November 7.89	
Grant Process	Applications are selected by the North American Wetland Conservation Council, approved by the Migratory Bird Conservation Commission, and administered by the FWS's Division of Bird Habitat Conservation. Ocuncil considerations include whether a "project represents a partnership among public agencies and private entities and the availability of matching funds, among other factors. For further information, visit the NAWCF website or contact the Division of Bird Habitat	

⁸³ 16 U.S.C. § 4401(b)(1). ⁸⁴ *Id.* § 4407(b).

⁸⁵ North American Wetlands Conservation Fund, CATALOG OF FED. DOMESTIC ASSISTANCE, https://www.cfda.gov/index?s=program&mode=form&tab=core&id=cf47b37e041a37cf729d70c812240a87.

⁸⁶ North American Wetlands Conservation Act, U.S. FISH & WILDLIFE SERV. DIV. OF BIRD HABITAT CONSERVATION, http://www.fws.gov/birdhabitat/Grants/NAWCA/index.shtm (last visited Jan. 20, 2014).

⁸⁸ North American Wetlands Conservation Fund, *supra* note 85.

⁸⁹ North American Wetlands Conservation Act, *supra* note 86.

⁹¹ 16 U.S.C. § 4404.

⁹² North American Wetlands Conservation Act, *supra* note 86.

	Conservation. ⁹³ For 2014, the standard grant application is at the link in the footnote. ⁹⁴
Example Projects	In Florida, the Indian River Lagoon Project is an effort to protect wetland-dependent resident and migratory birds in the Lagoon and the Atlantic Flyway by acquiring 9,000 acres of wetlands. The Indian River Land Trust and private individuals requested a \$1 million grant, proposing to meet the match by contributing property owned by the Trust and individuals. The proposal detailed the habitat and wildlife protection, economic benefit, and public benefit/access that would be achieved by the project. In Texas, the Big Thicket Project acquired 6,600 acres of bottomland hardwood forest and cypress-tupelo swamp that served as the habitat for waterfowl and other animals. The project used land donations and funding from private and public partners to match a \$2.5 million grant from NAWCF.
Public Participation	The North American Wetland Conservation Council has annual public meetings. ⁹⁷
Notes	The North American Wetlands Conservation Program funding expired in September 2012. Bills were introduced to reauthorize the program in 2013, but they have not yet passed. Bipartisan coalitions, land trusts, and conservation funds are advocating on behalf of reauthorization. Behalf of reauthorization. In February 2014, the Senate Environment and Public Works Committee passed reauthorization with bipartisan support. Physical Program of the Nawara Support of the Migratory Bird Treaty Act in connection with the Gulf oil spill. Nawara Support of the Suppopriations and penalty funds despite lacking legislative reauthorization.

⁹³ Division of Bird Habitat Conservation, (703) 358-1784, dbhc@fws.gov.

⁹⁴ NAWCA-14-USSTANDARD-623, Grants.gov, http://www.grants.gov/web/grants/search-grants.html?keywords=north%20american%20wetlands%20conservation%20act (last visited Jan. 15, 2014). ⁹⁵ See Indian River Land Trust, supra note 75.

⁹⁶ Big Thicket Gets Big Gift of Land, THE CONSERVATION FUND (Apr. 15, 2009), http://www.conservationfund.org/press-releases/newsbig_thicket_gets_big_gift_land/. ⁹⁷ 16 U.S.C. § 4403(f).

⁹⁸ See, e.g., NAWCA Future in Jeopardy - Take Action Today!, DUCKS UNLIMITED, http://www.ducks.org/conservation/public-policy/nawca (last visited Jan. 20, 2014).

⁹⁹ North American Wetlands Conservation Extension Act of 2013, S. 741, 113th Cong. (2013).

Guilty Plea Agreement, U.S. v. B.P. Exploration and Production (E.D. La. 2012), available at http://www.justice.gov/iso/opa/resources/43320121115143613990027.pdf.

Fe	deral Aid to Wildlife Restoration Act
Purpose	To support state fish and wildlife agencies' efforts to enhance bird and mammal populations and to restore, conserve, and manage their habitat 101
Types of Projects Funded	Acquisitions and improvement of land for wildlife habitat or public use, wildlife introductions into new habitat, research, and hunter education
Matching Requirements	25% ¹⁰²
Eligible Entities	"States, through their respective State fish and game departments" 103
2013 Funding	\$416.4 million ¹⁰⁴
CFDA Number	15.611
Funding Cycle	Proposals and inquiries can be submitted to FWS regional offices. Texas is in Region 2; the other Gulf States are in Region 4. 105 Grants are also announced on the grants.gov website. 106 In 2014, grant applications are due no later than August 31 and the application package is available for download at the link in the footnote. 107
Grant Process	DOI apportions funds among the states based on land area and the number of hunting and fishing license holders in the state. States submit plans to the Secretary of the Interior, pay for the full cost upfront, and are then reimbursed for up to 75% of the costs. 108
Example Projects	In Pennsylvania, the Game Commission owns 1.45 million acres of

http://wsfrprograms.fws.gov/Subpages/GrantPrograms/WR/WR Funding.htm (last visited Jan. 20, 2014).

http://wsfrprograms.fws.gov/Subpages/ContactUs/ContactUs.htm (last visited Jan. 15, 2014).

¹⁰¹ 16 U.S.C. §§ 669–669k.

¹⁰² 16 U.S.C. § 669e(a).

¹⁰³ *Id.* § 669.

 $^{^{104}}$ Wildlife Restoration Program-Funding, U.S. FISH & WILDLIFE SERV.,

¹⁰⁵ Wildlife and Sport Fish Restoration Program - Contact Us, U.S. FISH & WILDLIFE SERV.,

¹⁰⁶ Wildlife Restoration Program – Overview, U.S. FISH & WILDLIFE SERV.,

http://wsfrprograms.fws.gov/Subpages/GrantPrograms/WR/WR.htm (last visited Jan. 15, 2014).

Wildlife Restoration Grant Program, Grants.gov, http://www.grants.gov/web/grants/applicants/download-application-

 $package.html?p_p_id=grantsdownloadpackage_WAR_grantsdownloadpackageportlet\&p_p_lifecycle=0\&p_p_state=normal\&p_p_mode=view\&p_p_col_id=column-$

 $^{1\&}amp;p_p_col_pos=1\&p_p_col_count=2\&_grantsdownloadpackage_WAR_grantsdownloadpackageportlet_mvcPath=\\ \%2Fdownload.jsp?id=171036\&search=-2 (last visited Jan. 15, 2014).$ $^{108}16 \text{ U.S.C.} \ \S \ 669c.$

	land for public hunting and access; 180,000 of the acres were acquired with Federal Aid to Wildlife funds. In addition, since 2001, Federal Aid to Wildlife funds have provided \$9.2 million in habitat maintenance funding, including controlling invasive plants and protecting habitat. Pennsylvania matches with an excise tax on hunting license holders.
Public Participation	The comprehensive wildlife restoration plan necessary to receive a grant must contain provisions to ensure public participation in the selection of projects and priorities. In addition, the plan itself must be developed with public participation.
Notes	The Act has helped rebuild numerous species populations and extended their ranges, including the wild turkey, white-tailed deer, pronghorn antelope, wood duck, beaver, black bear, giant Canada goose, American elk, desert bighorn sheep, bobcat, mountain lion, and several species of predatory birds. Though states generally fulfill a project's match requirement through hunting license sales, state wildlife agencies could use RESTORE Act funds instead of or in addition to those revenues to meet the match requirement to acquire land and improve wildlife habitat.

Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA)		
Purpose	To conserve and restore coastal wetlands through acquisition, restoration, and management 113	
Types of Projects Funded	In Louisiana, CWPPRA focuses on coastal wetlands conservation, including diversion, outfall management, hydrologic restoration, shoreline protection, barrier island restoration, marsh creation, sediment and nutrient trapping, and vegetative planting. In other states, the Act creates the National Coastal Wetland Conservation Grants Program, prioritizing land acquisition projects that involve maritime forests on barrier islands.	

significantly benefit maritime forests on coastal barriers. Id. § 84.32.

Andrew Loftus Consulting & Southwick Associates, Inc., Financial Returns to Industry from the Federal Aid in Wildlife Restoration Program (2011), available at http://www.fishwildlife.org/files/WildlifeRestoration-ROI-Report_2011.pdf.

¹¹⁰ 16 U.S.C. § 669c(d)(1)(C).

¹¹¹ *Id.* § 669c(d)(2).

¹¹² The Pittman-Robertson Federal Aid in Wildlife Restoration Act, U.S. FISH & WILDLIFE SERV.: SOUTHEAST DIV., http://www.fws.gov/southeast/federalaid/pittmanrobertson.html (last visited Jan. 20, 2014). ¹¹³ 16 U.S.C. §§ 3951–3956.

¹¹⁴ About CWPPRA, LACOAST.GOV, http://lacoast.gov/new/About/Default.aspx (last visited Jan. 20, 2014). ¹¹⁵ 50 C.F.R. § 84. Other ranking factors include whether the proposal will act as a catalyst for future conservation, whether the proposal will receive support benefit from private or local partners, and whether the proposal will

Matching Requirements	15% for Louisiana projects, ¹¹⁶ 50% for other states under the National Coastal Wetland Conservation Grants Program ¹¹⁷
Eligible Entities	Coastal states
2013 Funding	\$84.5 million ¹¹⁸
CFDA Number	15.614
Funding Cycle	Grant information is available through FWS's Division of Habitat Conservation. Grant proposals for the next fiscal year are generally due in late June. 119
Grant Process	Louisiana's coastal wetlands conservation is managed by the CWPPRA Task Force, which is composed of the State of Louisiana (represented by the Governor's Office of Coastal Activities) and five federal agencies: FWS, EPA, U.S. Department of Agriculture—Natural Resources Conservation Service, NOAA—National Marine Fisheries Service, and Army Corps of Engineers. This Task Force fulfills its responsibilities under the CWPPRA Program by developing a comprehensive approach to restore and prevent the loss of Louisiana's coastal wetlands, identifying and preparing a list of coastal wetlands projects in Louisiana, and prioritizing restoration projects.
	are for individual projects. Proposals are submitted to National Coastal Wetland Conservation Grants Program Coordinators. The 2014 deadline will likely be in June. 123

http://www.fws.gov/coastal/coastalgrants/docs/factsheets/2009/coastal_grant.pdf.

¹¹⁶ 16 U.S.C. § 3952(f). Louisiana derives its share from the state's Wetlands Trust Fund and state general funds. The CWPPRA Program, LaCoast.gov, http://lacoast.gov/reports/rtc/1997/CwppraProgram.htm (last visited Jan. 20, 2014).

^{117 16} U.S.C § 3954(d)(1). If a state has established and maintains a special fund for acquiring coastal wetlands, other natural areas, or open spaces, then the federal share can be increased to 75% of project costs and the state match decreased to 25%. *Id.*

¹¹⁸ Coastal Wetlands Planning, Protection & Restoration Act, U.S. ARMY CORPS OF ENG'RS NEW ORLEANS DIST., http://www.mvn.usace.army.mil/Missions/Environmental/CWPPRA.aspx (last visited Jan. 20, 2014). CWPPRA's annual budget has ranged between approximately \$30 million per year to nearly \$80 million per year. About CWPPRA, *supra* note 114.

¹¹⁹ Habitat and Resource Conservation, U.S. FISH & WILDLIFE SERV., http://www.fws.gov/habitatconservation (last visited Jan. 15, 2014).

¹²⁰ Task Force Description, LACOAST.GOV, http://lacoast.gov/new/About/OrgChart.aspx#descriptionTF (last visited Jan. 20, 2014).

¹²¹ U.S. FISH & WILDLIFE SERV., NATIONAL COASTAL WETLANDS CONSERVATION GRANT PROGRAM (2009),

¹²² Regional and State Contact Information, U.S. FISH & WILDLIFE SERV.,

http://www.fws.gov/coastal/coastalgrants/contactUs.html (last visited Jan. 20, 2014).

¹²³ Coastal Wetlands Planning, Protection and Restoration Act: National Coastal Wetlands Grants, CATALOG OF FED. DOMESTIC ASSISTANCE,

Example Projects	In Louisiana, the Northwest Turtle Bay Marsh Creation project proposed to use dredged material to create 760 acres of marsh habitat to counter the 0.61% annual marsh loss rate observed in the 1990s. 124 Louisiana partnered with FWS to create a plan, with \$2.35 million of the \$23.1 million coming from state funds, and most of the remainder from CWPPRA. In Washington State, under the National Coastal Wetlands Conservation Grants program, the state completed Lower Nooksack River Acquisition and Restoration by acquiring 324 acres of floodplain to protect wetland habitat. The acquisition completed a 1700-acre floodplain corridor, protecting salmon among other species. The state matched the grant with \$345,000 of public funds and \$66,700 from private partners.
Public Participation	The CWPPRA plan for Louisiana—developed by the Task Force in order to identify projects that provide for long-term conservation—must be made in consultation with the public and must contain provisions for public review of projects. There does not seem to be any public participation provisions for other states.
Notes	The CWPPRA Louisiana Program has supported 196 authorized projects as of May 2013, and the Act is authorized until 2019. In addition, under the first phase of early restoration NRDA projects, \$14.4 million is funding a pre-existing CWPPRA project for Lake Hermitage Marsh Creation. 128
	Since the National Coastal Wetlands Conservation Grants program began in 1990 for states other than Louisiana, \$183 million worth of have been awarded to 25 states, protecting or restoring 250,000 acres. 129

https://www.cfda.gov/index?s=program&mode=form&tab=step1&id=7d3b23b9ef410f217e2e9f6b54524cdd (last visited Jan. 15, 2014).

LOUISIANA COASTAL WETLANDS CONSERVATION AND RESTORATION TASK FORCE, NORTHWEST TURTLE BAY MARSH CREATION (BA-125) (2013), http://lacoast.gov/reports/gpfs/BA-125.pdf.

^{125) (2013),} http://lacoast.gov/reports/gpfs/BA-125.pdf.

125 National Coastal Wetlands Conservation Act Grant Program, WASH. DEP'T FISH & WILDLIFE, http://wdfw.wa.gov/grants/coastal_wetlands (last visited Jan. 20, 2014).

126 16 U.S.C. § 3952(b)(4)(K).

¹²⁷ Coastal Wetlands Planning, Protection & Restoration Act, *supra* note 118.

¹²⁸ Phase I Early Restoration Plan, *supra* note 19, at 29–30.

¹²⁹ National Coastal Wetlands Conservation Grant Program, U.S. FISH & WILDLIFE SERV., http://www.fws.gov/Coastal/CoastalGrants/index.html (last updated Feb. 25, 2013).

	Estuary Restoration Act
Purpose	"To provide Federal assistance for estuary habitat restoration projects through cooperative agreements and to promote efficient financing of such projects" 130
Types of Projects Funded	On-the-ground restoration projects, including restoring salt- marsh vegetation, reclaiming native fish runs by installing fish ladders, replanting seagrass beds, building and seeding oyster reefs, controlling invasive species, and restoring tidal flows to formerly diked, drained, and impounded areas ¹³¹
Matching Requirements	35% ¹³²
Eligible Entities	States, political subdivisions, Indian tribes, regional or interstate agencies, or NGOs after "consultation and coordination with appropriate State and local governmental agencies and Indian tribes" 133
2013 Funding	2012 — \$25 million for U.S. Army Corps of Engineers and \$2.5 million each for NOAA, EPA, FWS, and the U.S. Department of Agriculture. 134 2013 — In the statute, funding is authorized through 2012. Solicitation for the 2013 program advertised \$3.5 million worth of funding. 135
CFDA Number	12.130
Funding Cycle	Grant opportunities are announced each year, usually circulated in the spring and due in October.
Grant Process	The Act creates the Estuary Habitat Restoration Council, composed of NOAA, EPA, FWS, the Department of Agriculture, and the Army Corps of Engineers. The Council solicits, reviews, and evaluates project proposals based on eight factors. New projects must be included in a federal or state estuary habitat

http://www.fws.gov/coastal/estuaryRestorationAct.html (last visited Jan. 20, 2014).

¹³⁰ 33 U.S.C. § 2901(3).

Estuary Restoration Act of 2000, U.S. FISH & WILDLIFE SERV.,

¹³² 33 U.S.C. § 2903(d)(1)(A). However, this share can be decreased to 15% percent "of the incremental additional cost of including in a project pilot testing of or a demonstration of an innovative technology or approach" that has "the potential for improved cost-effectiveness in estuary habitat restoration." *Id.* § 2903(d)(2), (c)(4)(B). ¹³³ *Id.* § 2902(8).

¹³⁴ Agency allocations established by 33 U.S.C. § 2908(a).

¹³⁵ See Estuary Habitat Restoration Program Project Solicitation, RESEARCH COORDINATION NETWORK, http://sites.tdl.org/southtexassustainability/2013/01/18/estuary-habitat-restoration-program-project-solicitation/ (last visited Nov. 1, 2013); see also Estuary Restoration-Project Proposal Solicitations, U.S. ARMY CORPS OF ENG'RS, http://www.usace.army.mil/Missions/Environmental/EstuaryRestoration/ProjectProposalSolicitations.aspx (last visited Nov. 1, 2013).

¹³⁶ 33 U.S.C. § 2904.

¹³⁷ *Id*.

	restoration plan and are evaluated for technical feasibility, scientific merit, and cost-effectiveness, among other factors. The federal partner agency may not carry out a project until the non-federal partner has entered into a written agreement that contains information on all relevant lands, easements, rights-ofway, and relocations, and that provides for maintenance and monitoring of the project. 139
Example Projects	In Florida, the St. Lucie River Oyster Reef Habitat Restoration Project was designed to restore and monitor two acres of historic oyster reef, protecting the shoreline and improving water quality. The project received \$212,038 from NOAA to match a large state investment in the surrounding watershed. ¹⁴⁰
Public Participation	Estuary restoration plans must be developed with substantial public participation before approval. In addition, the annual meeting of the Estuary Restoration Council must be open to public participation, and all restoration strategies must be subject to public comment. 142

Coastal and Estuarine Land Conservation Program (CELCP)		
Purpose	To protect important coastal and estuarine areas that have significant conservation, recreational, ecological, historical, or aesthetic values 143	
Types of Projects Funded	Land purchases and conservation easements	
Matching Requirements	50% ¹⁴⁴	
Eligible Entities	Coastal states that have an approved coastal management plan <i>or</i> an established National Estuary Research Reserve (NERR, see next) ¹⁴⁵	
2013 Funding	\$3.8 million ¹⁴⁶	
CFDA Number	11.419	

¹³⁸ *Id.* § 2903(c)(3). ¹³⁹ *Id.* § 2903(f).

http://coastalmanagement.noaa.gov/land/celcp_fundingop.html (last visited Jan. 20, 2014).

Report, Meeting of the Estuary Habitat Restoration Council (June 12, 2013),

 $http://www.era.noaa.gov/pdfs/ERA_Meeting_Summary_8_22_2013.pdf. \\ ^{141} 33 \ U.S.C. \ \S \ 2902(6)(A).$

¹⁴² *Id.* § 2904(h).

¹⁴³ 16 U.S.C. § 1456d.

¹⁴⁴ Final Guidance for the Coastal and Estuarine Land Conservation Program, 68 Fed. Reg. 35,860 (June 17, 2003).

¹⁴⁵ 68 Fed. Reg. 35,860.

¹⁴⁶ CELCP—Federal Funding Opportunities: How to Apply, NOAA,

Funding Cycle	Generally, proposals are due by mid-November. 147
Grant Process	Applications must specify the ability to meet the match requirement and must provide for conservation of publicly held lands in perpetuity. 148
Example Projects	In Florida, Boot Key was selected for CELCP funding in 2011 after a competitive grant process where the proposal to buy a 1,100 acre undeveloped island was ranked sixth out of all national projects. Florida provided a \$3,000,000 matching grant through the Florida Forever program. Boot Key is surrounded by the Florida Keys National Marine Sanctuary, and the project is designed to protect coral reefs, shoreline, and seagrass, among other resources.
Public Participation	There is no federal provision that requires public participation when NOAA is selecting proposals. Under the Coastal Zone Management Act, periodic reviews of state performance are conducted with respect to coastal management, and the evaluation must occur in an open and public manner. 151
Notes	All Gulf States are eligible for CELCP funding. The states must rank qualifying projects and nominate them to a nationally competitive process and must conduct peer review of the proposed projects. 152

National Estuarine Research Reserve (NERR) System	
Purpose	To create living laboratories where research and education are used to work with communities and regional groups to address natural resource management issues ¹⁵³
Types of Projects Funded	Land acquisition, maintenance, and educational activities
Matching Requirements	50%
Eligible Entities	States

¹⁴⁷ *Id.*148 68 Fed. Reg. 35,860.
149 2011 CELCP Projects, NOAA, http://coastalmanagement.noaa.gov/land/media/celcpfsfy11.pdf (last visited Jan.

<sup>20, 2014).

150</sup> FLORIDA COASTAL MANAGEMENT PROGRAM, BOOT KEY, FLORIDA KEYS (2011), http://www.dep.state.fl.us/cmp/programs/files/boot_key_celcp_2011.pdf.

¹⁵¹ 16 U.S.C. § 1458(b). ¹⁵² 68 Fed. Reg. 35,860. ¹⁵³ 16 U.S.C. § 1461.

CFDA	11.420 ¹⁵⁴
2013 Funding	FY 2012: \$15,997,684 (FY 2013 estimate: \$20,367,988; FY 2014 estimate: \$21,900,000) ¹⁵⁵
Funding Cycle	Funding is typically announced on a yearly basis in the Federal Register in September and applications are due at the end of November. 156
Grant Process	Grant applications must be accompanied by a letter from the Governor of the state designating a lead agency for the NERR, along with a statement of work and budget estimates. 157 Generally, funding is provided for 18 months, though acquisition, construction, and development processes may take longer. 158 Financial status and performance reports must be submitted semi-annually. 159
Example Projects	In Alabama, the Weeks Bay NERR consists of 6,000 acres of estuarine land with a variety of pristine wetland habitats. The reserve was acquired in 1986 with matching funds from the Alabama Department of Conservation and Natural Resources. In Texas, the Mission-Aransas NERR was established in 2006 and covers a 185,000-acre estuary ecosystem with coastal prairie, oak motte, riparian freshwater and salt marsh habitats. Much of the submerged land is owned by the Texas General Land Office. The NERR provides for public access, habitat protection, education, and research.
Public Participation	Each grant application requires a description of how public participation will be considered in the process. 163
Notes	Six NERRs currently exist in the Gulf: Rookery Bay, Apalachicola, and Guana Tolomato Matanzas, Florida; Weeks Bay, Alabama; Grand Bay, Mississippi; and Mission-Aransas, Texas.

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¹⁵⁴ Coastal Zone Management Estuarine Research Reserves, CATALOG OF FED. DOMESTIC ASSISTANCE, https://www.cfda.gov/?s=program&mode=form&tab=step1&id=e74a2ce483968f2099578bf570111d4f. ¹⁵⁵ *Id.*

¹⁵⁶ Opportunities: Land Acquisition, NOAA, http://www.nerrs.noaa.gov/SCDefault.aspx?ID=423 (last visited Jan. 20, 2014).

¹⁵⁷ *Id*.

¹⁵⁸ *Id*.

¹⁵⁹ Id

¹⁶⁰ NERRs Reserves: Weeks Bay, Alabama, NOAA, http://www.nerrs.noaa.gov/Reserve.aspx?ResID=WKB (last visited Jan. 20, 2014).

¹⁶¹ NERRs Reserves: Mission Aransas, Texas, NOAA, http://www.nerrs.noaa.gov/Reserve.aspx?ResID=MAR (last visited Jan. 20, 2014).

University of Texas: Marine Science Institute, Mission-Aransas NERR Final Management Plan (2006),
 http://www.nerrs.noaa.gov/Doc/PDF/Reserve/MAR_MgmtPlan.pdf.
 15 C.F.R. § 921.11.

Water Resources Development Act (WRDA)	
Purpose	To provide for the conservation and development of water and related resources ¹⁶⁴
Types of Projects Funded	Land acquisition, stream bank stabilization, non-point source pollution control projects, water supply and storage projects
Matching Requirements	Varies, usually 25% ¹⁶⁵
Eligible Entities	Projects are identified through collaboration between federal and state agencies 166
2013 Funding	WRDA has not been reauthorized in over five years. The Senate ¹⁶⁷ and House ¹⁶⁸ passed conflicting bills over the last year. The Senate Bill authorizes \$250 million in grants per year. The House Bill is called the Water Resources Reform and Development Act (WRRDA) and purports to strengthen oversight, transparency, and accountability. ¹⁶⁹
CFDA Number	Not applicable
Grant Process	The process is in flux, though grants are usually announced on the Army Corps' website at the beginning of each year.
Example Projects	Under past WRDAs, specific projects have been funded within the Act itself. For example, in the 2007 WRDA, the Lido Key Beach Project was funded to provide beach nourishment through native plant seeding operations, among other things. Initial operations were funded with \$9.3 million of federal funds and \$5.87 million of state funds, with the \$65 million needed for maintenance over 50 years apportioned evenly between the federal and state governments. 170
	The Act also appropriated \$32 million for the Atchafalaya Basin Floodway System in Louisiana. The funds were to be used to purchase up to 20,000 acres of sensitive habitat and wetland ecosystems for flood control and prevention. 171

http://www.fws.gov/habitatconservation/wrda.html (last updated Dec. 31, 2013).

¹⁶⁴ Water Resources Development Act of 2007, 121 Stat. 1041, P.L. 110-114 (110th Cong., 2007).

¹⁶⁵ Under WRDA, there are numerous variables affecting the match requirement, primarily related to the type of project being funded. 33 U.S.C. § 2213. ¹⁶⁶ See, e.g., Water Resource Development Acts, U.S. FISH & WILDLIFE SERV.,

¹⁶⁷ Water Resources Development Act of 2013, S. 601, 113th Cong. (2013).

¹⁶⁸ Water Resources Reform and Development Act of 2013, H.R. 3080, 113th Cong. (2013).

¹⁶⁹ Full Committee Markup—September 19, 2013, House Committee on Transportation and Infrastructure (Sept. 19, 2013), http://transportation.house.gov/markup/full-committee-markup-september-19-2013.

Water Resources Development Act of 2007, § 3049.

¹⁷¹ *Id.* § 3075.

Public Participation	Both the House and Senate versions of the bill call for annual reports to be made available for public comment.
Notes	As of April 2014, the House and Senate versions of the bill are in conference committee, and action is expected within the first half of the year.

Aqı	uatic Ecosystem Restoration Program
Purpose	To carry out cost-effective aquatic ecosystem restoration and protection projects that "will improve the quality of the environment and [are] in the public interest" 172
Types of Projects Funded	Eelgrass restoration, salt marsh and salt pond restoration, freshwater wetland restoration, anadromous fish passage and dam removal, river restoration, and nesting bird island restoration ¹⁷³
Matching Requirements	The Army Corps provides the first \$100,000 of study costs, a nonfederal sponsor must provide 50% of study costs thereafter, 35% of design and construction costs, and 100% of operation and maintenance costs. 174
Eligible Entities	States, political subdivisions, NGOs, individuals ¹⁷⁵
2013 Funding	\$19.7 million ¹⁷⁶
CFDA Number	Not applicable
Grant Process	A nonfederal sponsor begins by contacting the Army Corps to request assistance under the program. If funding is available, the Army Corps prepares a feasibility study—if the study recommends implementation, detailed plans are drafted and private contractors are hired for construction. 177
Example Projects	In Texas, the Olmos Creek project restored 73 acres of riparian bottomland hardwood forest adjacent to Olmos Creek. The project reduced erosion and increased shade by planting trees and grasses. The project cost \$1.1 million, split between the

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¹⁷² Water Resources Development Act of 1996, § 206.

¹⁷³ Aquatic Ecosystem Restoration Projects (Section 206), U.S. ARMY CORPS NEW ENGLAND DISTRICT,

http://www.nae.usace.army.mil/Missions/PublicServices/ContinuingAuthoritiesProgram/Section206.aspx.

¹⁷⁷⁴ Water Resources Development Act of 1996, § 206.

¹⁷⁵ See id.

¹⁷⁶ Aquatic Ecosystem Restoration (CAP Section 206), EPA CATALOG OF FEDERAL FUNDING SOURCES FOR WATERSHED PROTECTION.

https://ofmpub.epa.gov/apex/watershedfunding/f?p=116:2:0::NO::P2_X_PROG_NUM,P2_X_YEAR:104,2014.
Aquatic Ecosystem Restoration Projects (Section 206), *supra* note 173.

	Federal government (\$716,663) and the City of San Antonio (\$385,896). 178
Public Participation	There are no provisions for public participation.

We	etland Program Development Grants
Purpose	"To encourage comprehensive wetlands program development by promoting the coordination and acceleration of research, investigations, experiments, training, demonstrations, surveys, and studies relating to the causes, effects, extent, prevention, reduction, and elimination of water pollution" 179
Types of Projects Funded	Developing monitoring and assessment programs, restoring and protecting wetlands
Matching Requirements	25%
Eligible Entities	States, political subdivisions, NGOs ¹⁸⁰
CFDA	66.461 and 66.462
2013 Funding	\$14.15 million ¹⁸¹
Grant Process	Two separate Wetland Program grants exist, both under Clean Water Act § 104(b)(3). The first is the Regional Wetland Program (CFDA 66.461), which is limited to states and local governments. Applications for wetlands projects are submitted to the applicable EPA region—FY 2014 proposals for Region 4 (Alabama, Florida, and Mississippi) are due on April 4. The request for proposals has not been announced for Region 6 (Texas and Louisiana).
	The National Wetland Program (CFDA 66.462) funds projects that are broad in scope, affecting more than one EPA region. This

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https://www.cfda.gov/index?s=program&mode=form&tab=core&id=5477a9c512570156a7b192893e51a9db.

https://www.cfda.gov/index?s=program&mode=form&tab=core&id=63bd49d400bb70277a96a42293b6f4b8.

http://www.epa.gov/region4/water/wetlands/documents/fy14 wpdg rfp final 020414.pdf.

¹⁷⁸ U.S. ARMY CORPS, PLANNING DESIGN REPORT AND ENVIRONMENTAL ASSESSMENT FOR OLMOS CREEK PROJECT (2006), *available at* http://www.sanantonio.gov/planning/npud/ProjectsReportsStudies/pdf/OlmosCreekDesignEnviroReport.pdf.

Wetlands Program Development Grants, EPA CATALOG OF FEDERAL FUNDING SOURCES FOR WATERSHED PROTECTION, https://ofmpub.epa.gov/apex/watershedfunding/f?p=116:2:0::NO::P2_X_PROG_NUM,P2_X_YEAR:65,2014.

National Wetland Program Development Grants and Five-Star Restoration Training Grant, CATALO G OF FEDERA

¹⁸⁰ National Wetland Program Development Grants and Five-Star Restoration Training Grant, CATALO G OF FEDERAL DOMESTIC ASSISTANCE,

¹⁸¹ Wetlands Program Development Grants, *supra* note 179.

¹⁸² Regional Wetland Program Development Grants, CATALOG OF FEDERAL DOMESTIC ASSISTANCE,

¹⁸³ U.S. EPA REGION 4, FY14 REGION 4 WETLAND PROGRAM DEVELOPMENT GRANTS (2014),

Wetlands Program Development Grants, *supra* note 179.

	program generally receives less than \$1 million a year. 185 Grant applications are submitted to Regional Grant Coordinators and generally take four months for approval. 186
Example Projects	In Florida, the Comprehensive Conservation Management Plan for Clearwater was funded "to establish priorities for protection, enhancement, and restoration" of wetlands in the area. The project involved a partnership among Pinellas County, the Southwest Florida Water Management District, the cities of Tarpon Springs, Clearwater, Dunedin, and Largo, and various other stakeholder groups. 188

2. COORDINATION PROGRAMS:

Aside from using RESTORE Act funds to meet matching requirements under existing grant programs, some programs will likely be important for coordination due to overlapping goals with the restoration processes. In the wetlands and estuaries category, the Coastal Impact Assistance Program (CIAP) (CFDA 15.668)¹⁸⁹ uses funds from federal offshore lease revenues to mitigate impacts from oil and gas production on the Outer Continental Shelf. 190 Federal grants for oil-producing states support five authorized uses:

- conservation, protection, or restoration of coastal areas including wetlands;
- mitigation of damage to fish, wildlife, or natural resources;
- planning assistance and the administrative costs of complying with the objectives of the program;
- implementation of a federally approved marine, coastal, or comprehensive conservation management plan; and
- mitigation of the impact of Outer Continental Shelf activities through funding of onshore infrastructure projects and public service needs. 191

Except for Florida, the Gulf States are all eligible for CIAP funding, along with certain counties and parishes within those states. 192 From FY 2007 through FY 2010, \$250 million was authorized

¹⁸⁵ Id.

¹⁸⁷ Grant Summaries, 2006-2011, EPA Wetlands Program,

http://water.epa.gov/grants_funding/wetlands/grantguidelines/upload/wetland-grants-fy-2006-2011.pdf.

¹⁸⁹ Coastal Impact Assistance Program, CATALOG OF FEDERAL DOMESTIC ASSISTANCE,

https://www.cfda.gov/index?s=program&mode=form&tab=core&id=c32fb57dfe5880a42117611cae56d7fa. ¹⁹⁰ 43 U.S.C. § 1356a.

¹⁹¹ Id. § 1356a(d); see also Coastal Impact Assistance Program—Overview, U.S. FISH & WILDLIFE SERV., http://wsfrprograms.fws.gov/Subpages/GrantPrograms/CIAP/CIAP.htm (last visited Jan. 20, 2014).

¹⁹² Coastal Impact Assistance Program-Eligible Coastal Political Subdivisions, U.S. FISH & WILDLIFE SERV., http://wsfrprograms.fws.gov/Subpages/GrantPrograms/CIAP/CIAP EligibleCPS.pdf (last visited Jan. 20, 2014).

annually for CIAP grants. 193 Currently, Congress has not allocated additional funding and all projects must be completed by December 31, 2016. 194 The following table provides an overview of the CIAP in the Gulf of Mexico Region.

	Texas	Louisiana	Mississippi	Alabama
State Agency Tasked with Administration	Texas General Land Office	Coastal Protection and Restoration Authority of Louisiana	Mississippi Department of Marine Resources	Alabama Department of Conservation and Natural Resources
Approximate Funding Levels ¹⁹⁵	\$35.2 million (\$22.9 million to the state/\$12.3 million to coastal political subdivisions within the state)	\$119.6 million (\$77.7 million to the state/\$41.8 million to coastal political subdivisions within the state)	\$23.5 million (\$15.3 million to the state/\$8.2 million to coastal political subdivisions within the state)	\$19.5 million (\$12.6 million to the state/\$6.8 million to coastal political subdivisions within the state)

Federal funds must be used "to directly benefit an authorized use to conserve, restore, enhance, and protect renewable natural resources." Projects have included marsh rebuilding, preservation and restoration of barrier islands, and construction of onshore infrastructure, along with projects mitigating damage to fish, wildlife, and other natural resources.

Similarly, the **Emergency Wetlands Resources Act (EWRA)** (CFDA 15.665)¹⁹⁷ does not have a matching provision but has overlapping goals to promote the conservation of wetlands to maintain the public benefits they provide.¹⁹⁸ Under the EWRA, state resource agencies, NGOs, or private individuals coordinate with the federal government to protect wetlands—primarily by filling data gaps—using funds from the Land and Water Conservation Fund (discussed below).¹⁹⁹

Prior to 2014, the **Wetlands Reserve Program (WRP)** (CFDA 10.072)²⁰⁰ provided financial support to private landowners, state agencies, and local government entities to conserve

¹⁹⁴ Coastal Impact Assistance Program, Tex. Gen. LAND Off., http://www.glo.texas.gov/what-we-do/caring-for-the-coast/grants-funding/ciap.

http://wsfrprograms.fws.gov/Subpages/GrantPrograms/CIAP/CIAP_Funding.htm (last visited Jan. 20, 2014) (for Fiscal Year 2010).

https://www.cfda.gov/index?s=program&mode=form&tab=core&id=ecdb6ad782c425c6b7d0c8cb2e69bcc4. 198 16 U.S.C. § 3901 et seq.

https://www.cfda.gov/index?s=program&mode=form&tab=core&id=3bd0db55df50d98a5469ef272eb54bfb.

¹⁹³ 43 U.S.C. § 1356a(b)(1).

¹⁹⁵ Coastal Impact Assistance Program—Funding, U.S. FISH & WILDLIFE SERV.,

¹⁹⁶ Coastal Impact Assistance Program—Overview, *supra* note 191.

¹⁹⁷ National Wetlands Inventory, CATALOG OF FEDERAL DOMESTIC ASSISTANCE,

¹⁹⁹ See Protected Species and Protected Places, infra.

²⁰⁰ Wetland Reserve Program, CATALOG OF FEDERAL DOMESTIC ASSISTANCE,

wetlands. Under the Agricultural Act of 2014, the WRP has been consolidated with several other programs in the **Agricultural Conservation Easement Program**, which has a 50% match provision. States and local governments are eligible entities and wetlands and riparian areas are considered eligible land. Given overhauls to conservation programs in the recent Farm Bill, details on the implementation of the Easement Program and other programs will need to be followed over the next several years.

B. HARVESTED SPECIES HABITAT

The *Deepwater Horizon* spill spurred fishery closures that decreased commercial production by 20%. ²⁰³ Accordingly, multiple funding processes support restoration and recovery of finfish and shellfish habitats. Mitigation of damage to fish and restoration and protection of fisheries are listed as activities eligible for funding under the RESTORE Act. ²⁰⁴ Under NRDA early restoration, \$116.9 million worth of funding has been allocated to 15 projects that directly or indirectly restore fisheries or aim to support fish production. Similarly, under NFWF's first phase of funding, four projects totaling \$11.8 million have been funded related to fishery resources.

A federal program with matching grants that focuses on fish habitat is the **Federal Aid in Sport Fish Restoration Fund**. This program consistently receives hundreds of millions of dollars from federal excise taxes on certain fishing items. In 2013, the Gulf States received nearly \$50 million from the program, with a 25% state-match requirement. In other words, Gulf States can potentially multiply their investment in fisheries habitat by several hundred percent by applying for support through the Fund.

Harvested Species Habitat Federal Programs			
Program	Applicant Type	Minimum State Funding Requirement	Types of Projects
Federal Aid in Sport Fish Restoration Act	States	25%	Acquisition of habitat, fish- stocking, and research

Comparable to some of the projects approved for early restoration funding under the NRDA process, the Fund's work focuses on aquatic habitat enhancement. For example, in Mississippi in 2009, the Artificial Reef Program received \$142,500 from the Federal Aid in Sport Fish

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²⁰¹ Agricultural Act of 2014, § 2301, available at

 $http://agriculture.house.gov/sites/republicans.agriculture.house.gov/files/pdf/legislation/AgriculturalAct2014.pdf. \\ \emph{202} \textit{Id.}$

²⁰³ See Nat'l Academy of Sci., supra note 8.

²⁰⁴ RESTORE Act, § 1603(t)(1)(B)(i),(ii).

Restoration Fund to manage artificial reefs along the Gulf Coast.²⁰⁵ Similarly, five of the approved or proposed NRDA early restoration projects fund artificial reef development.

1. MATCHING GRANT PROGRAMS:

Fed	deral Aid in Sport Fish Restoration Act
Purpose	To provide federal funding for state efforts to manage and restore sport fish populations ²⁰⁶
Types of Projects Funded	Acquisition of habitat, fish stocking, and research
Matching Requirements	25%
2013 Funding	\$359,871,868 ²⁰⁷
	In FY 2013, Texas received \$17,993,593, Louisiana received \$6,684,316, Mississippi received \$4,319,003, Alabama received \$6,735,565, and Florida received \$11,943,743.
Eligible Entities	States
CFDA Number	15.605
Funding Cycle	Funding cycles usually begin in March and are closed in August to October of each year. In 2014, the grant window closes on August 31. ²⁰⁸ All opportunities are available through grants.gov or the FWS regional portals. Texas is in FWS Region 2; ²⁰⁹ all other Gulf States are in FWS Region 4. ²¹⁰
Grant Process	State fish and wildlife departments may apply for funding under the Act in one of two ways. First, states may prepare and submit to the Secretary of the Interior comprehensive fish and wildlife resource management plans, which "shall insure the perpetuation of these resources for the economic, scientific, and recreational enrichment of the people."

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http://wsfrprograms.fws.gov/Subpages/GrantPrograms/SFR/SFR Funding.htm (last visited Jan. 20, 2014).

²⁰⁵ Deborah Anderson, *2009 Mississippi Sport Fish Restoration Grants*, YAHOO (Mar. 25, 2009), http://voices.yahoo.com/2009-mississippi-sport-fishing-restoration-2958910.html?cat=8.

²⁰⁶ 16 U.S.C. §§ 777–777k.

²⁰⁷ Sport Fish Restoration Program – Funding, U.S. FISH & WILDLIFE SERV.,

²⁰⁸ Sport Fish Restoration Program, CAT. OF FED. DOMESTIC ASSISTANCE,

https://www.cfda.gov/index?s=program&mode=form&tab=core&id=566a07b8cb7ade67ffb36b676da87de0 (last visited Jan. 19, 2014).

Contact the Wildlife and Sport Fish Restoration Program, U.S. FISH & WILDLIFE SERV. REGION 2, http://www.fws.gov/southwest/federal_assistance/ri.html#contactfedaid (last visited Jan. 19, 2014). As of early 2014, the Texas contact for this program is Brie Darr.

²¹⁰ Contact the Wildlife and Sport Fish Restoration Program, U.S. FISH & WILDLIFE SERV. REGION 4, http://wsfrprograms.fws.gov/Subpages/ContactUs/Region4.htm (last visited Jan. 19, 2014). ²¹¹ 16 U.S.C. § 777e(a)(1).

	the Secretary of the Interior detailed statements of any proposed fish restoration and management projects. ²¹² Funds are usually disbursed as reimbursement for completed or ongoing projects.
Example Projects	In Alabama in 2009, the Aquatic Habitat Enhancement and Restoration Program received \$26,000 from the Fund. The fish-stocking program received \$731,000. The first stocking program received \$731,000.
	In Mississippi in 2009, the Artificial Reef Program received \$142,500 for managing artificial reefs along the Gulf Coast. 215
Public Participation	There are no provisions for public participation.
Notes	Funding for the grants is derived from a 10% excise tax on certain items of sport-fishing tackle, a 3% excise tax on other types of fishing gear, and a portion of motorboat fuel tax revenues and small engine fuel taxes. The Sport Fish Restoration Account holds these funds, which are permanently appropriated, unless otherwise specified within subsections of the Act. 216
	In early 2014, a bipartisan coalition of Senators introduced a bill "[t]o amend the law relating to sport fish restoration." The bill was referred to the Commerce, Science, and Transportation Committee.

2. COORDINATION PROGRAMS:

The **National Fishing Enhancement Act** aims to maximize benefits to fisheries and minimize environmental risks by funding artificial reef projects. The Act is administered by NOAA and establishes standards and procedures for certain harvested species habitat projects, and could be coordinated with the planning and implementation processes of Gulf oil spill restoration.

²¹³ Deborah Anderson, *2009 Alabama Sport Fish Restoration Grants*, YAHOO (Mar. 25, 2009), http://voices.yahoo.com/2009-alabama-sport-fishing-restoration-grants-2925260.html?cat=8. ²¹⁴ *Id.*

²¹² *Id.* § 777e(a)(2).

²¹⁵ Deborah Anderson, *2009 Mississippi Sport Fish Restoration Grants*, YAHOO (Mar. 25, 2009), http://voices.yahoo.com/2009-mississippi-sport-fishing-restoration-2958910.html?cat=8.

²¹⁶ See The Appropriations Act of August 31, 1951, P.L. 136, 65 Stat. 262.

²¹⁷ S. 2028, 113th Cong., *available at* http://www.commerce.senate.gov/public/?a=Files.Serve&File_id=bac4f7a5-2c1e-435f-b518-039f037ca980.

²¹⁸ 33 U.S.C. § 2102.

²¹⁹ See NOAA, NATIONAL ARTIFICIAL REEF PLAN (2007), available at http://www.nmfs.noaa.gov/sfa/PartnershipsCommunications/NARPwCover3.pdf.

Prior to 2014, the **Wildlife Habitat Incentive Program (WHIP)** (CFDA 10.914)²²⁰ provided 75% cost-share assistance to conservation-minded landowners to acquire and improve fish and wildlife habitat on private land. Through 2012, \$85 million was available annually for projects.

2012 WHIP Funding ²²²				
Alabama	Florida	Louisiana	Mississippi	Texas
\$3.605 million	\$1.124 million	\$1.051 million	\$1.593 million	\$647,000 (down from \$11.8 million in 2011)

Under the Agricultural Act of 2014, WHIP is consolidated with the Environmental Quality Incentives Program (EQIP – for more information, *see supra* Part III.E(2).²²³ At least 5% of the funds made available under the new EQIP are to be for projects benefitting wildlife habitat, including wetlands and fish habitat, among other habitat types.²²⁴

C. CORAL REEFS

Of all Gulf ecosystems, coral reefs may be the most fragile. The Gulf's coral reefs are home to some of the world's most exotic—and valuable—marine ecosystems. Due to the complexity of reef systems, value from ecosystem services and fishing can be easily impaired.²²⁵

In the aftermath of the spill, some Gulf reefs have suffered.²²⁶ A research consortium of 17 universities, headquartered at the University of Mississippi, is focused on understanding the long-term implications of the spill on coral reef ecosystems. Initial results are inconclusive but generally discouraging.²²⁷

²²⁰ Wildlife Habitat Incentive Program, CATALOG OF FEDERAL DOMESTIC ASSISTANCE,

https://www.cfda.gov/index?s=program&mode=form&tab=core&id=5958b744b02a118e896e0a0e20ec9a03.

Wildlife Habitat Incentive Program, U.S. NATURAL RESOURCES CONSERVATION SERV.,

http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/whip (last visited Jan. 20, 2014).

²²² Wildlife Habitat Incentive Program, NRCS Conservation Programs,

http://soils.usda.gov/survey/rca/viewer/reports/fb08 cp whip.html (last visited Jan. 20, 2014).

²²³ Agriculture Act of 2014, § 2201.

²²⁴ Id. § 2202, 2203.

See Gulf of Mexico Fishery Management Council, Final Summary Report—Workshop on Interrelationships between Coral Reefs and Fisheries (2013), available at

http://www.gulfcouncil.org/docs/Coral%20Workshop%20Final%20Summary%20Report%209-26-13.pdf.

²²⁶ See H.K. White et al., Impact of the Deepwater Horizon Oil Spill on a Deep-Water Coral Community in the Gulf of Mexico, 50 PROCEEDINGS OF THE NAT'L ACADEMY OF SCI. 20303 (2012).

²²⁷ See Deepwater Horizon Research Consortia, NAT'L INST. OF ENVTL. HEALTH SCI.,

http://www.niehs.nih.gov/research/supported/dert/sphb/programs/gulfconsortium (last visited Jan. 20, 2014).

The RESTORE Act lists marine habitat projects as eligible activities.²²⁸ One existing federal grant program, established under the **Coral Reef Protection Act**, has overlapping goals and may be important for coordination and investment through matching provisions.

Coral Reefs Federal Programs				
Program	Applicant Type	Minimum State Funding Requirement	Types of Projects	
Coral Reef Protection Act (CRPA)	State agencies, educational institutions, and NGOs	50%	Restoration, clean-up, and research	

The lead agency for the CRPA is NOAA, which is an important coordination partner in any coral reef or shoreline project.

1. MATCHING GRANT PROGRAMS:

	Coral Reef Protection Act (CRPA)
Purpose	"To preserve, sustain, and restore the condition of coral reef ecosystems" by providing financial support to projects and programs that contribute to the conservation of coral reefs ²²⁹
Types of Projects Funded	Restoration, clean-up, and research
Matching Requirements	50%
Applicant Type	"Any natural resource management authority of a State or other government authority with jurisdiction over coral reefs or whose activities directly or indirectly affect coral reefs, or coral reef ecosystems, or educational or nongovernmental institutions with demonstrated expertise in the conservation of coral reefs" ²³⁰
CFDA	11.482 ²³¹
2013 Funding	FY 2012 \$4,718,964 (FY 2013 estimate \$5,831,623, FY 2014 estimate \$5,831,623) ²³²
Funding Cycle	Applications are submitted at grants.gov and are usually due by the end of the year. Some grants require pre-applications that

²²⁸ RESTORE Act, § 1603(t)(1)(B)(i).

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²²⁹ 16 U.S.C. § 6401.

²³⁰ *Id.* § 6403(c).

²³¹ Coral Reef Conservation Program, CATALOG OF FED. DOMESTIC ASSISTANCE,

https://www.cfda.gov/index?s=program&mode=form&tab=core&id=fa69f8d7cac5324c184b192a56bbfc27 (last visited Jan. 20, 2014).

²³² Id.

	must be submitted in November.
Grant Process	Funding may be direct through NOAA or delegated to the National Fish and Wildlife Foundation ("NFWF"). State natural resource management authorities with jurisdiction over reefs or whose activities affect reefs are eligible to submit proposals. Projects must enhance the conservation of coral reefs by promoting sustainable development, addressing use conflicts, or encouraging projects with local communities, among other criteria. The Act authorizes emergency funding to address unforeseen or disaster-related circumstances. In 2013 and 2014, projects are expected to address the three key threats to coral reef ecosystems addressed in the most recent coral reef action plan: land-based pollution, fishing impacts, and climate change.
Example Projects	Florida signed a Coral Reef Conservation Agreement in 2012, which provides federal funding of \$667,884. The funding has been used for timely and efficient assessment, along with restoration activities (e.g., repairing a reef after it had been damaged by a propeller).
Public Participation	While public meetings are not mandated under the Act, Florida (the primary Gulf state receiving funds) holds periodic public meetings to receive input and review ideas. ²³⁸
Notes	Awards are made on the basis of proposal reviews, technical reviews, and administrative reviews. Grants can last up to three years in annual increments. Semi-annual progress reports are the only required updates after the award is made. Average financial assistance is \$326,000 per year, with a range from \$49,000 to \$700,000.

²³³ 16 U.S.C. § 6403(c).

²³⁴ *Id.* § 6403(g).

²³⁵ *Id.* § 6405.

²³⁶ Coral Reef Conservation Program, *supra* note 232.

²³⁷ NOAA Coral Reef Conservation Program, Financial Assistance Awards for Fiscal Year 2012, NOAA, http://coralreef.noaa.gov/aboutcrcp/workwithus/funding/grants/resources/fy12_grant_awards.pdf (last visited Jan. 20, 2014).

²³⁸ See David Fleshler, Florida Coral Reef Conservation Program Seeks Input Via Public Meetings, SUN SENTINEL (June 1, 2013), http://www.huffingtonpost.com/2013/06/01/florida-coral-reefs_n_3369844.html.
²³⁹ Coral Reef Conservation Program, *supra* note 232.

²⁴⁰ Id.

²⁴¹ See id.

²⁴² Id.

2. COORDINATION PROGRAMS:

The authors identified no additional federal programs addressing protection of existing coral reefs.

D. BEACHES AND DUNES

Gulf Coast beaches and dunes are important to Gulf species, including threatened and endangered species like the loggerhead turtle, as well as to the Gulf States' economies. They were subject to injuries from the *Deepwater Horizon* oil spill from oil washing ashore²⁴³ and spill response.²⁴⁴ One federal program, the **Erosion Protection Act**, has a matching grant program focused on beach protection and restoration.

	Beaches and [Ounes Federal Pr	ograms
Program	Applicant Type	Minimum State Funding Requirement	Types of Projects
Erosion Protection Act	States, political subdivisions, and private enterprises	50%	Beach nourishment and erosion control

The Erosion Protection Act is administered by the Army Corps, whose expertise may be vital for coastal or inland shoreline projects.

1. MATCHING GRANT PROGRAMS:

	Erosion Protection Act
Purpose	"To promote shore protection projects and related research that encourage the protection, restoration, and enhancement of sandy beaches, including beach restoration and periodic beach nourishment, on a comprehensive and coordinated basis" ²⁴⁵
Types of Projects Funded	Beach nourishment and erosion control
Matching Requirements	50%

²⁴³ See Northern Gulf Inst., Gulf Beaches and Dunes: Oil Spill Impacts (2013),

http://dhp.disl.org/PDFs/Oil%20Spill%20Fact%20Sheets/Gulf%20of%20Mexico%20Beaches%20and%20Dunes_Oil%20Spill%20Impacts.pdf.

²⁴⁴ See Kathy Jumper, *Gulf Coast Dunes to be Restored in Aftermath of BP Oil Spill*, ALL ALABAMA (Apr. 20, 2012), http://blog.al.com/live/2012/04/gulf_coast_dunes_to_be_restore.html. ²⁴⁵ 33 U.S.C. § 426e.

Applicant Type	States, localities, and private enterprises ²⁴⁶
CFDA Number	12.101
2013 Funding	Beach erosion control projects were estimated to receive \$1,794,386 in 2013. 247 Funding numbers could not be found for other Erosion Protection Act programs. 248
Funding Cycle	The funding cycle varies by project, with applications available at grants.gov.
Grant Process	The Rivers and Harbors Act authorizes the Erosion Protection Act to fund projects that shall "promote shore protection projects and related research that encourages the protection, restoration, and enhancement of sandy beaches." Projects must be adopted and authorized by Congress or approved by the Chief of Engineers of the Army Corps.
Public Participation	There are no statutory provisions for public participation.

2. COORDINATION PROGRAMS:

The Coastal Barrier Resources Act (CBRA) prioritizes the use of federal funds for beach and shore projects, limiting funding for development projects in sensitive coastal areas. ²⁵⁰ The CBRA is administered by the FWS and "encourages the conservation of hurricane prone, biologically rich coastal barriers by restricting Federal expenditures that encourage development."²⁵¹ All Gulf States have regions covered by the Act in the John H. Chafee Coastal Barrier Resources System, ²⁵² making it an important coordination consideration during selection and implementation of *Deepwater Horizon* restoration projects.

EPA administers the **BEACH Act** (CFDA 66.472), ²⁵³ which funds grants to states and local governments to help protect coastal waters. BEACH grants fund water quality testing, awarded based on (1) beach season length, (2) total miles of shoreline, and (3) coastal county population.²⁵⁴ Each of the five Gulf States received at least \$250,000 from this program in 2012.

²⁴⁶ *Id.* § 426e(a).

²⁴⁷ Beach Erosion Control Projects, CATALOG OF FED. DOMESTIC ASSISTANCE,

https://www.cfda.gov/?s=program&mode=form&tab=step1&id=6225e96e599c80c5248be6ba1d5a130b. ²⁴⁸ See generally 33 U.S.C. §§ 426e-426h.

²⁴⁹ 33 U.S.C. § 426e.

²⁵⁰ See Coastal Barrier Resources Reauthorization Act of 2005, 16 U.S.C. § 3503.

²⁵¹ Coastal Barrier Resources Act, U.S. FISH & WILDLIFE SERV., http://www.fws.gov/cbra/Act/index.html.

²⁵³ Beach Monitoring and Notification Program Implementation Grants, CATALOG OF FEDERAL DOMESTIC ASSISTANCE, https://www.cfda.gov/index?s=program&mode=form&tab=core&id=1613e0d25c83b68abf1cabca2be31923.

²⁵⁴ EPA, EPA GRANTS AVAILABLE TO IMPLEMENT BEACH MONITORING AND PUBLIC NOTIFICATION PROGRAMS IN 2012 (2012), http://water.epa.gov/grants funding/beachgrants/upload/2012fs.pdf.

While there is no matching provision for these grants, state resource agencies in charge of its implementation overlap with those carrying out ongoing oil spill restoration programs.

E. PROTECTED SPECIES AND PROTECTED PLACES

The Gulf States feature a stunning array of habitat, which supports a diversity of species. Louisiana alone is home to 40% of the United States' wetlands;²⁵⁵ Florida's coasts are home to many migratory birds and sea turtles; Texas and Alabama are two of the top five states for species diversity.²⁵⁶ Many of the areas and species of the Gulf of Mexico region are protected due to their value, vulnerability, or sensitivity.

Early restoration NRDA projects have included funding for restoring sea turtle, beach mouse, and migratory bird habitat, along with many other endangered, threatened, and endemic species' habitat. A total of \$391 million is currently allocated or proposed for species habitat projects. Similarly, the RESTORE Act's eligible activities include natural resource projects restoring ecosystems and wildlife habitats.²⁵⁷ Thus, a cross-cutting, coordinated habitat protection focus could optimize the post-spill recovery.

Protected Species and Protected Places Federal Programs			
Program	Applicant Type	Minimum State Funding Requirement	Types of Projects
Endangered Species Act (ESA) Grant Programs	States and territories	25%	Implementing ESA provisions, land acquisition, and habitat conservation planning assistance
Land and Water Conservation Fund (LWCF)	States	50%	Land acquisition and outdoor recreation planning
Forest Legacy Program	Private landowner through State Forester	25%	Partial-interest land acquisition to ensure forest protection on private lands
Community Forest Program	Local governments, Indian tribes, and qualified nonprofit organizations	50%	Local government land acquisition
State Wildlife Grants	State fish and wildlife agencies	25%	Landscape-scale conservation planning, climate change

²⁵⁵ U.S. Geological Survey, Louisiana's Coastal Ecosystem (2000), http://www.nwrc.usgs.gov/factshts/015-00.pdf.

NATURESERVE, STATES OF THE UNION: RANKING AMERICA'S BIODIVERSITY 2 (2002), available at http://www.natureserve.org/library/stateofunions.pdf.

²⁵⁷ RESTORE Act, § 1603(t)(1)(B)(ii).

adaptation, species and habitat management, acquisition of real property

Both the ESA Grant Programs and the LWCF provide for land acquisition and planning. Land acquisition might be especially effective in protecting a large range of species in diverse habitats. For example, in Alabama, the state used the Recovery Land Acquisition program under the ESA to protect 812 acres of the Hancock South Tract along the Little Cahaba River. 258 The \$1 million acquisition aided recovery efforts for listed species such as the goldlined darter, plicate rocksnail, flat pebblesnail, orange nacre mucket, and the fine-lined pocketbook.²⁵⁹

The LWCF can be used for projects that protect species while also creating public parks. In Texas, LWCF provided \$1.9 million matched by state funds to acquire 129 acres for the Wimberley Blue Hole Regional Park. The park was preserved in large part for the natural water features of Cypress Creek and its watershed. 260 A potential linkage with Gulf restoration is that under RESTORE, state park projects are an eligible activity, and thus similar park expansions and improvements could receive additional funding.

The Forest Legacy Program is a relatively unique public-private partnership in which states or other entities work with private landowners to propose conservation easements on private land. State or entity funds are used to match federal funds, with the maximum federal share being 75%. In Texas, for example, the Longleaf Ridge project protected 10,000 acres of forestland surrounding Big Thicket. The project was funded with a \$3.5 million grant from the program, matched by \$1.1 million from The Conservation Fund. 261 The project is designed to protect wildlife habitat and open space. Through the Forest Legacy Program, a \$1.1 million nonfederal investment protected \$4.6 million of habitat. The Community Forest Program has similar objectives, though it funds local government fee title acquisition.

State Wildlife Grants have broad application, encompassing both a competitive and noncompetitive process, allowing states to partner across borders to protect wildlife, and funding projects including landscape-scale conservation planning, climate change adaptation, species and habitat management, and acquisition of real property.

²⁵⁸ U.S. FISH & WILDLIFE SERV., FY 2012 COOPERATIVE ENDANGERED SPECIES CONSERVATION FUND PROJECT DESCRIPTIONS ARRANGED BY STATE (2012), http://www.fws.gov/endangered/esalibrary/pdf/FY12Section6AwardSummariesFinal.pdf. ²⁵⁹ *Id*.

 $^{^{260} \,} Texas \, Projects: \, LWCF, \, Nat'l \, PARKS \, SERV., \, http://www.nps.gov/ncrc/programs/lwcf/exemp_prjts/LWCF_TX.pdf$ (last visited Jan. 20, 2014).

²⁶¹ Press Release, Tex. Forest Serv., Forest Service Protects More Than 10,000 Acres of Forestland Surrounding Big Thicket (Dec. 22, 2009), http://txforestservice.tamu.edu/main/popup.aspx?id=10528.

Notably, any land acquisition project using RESTORE Act monies must adhere to certain requirements. For one, land must be purchased from a willing seller. ²⁶² In addition, no RESTORE funds can be used to purchase fee title in land unless:

- (1) the land is acquired by exchange or donation; or
- (2) [t]he acquisition is necessary for the restoration and protection of the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast region and has the concurrence of the Governor of the State in which the acquisition will take place.²⁶³

These requirements are important considerations in implementing land acquisition planning and projects.

1. MATCHING GRANT PROGRAMS:

Endangered Species Act (ESA) Grant Programs		
Purpose	To form cooperative agreements with states to establish and maintain an adequate and active program for the conservation of endangered and threatened species ²⁶⁴	
Types of Projects Funded	Implementing ESA provisions, including conservation grants, recovery land acquisition, habitat conservation planning assistance, and habitat conservation plans ²⁶⁵	
Matching Requirements	25%, reduced to 10% when 2 or more states jointly propose a project ²⁶⁶	
Applicant Type	"States or Territories that have entered into cooperative agreements with the [FWS] for endangered and threatened species conservation" 267	
2013 Funding	\$32 million ²⁶⁸	
CFDA Number	15.615, 15.657, and 15.660	
Funding Cycle	In 2014, the FWS accepted grant proposals from January 8 to March 14. The FWS lists funding documents detailing the content and form of applications on its website. 269	

²⁶² RESTORE Act, § 1607.

²⁶³ Id.

²⁶⁴ 16 U.S.C. § 1535.

²⁶⁵ Endangered Species—Grants: Grant Programs, U.S. FISH & WILDLIFE SERV.,

http://www.fws.gov/endangered/grants/grant-programs.html (last visited Jan. 20, 2014).

²⁶⁶ 16 U.S.C. § 1535(d)(2).

²⁶⁷ *Id*.

²⁶⁸ Press Release, U.S. Fish & Wildlife Serv., U.S. Fish and Wildlife Service Boosts State Endangered Species Conservation Efforts with \$32 Million in Grants (July 9, 2013),

http://www.fws.gov/home/newsroom/32milliongrantsstateendangeredspeciesNR07092013.html.

Grant Process	Habitat conservation planning assistance and implementation are nationally competitive programs to support land acquisition to promote the recovery of threatened and endangered species. Conservation grants provide funding for candidate, listed, or recently recovered species, with funding allocated by formula. Recovery land acquisition requires land to be set aside in perpetuity for conservation, with proposals being evaluated in a competitive process by regional FWS offices.
Example Projects	In Texas, the program funded the La Cantera Habitat Conservation Planning Land Acquisition, where 461 acres of essential ground beetle and cave meshweaver habitat was acquired. ²⁷¹ The cost of the project was \$1.5 million. In Alabama, the state used the Recovery Land Acquisition program under the ESA to protect 812 acres of the Hancock South Tract along the Little Cahaba River. ²⁷² The \$1 million acquisition aided recovery efforts for listed species such as the goldlined darter, plicate rocksnail, flat pebblesnail, orange nacre mucket, and the fine-lined pocketbook.
Public Participation	To qualify for a grant, the state program must provide for public participation in the designation of resident species as endangered or threatened. ²⁷³

Land and Water Conservation Fund (LWCF)	
Purpose	To preserve, develop, and assure access to outdoor recreational resources ²⁷⁴
Types of Projects Funded	Land acquisition, planning
Matching Requirements	50% ²⁷⁵
Applicant Type	States
CFDA Number	15.916

²⁶⁹ Grants: How to Apply, U.S. Fish & Wildlife Serv., http://www.fws.gov/endangered/grants/how-to-apply.html (last updated Jan. 9, 2014).

http://www.fws.gov/endangered/esa-library/pdf/FY12CESCF_RFPGrantAnnouncement.pdf.

²⁷⁰ See U.S. FISH & WILDLIFE SERV., ENDANGERED SPECIES PROGRAM FISCAL YEAR 2012 COOPERATIVE ENDANGERED SPECIES CONSERVATION FUND (SECTION 6 OF THE ENDANGERED SPECIES ACT) GRANT PROGRAM (2012),

FY 2012 COOPERATIVE ENDANGERED SPECIES CONSERVATION FUND PROJECT DESCRIPTIONS ARRANGED BY STATE, *supra* note 258. ²⁷² *Id*.

²⁷³ 50 C.F.R. § 81.2(e).

²⁷⁴ 16 U.S.C. § 460I-4.

²⁷⁵ 16 U.S.C. § 460I-8(c).

2013 Funding	\$42 million for state projects in 2013; ²⁷⁶ average of \$40 million since 1987 ²⁷⁷
Funding Cycle	States usually receive a set amount of funding from the LWCF based on a number of factors (primarily population). The Fund is administered by the National Park Servce. ²⁷⁸ Funding comes from oil and gas lease revenue from drilling in federal waters.
Grant Process	To be eligible, states must have an approved statewide recreation plan and a process for ranking projects that conserve the resources of the state. Statewide recreation plans "address the demand for and supply of recreation resources (local, state and federal) within a state, identify needs and new opportunities for recreation improvements and set forth an implementation program to meet the goals identified by its citizens and elected leaders." Most years, states receive an allocation of funds, then disburse funds to projects based on the state ranking system. 280
Example Projects	In Texas, LWCF provided \$1.9 million matched by state funds to acquire 129 acres for the Wimberley Blue Hole Regional Park. The park was preserved in large part for the natural water features of Cypress Creek and its watershed. 281 Also in Texas, LWCF provided \$2 million matched by state funds for the acquisition of a 1,100 acre tract of land on the Matagorda Peninsula at the mouth of the Colorado River. The land will be used as a conservation area. 282
Public Participation	To be eligible for funds, state recreation plans must be developed through a process involving ample opportunity for public participation. ²⁸³
Notes	All five states received more than \$500,000 from the LWCF for 2014, with Texas and Florida receiving \$2.2 million and \$1.8 million, respectively.

Forest Legacy Program

²⁷⁶ FY 2013 Allocations: LWCF, Nat'l Parks Serv.,

http://www.nps.gov/ncrc/programs/lwcf/FY13%20Apportionment%20to%20States-Territories0001.pdf.

²⁷⁷ About LWCF, LAND & WATER CONSERVATION FUND, http://lwcfcoalition.org/about-lwcf.html. ²⁷⁸ How States Plan and Select Proposals, NAT'L PARKS SERV.,

http://www.nps.gov/ncrc/programs/lwcf/plan_prjts.html.

²⁷⁹ *Id*.

²⁸⁰ *Id*.

²⁸¹ Texas Projects: LWCF, *supra* note 260.

²⁸³ 16 U.S.C. § 460I-8(d).

fectively protect and conserve environmentally important areas threatened by conversion to non-forest uses ²⁸⁴
t areas timeatened by conversion to non-lorest uses
ervation easements to ensure forest protection on private
ndustrial private forest landowners, through State sters ²⁸⁵
5 million ²⁸⁶
76
ect proposals are due by late November, with submission to and Congress by January. ²⁸⁷
Forest Service regions work with states to propose projects are reviewed by the state's Forest Stewardship Coordinating mittee and approved by the State Lead Agency. The ects must be consistent with the State Forest Plan and must ithin a Forest Legacy Area. Evaluation criteria include the ence of threatened or endangered species habitat, unique cat, and potential for watershed protection. 289
aho, the Boundary Connections project protects 1,700 acres ivate forest through a \$3 million grant matched by a bination of state and private funds. The land serves as a life corridor between the Selkirk, Purcell and Cabinet intains of Idaho and includes habitat for more than two dozen less designated as in greatest need of conservation. 290 exas, the Longleaf Ridge project protected 10,000 acres of stland surrounding Big Thicket with a \$3.5 million grant

http://www.fs.fed.us/spf/coop/library/fy13_funded_project.pdf (last visited Jan. 20, 2014).

²⁸⁴ 16 U.S.C. § 2103c.

²⁸⁶ FY 2013—Forest Legacy Funded Programs, U.S. FOREST SERVICE,

Fiscal Year 2015 Project Selection Process for the Forest Legacy Program, U.S. FOREST SERV.,

http://www.fs.fed.us/spf/coop/library/fy15_replydue&guide.pdf (last visited Jan. 20, 2014). ²⁸⁸ *Id.*

²⁸⁹ *Id*.

²⁹⁰ Press Release, U.S. Forest Serv., Forest Service Grants \$52.2M to Protect Working Forests, Rural Economies (Jan.

^{19, 2012),} http://www.prweb.com/releases/2012/1/prweb9121540.htm.
²⁹¹ Press Release, U.S. Forest Serv., Forest Service Protects More Than 10,000 Acres of Forestland Surrounding Big Thicket (Dec. 22, 2009), http://txforestservice.tamu.edu/main/popup.aspx?id=10528.

Public Participation	Public participation occurs at the state level, with state lead agencies tasked with soliciting involvement and comments for each project. ²⁹²
Notes	Texas, Florida, and Alabama have used the Forest Legacy Program to protect forest land. ²⁹³ In 2014, projects are proposed in Mississippi and Texas, though not yet finalized. ²⁹⁴

	Community Forest Program
Purpose	To establish forests that provide continuing and accessible community benefits by funding local government acquisition ²⁹⁵
Types of Projects Funded	Fee-title land acquisition to ensure forest protection
Matching Requirements	50%
Applicant Type	"Local governments, Indian tribes, and qualified nonprofit organizations" 296
2013 Funding	\$4 million ²⁹⁷
CFDA Number	10.675
Funding Cycle	Project solicitation is released in August, with applications due by mid-January to the respective State Forester.
Grant Process	Eligible lands for the competitive grant program are at least five acres in size, suitable to sustain natural vegetation, and at least 75 percent forested. The proposal must certify environmental benefits, including sustainable forest management, clean air and water, wildlife habitat, and stewardship. Applications are submitted to the State Forester.
Example Projects	Barre, Vermont received a \$400,000 matching grant to acquire a 384-acre tract of forest land. This project aims to "ensure water

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http://www.fs.fed.us/spf/coop/library/flp_guidelines.pdf.

http://www.fs.fed.us/spf/coop/programs/loa/flp_projects.shtml (last visited Jan. 20, 2014).

²⁹² U.S. Forest Service, Forest Legacy Program Implementation Guidelines 10 (2011),

²⁹³ Forest Legacy Program: Funded and Completed Projects, U.S. FOREST SERV.,

²⁹⁴ 2014 Proposed Projects, U.S. FOREST SERV., http://www.fs.fed.us/spf/coop/library/fy14_proposed_project.pdf. Total proposed funding is \$84.8 million.

Community Forest and Open Space Conservation Program, 76 Fed. Reg. 65,121 (Oct. 20, 2011). ²⁹⁶ Id

²⁹⁷ Community Forest Program, U.S. FOREST SERV., http://www.fs.fed.us/spf/coop/programs/loa/cfp.shtml (last visited Jan. 20, 2014).

²⁹⁸ Request for Applications: The Community Forest and Open Space Conservation Program, 78 Fed. Reg. 52,900 (Aug. 27, 2013).

	quality, wildlife protection, timber production, education opportunities and access to 20 miles of trails." ²⁹⁹
Public Participation	The Forest Service gives priority to projects that maximize the delivery of community benefits through a high degree of public participation. ³⁰⁰
Notes	The State Foresters for the Gulf States (to whom applications are submitted) are listed on the Forest Service website. No projects have been funded in Gulf States in the two-year history of the Community Forest Program.

	State Wildlife Grants
Purpose	"[T]he development and implementation of programs for the benefit of wildlife and their habitat, including species that are not hunted or fished" 302
Types of Projects Funded	Landscape-scale conservation planning, climate change adaptation, species and habitat management, acquisition of real property ³⁰³
Matching Requirements	25% for planning activities, 50% for implementation grants ³⁰⁴
Applicant Type	State agency with primary responsibility for fish and wildlife management; other government agencies, tribes, NGOs, and private individuals may partner with fish and wildlife agency or serve as subgrantees ³⁰⁵
CFDA Number	15.634
2013 Funding	\$45,720,189 available for non-competitive grants, ³⁰⁶ competitive grants receive \$5.4 million (FY 2014) ³⁰⁷
Funding Cycle	Much of the funding under the State Wildlife Grant program is distributed through an apportionment formula "based one-third

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²⁹⁹ Press Release, U.S. Forest Serv., Forest Service Announces \$3.5 million to Support Community Forests (Aug. 28, 2012), http://www.fs.fed.us/news/2012/releases/08/community.shtml.
³⁰⁰ 36 C.F.R. § 230.5(a).

³⁰¹ C.F.R. § 230.5(a).
301 NAT'L ASSOC. OF STATE FORESTERS, MEMBERSHIP DIRECTORY (2013), available at http://www.stateforesters.org/sites/default/files/publication-documents/Membership%20Directory%201.2013.pdf.

³⁰² Department of Interior and Related Agencies Appropriations Act, 2002, 115 Stat. 414, P.L. 107-63.

 $^{^{303}}$ U.S. FISH & WILDLIFE SERV., STATE WILDLIFE GRANTS GUIDELINES 517 FW 10 TABLE 10-1 (2010), available at http://wsfrprograms.fws.gov/subpages/toolkitfiles/517fw10.pdf.

³⁰⁴ U.S. FISH & WILDLIFE SERV., STATE WILDLIFE GRANTS COMPETITIVE GRANT PROGRAM FY 2014 (2014), available at http://wsfrprograms.fws.gov/Subpages/GrantPrograms/SWG/SWG-NOFA2014.pdf.
³⁰⁵ Id.

Letter from FWS, Final Apportionment of State and Wildlife Grants for Fiscal Year 2013 (May 15, 2013), http://wsfrprograms.fws.gov/Subpages/GrantPrograms/SWG/SWG2013Apportionment.pdf.

307 U.S. FISH & WILDLIFE SERV., *supra* note 304.

	on the land area of each State and two-thirds on the population of each State." ³⁰⁸ In 2013, states were made aware of appropriations in mid-May. ³⁰⁹ The match requirement applies to non-competitive grants as well—thus, states must go through the grant process with apportioned funds. ³¹⁰ The competitive grant program was established in 2008 through Public Law 110-161; in 2014, applications were due on March 14 and future announcements will be made on the FWS website. ³¹¹
Grant Process	To participate in the State Wildlife Grant Program, a state must have a State Wildlife Action Plan, identifying species of greatest conservation need and the habitats needed to conserve them. Non-competitive funds must be used to meet the needs of species identified in the plan, update the plan, or address emerging issues affecting wildlife not identified in the plan. States must submit project statement documents that demonstrate compliance with these requirements and the match provision. 314
	In FY 2014, competitive grants are "restricted to a minimum of two States which choose to work together to jointly complete a project." The minimum award is \$150,000 and the maximum award is \$500,000. Applications must be submitted online and guidelines are established annually.
Example Projects	In Alabama, the Gulf State Park Longleaf Pine Restoration project restored 128 acres of storm-damaged mixed timber to decrease fragmentation and increase diversity in both resident and migrant birds, reptiles, amphibians, and mammals. The project was funded through a State Wildlife Grant, a NFWF grant, and matching state funds. The project was funded through a State Wildlife Grant, a NFWF grant, and matching state funds.

³⁰⁸ Letter from FWS, *supra* note 306.

³⁰⁹ *Id.*

U.S. FISH & WILDLIFE SERV., supra note 303.

³¹¹ U.S. FISH & WILDLIFE SERV., *supra* note 304.

³¹³ U.S. FISH & WILDLIFE SERV., *supra* note 303.

³¹⁵ U.S. FISH & WILDLIFE SERV., *supra* note 304.

³¹⁶ *Id*.

³¹⁷ *Id.* at 6–7.

³¹⁸ Alabama Projects Funded by State Wildlife Grants, OUTDOOR ALABAMA,

http://www.outdooralabama.com/research-mgmt/State%20Wildlife%20Grants/projectsfunded.cfm. ³¹⁹ *Id.*

Public Participation	Non-competitive grants include planning activities to collect public input and conduct public meetings. 320
Notes	In 2013 non-competitive grant funding, Florida and Texas received more than \$2 million, and Alabama, Louisiana, and Mississippi received between \$500,000 and \$750,000. 321

2. COORDINATION PROGRAMS:

The National Fish and Wildlife Foundation (NFWF) (CFDA 10.683, 15.663) will play a large role in recovery from the *Deepwater Horizon* oil disaster. As discussed in Section II above, NFWF is a private non-profit organization created by Congress that provides grants for conservation projects through a number of different programs. Grant applications, along with the applicable matching requirements, can be found on the NFWF website. In addition, under the federal criminal settlements with BP and Transocean, NFWF will receive more than \$2.5 billion, which will go to the Gulf Environmental Benefit Fund for projects that remedy harm caused by the spill to natural resources. The interaction between NFWF's general match program, the Gulf Fund, and specific projects funded under the other restoration processes is unclear; no matter the interaction, NFWF will be an important player in Gulf restoration.

The **Migratory Bird Conservation Act** (CFDA 15.647) funds projects that protect migratory bird habitat in the United States and abroad.³²⁴ It is administered by FWS, and projects have been funded in all of the Gulf States.

The **Partners for Fish and Wildlife Program** (CFDA 15.631) is also administered by FWS, and conserves private land with high environmental value. While there is no explicit match requirement, the Program's goal is to obtain a 50% non-federal match, which can be provided by states on a private landowner's behalf (similar to the Forest Legacy Program). It is estimated that \$22 million of grant funding will be available in 2014.

The **Landowner Incentive Program (LIP)** (CFDA 15.633) provides funds for states to supply technical or financial assistance to private landowners for habitat improvement, restoration, and land protection.³²⁶ From 2003 to 2007, \$120 million in grants were made;³²⁷ however,

³²⁰ U.S. FISH & WILDLIFE SERV., *supra* note 303.

³²¹ Letter from FWS, *supra* note 306.

³²² See, e.g., Conservation Programs, NFWF,

http://www.nfwf.org/whatwedo/programs/Pages/conservationprograms.aspx.

³²³ See Grants, NFWF, http://www.nfwf.org/whatwedo/grants/Pages/home.aspx.

³²⁴ 16 U.S.C. § 715

Partners for Fish and Wildlife, CATALOG OF FED. DOMESTIC ASSISTANCE,

https://www.cfda.gov/?s=program&mode=form&tab=step1&id=8dafc52e565501e22fc041c9153f7305 (last visited Jan. 20, 2014).

Landowner Incentive Program, CATALOG OF FED. DOMESTIC ASSISTANCE,

https://www.cfda.gov/index?s=program&mode=form&tab=core&id=89c385c553ae0bdf94201d791a7e1e63.

funds have not been appropriated to LIP since 2007.³²⁸ In the future, LIP could receive additional appropriations or similar public-private partnership incentive programs could be developed.

Tribal Wildlife Grants (CFDA 15.639) "provide technical and financial assistance to Tribes for the development and implementation of programs that benefit fish and wildlife resources and their habitat." There is no match requirement, and \$3.9 million was available for FY 2014. States and other organizations can act as sub-grantees on Tribal grants. 331

Cooperative Landscape Conservation grants (CFDA 15.669) target science to inform conservation decisions. Administered by Landscape Conservation Commissions (LCCs) within the FWS, the grants fund states, local governments, tribal governments, non-profits, and individuals to support four goals: (1) identify common science and conservation goals and priorities, (2) develop science-based tools and solutions to meet shared conservation goals, (3) support biological planning, conservation design and adaptive management, and (4) evaluate the effectiveness of scientific information and conservation actions. The Gulf Coast Prairie LCC covers parts of coastal Texas and Louisiana; the Gulf Coastal Plains and Ozarks LCC covers the remainder of Louisiana, Mississippi, Alabama, and parts of Florida; the Florida LCC covers the remainder of Florida. It is estimated that \$3.05 million will be available in 2014. Applications are submitted to the LCC for the region.

Watershed Restoration and Enhancement Agreements (CFDA 10.693) authorize cooperative agreements with states, local governments, tribal governments, non-profits, and individuals "for the protection, restoration and enhancement of fish and wildlife habitat, and other resources on public or private land, the reduction of risk from natural disaster where public safety is threatened, or a combination thereof ... within the watershed."³³⁴ The Agreements are administered by the Forest Service, and sample projects include stream bank stabilization, watershed assessment, and restoration planning.³³⁵ Funds are permanently appropriated—³³⁶\$4 million in funding is expected in 2014.³³⁷

³²⁷ U.S. FISH & WILDLIFE SERV., LANDOWNER INCENTIVE PROGRAM AWARD HISTORY: 2003-2007 (2008), http://wsfrprograms.fws.gov/Subpages/GrantPrograms/LIP/LIP-Awards2003-07.pdf

³²⁸ CATALOG OF FED. DOMESTIC ASSISTANCE, *supra* note 326.

³²⁹ Tribal Wildlife Grants, U.S. FISH & WILDLIFE SERV., http://www.fws.gov/nativeamerican/grants.html.

³³⁰ U.S. FISH & WILDLIFE SERV., TRIBAL WILDLIFE GRANTS APPLICATION KIT FY 2014 (2013),

http://www.fws.gov/nativeamerican/pdf/twg-2014-application-kit.pdf. $^{\rm 331}$ $\it Id.$

What is an LCC?, GULF COAST PRAIRIE LANDSCAPE CONSERVATION COMMISSION, http://gulfcoastprairielcc.org/about/what-is-an-lcc.

³³³ Cooperative Landscape Conservation, CATALOG OF FEDERAL DOMESTIC ASSISTANCE,

https://www.cfda.gov/?s=program&mode=form&tab=step1&id=c5a7c278a23b946c9ca1ccf8e77a46bb. 334 P.L. 105-277, § 323.

P.L. 109-54, § 434. See also Guidance on Use of Reauthorized Watershed Restoration and Enhancement Agreement (Wyden) Authority, Forest Service, File Code 1580/2300/2400/2500/2600/3500 (Nov. 1, 2005).

Watershed Restoration and Enhancement Agreements, Catalog of Federal Domestic Assistance, https://www.cfda.gov/?s=program&mode=form&tab=step1&id=3f77d4df8b9d660908187c0fbb640689.

In the Agricultural Act of 2014, several of the Farm Bill's conservation programs were consolidated under the **Environmental Quality Incentives Program (EQIP)** (CFDA 10.912). EQIP aims to address soil health, water quality, nutrient management, pest management, air quality improvement, wildlife habitat development, and invasive species management. 339

Another program in the Agricultural Act of 2014 is the **Regional Conservation Partnership Program (RCPP).** ACPP will provide \$100 million annually to states, political subdivisions, tribes, agricultural producers, and some private organizations and individuals "to further the conservation, restoration, and sustainable use of soil, water, wildlife, and related natural resources" on eligible land. Eligible land includes land associated with agricultural production and private non-industrial forest, along with other land incidental to agricultural production, including wetlands and riparian buffers, "on which significant natural resource issues could be addressed under the program." Applications are selected through a competitive process, and the equivalent of the match provision states that the applicant shall provide a significant portion of the costs of the project. Moving forward, the evolution of these Farm Bill programs could provide important tools for conservation.

F. COASTAL MANAGEMENT

Coastal management overlaps with programs discussed above, including beach and wetland restoration efforts under the CELCP and CWPPRA. Programs that explicitly deal with coasts, flooding, and watersheds merit special mention, however, because coastal areas, flood protection, and port projects are all listed as eligible projects under the Direct and Spill Impact Components of RESTORE.³⁴⁴

Coastal Management Federal Programs					
Program	Applicant Type	Minimum State Funding Requirement	Types of Projects		
Coastal Zone Management Act	Coastal States	50%	Administration of coastal programs, restoring specific coastal areas or coastal resources, and redeveloping urban waterfronts and ports of		

³³⁸ Agricultural Act of 2014, §§ 2201–08.

³³⁹ Id

³⁴⁰ Agricultural Act of 2014, § 2401.

³⁴¹ *Id*.

³⁴² *Id*.

³⁴³ Id

³⁴⁴ RESTORE Act, § 1603(t)(1)(B)(i),(ii).

			particular concern
Watershed Protection and Flood Prevention Act	States and their political subdivisions, soil or water conservation districts, flood prevention or control districts, and other local public agencies	50%	Land acquisition, habitat conservation, wetland restoration
Sea Grant Programs	States, political subdivisions, eligible Sea Grant institutions	33%	Funds university-based programs carried out by the state in order to help understand, utilize, and conserve coastal resources

The **Coastal Zone Management Act (CZMA)** provides grants for coastal improvement projects and administration of coastal plans, provided that state coastal management programs meet national standards. Therefore, in practice, the grants incentivize compliance with the CZMA.

CZMA grants have been used to support productive on-the-ground habitat restoration work in Texas. ³⁴⁵ For example, the Neuces Bay Causeway Marsh Restoration Project received \$399,000 in CZMA Section 306A grants to construct marshes in high-priority conservation areas along the coast. ³⁴⁶ All Gulf States are eligible for funding under the CZMA grant programs.

Coastal Management Programs ³⁴⁷					
	Texas	Louisiana	Mississippi	Alabama	Florida
State Agency Tasked with Administration	Texas General Land Office	Louisiana Department of Natural Resources/ Office of Coastal Management	Mississippi Department of Marine Resources/ Office of Coastal Ecology	Alabama Department of Conservation and Natural Resources (planning) & Alabama	Florida Department of Environmental Protection

³⁴⁵ Interview conducted in September 2013 (on file with author).

³⁴⁶ Neuces Bay Causeway Restoration—Phase II, TEX. GEN. LAND OFF., http://www.glo.texas.gov/what-we-do/caring-for-the-coast/grants-funding/projects/11-019-nueces-bay-causeway-marsh-restoration-2.html (last visited Jan. 20, 2014).

Memorandum on FY 2012 Final Funding Guidance and Allocations, Coastal Zone Management Act Sections 306/306A and 309, from Joelle Gore, Acting Chief, Coastal Programs Division, NOAA, to Commonwealth, State, and Territorial Coastal Program Managers (Feb. 28, 2012), att. 1, http://coastalmanagement.noaa.gov/backmatter/media/fy12finalguidance.pdf.

				Department of Environmental Management (permitting)	
Funding Levels (FY 2012)	\$1,992,000	\$1,992,000	\$1,066,000	\$1,330,000	\$1,992,000

The state agencies in charge of administering the CZMA grants are also all trustees in the NRDA process.

Other matching opportunities for coastal management projects are set forth under CWPPRA and CELCP (discussed above). In addition, the **Watershed Protection and Flood Prevention Act** focuses on flood control. While the Act has received \$6.2 billion since 1962, it has recently lacked funding due to budget battles. Given its history of funding for clean-up and works projects, its budget status should be watched through the restoration process.

1. MATCHING GRANT PROGRAMS:

Coastal Zone Manage	ment Administration and Project Grants (CZMA Section 306 and 306A)
Purpose	"To encourage and assist the states to exercise effectively their responsibilities in the coastal zone through the development and implementation of management programs to achieve wise use of the land and water resources" 348
Types of Projects Funded	Administration of coastal programs, restoring specific coastal areas or coastal resources, redeveloping urban waterfronts and ports of particular concern, providing public access to beaches and other coastal areas, and developing coordinated interagency aquaculture management processes ³⁴⁹
Matching Requirements	50% ³⁵⁰
Applicant Type	Coastal States

³⁴⁸ 16 U.S.C. § 1452(2).

³⁴⁹ *Id.* §1455a.

³⁵⁰ See NOAA OFFICE OF OCEAN & COASTAL RES. MGMT., COASTAL ZONE MANAGEMENT ACT SECTION 306A GUIDANCE 11 (1999), http://coastalmanagement.noaa.gov/backmatter/media/guide306a.pdf. The federal-state ratio has remained constant at 1:1 since FY 1989. See also 16 U.S.C. § 1455(a) ("(1) For those States for which programs were approved prior to November 5, 1990, 1 to 1 for any fiscal year. (2) For programs approved after November 5, 1990, 4 to 1 for the first fiscal year, 2.3 to 1 for the second fiscal year, 1.5 to 1 for the third fiscal year, and 1 to 1 for each fiscal year thereafter.").

CFDA	11.419 ³⁵¹
2013 Funding	\$55.7 million (FY 2012)
Funding Cycle	State Coastal Management Programs are eligible to apply and must submit one application for a combined Section 306/306A grant. NOAA's website contains guidance on grant applications, and NOAA accepts submissions through grants.gov. 352
Grant Process	Under CZMA Section 306A, state proposals must demonstrate one of the following: preservation and/or restoration of specific areas, the presence of a coastal resource of national significance, port redevelopment, or the promotion of public access or agency coordination. Under Section 306, a state is evaluated based on the nature of its shoreline and conservation needs.
Example Projects	In Texas, the Neuces Bay Causeway Marsh Restoration Project received \$399,000 in CZMA Section 306A grants to construct marshes in high-priority conservation areas along the coast. ³⁵³
Public Participation	Management programs must provide for public participation to receive a matching grant under CZMA Section 306. Public participation must be available throughout the program's funding to be eligible for continuing funding under either grant program.
Notes	Each Gulf State received more than \$1 million in CZMA grants in 2012.

Watershed Protection and Flood Prevention Act		
Purpose	To cooperate with states to provide technical assistance and grants for flood control and conservation projects ³⁵⁴	
Types of Projects Funded	Land acquisition, habitat conservation, wetland restoration	
Matching Requirements	50% ³⁵⁵	
Applicant Type	"States and their political subdivisions, soil or water conservation districts, flood prevention or control districts, and other local public agencies" 356	

Toastal Zone Management Administration Awards, CATALOG OF FEDERAL DOMESTIC ASSISTANCE,

HTTPS://www.cfda.gov/index?s=program&mode=form&tab=core&id=28c9d9d0a47efb44c7034212985257eb.

352 See id. at 11.

See Id. at 11.

353 Neuces Bay Causeway Restoration—Phase II, supra note 346.

354 16 U.S.C. § 1001.

355 Id. § 1003(a).

356 Id. (defining "local organizations").

CFDA	10.904 ³⁵⁷
2013 Funding	Funding has plummeted in recent years, with no appropriations in 2012 and 2013. The American Recovery and Reinvestment Act of 2009 provided additional funding to the program, which has led to project grant obligations estimated at \$4,759,600 for FY 2014.
Funding Cycle	Announcements for a competitive grant process are made at the beginning of each year, subject to the appropriations process.
Grant Process	The Watershed Protection and Flood Prevention Act is administered by the Natural Resources Conservation Service within the USDA. Cost-sharing is available for projects that enable state partners to acquire perpetual wetland or floodplain conservation easements, to protect habitat, or to enhance water quality. Projects must be publicly sponsored watershed projects up to 250,000 acres with direct benefits for agriculture or rural communities that are at least 20% of the total benefits of the project. ³⁶⁰
Example Projects	In Pennsylvania, toxic mine drainage was contaminating a 7,740-acre watershed. A \$1,000,000 project constructed and restored five wetland sites and back-filled an old mine. The cost was split between the grant program and local government sponsors. 361
Public Participation	State and local sponsors are required to conduct public meetings to ensure local involvement. 362
Notes	While the Watershed Program is currently lacking funding, funding was more than \$70 million annually every year from 1962 to 2006, with a total of \$6.2 billion expended in grants since 1947.

Sea Grant Programs

Watershed Protection and Flood Prevention, CATALOG OF FEDERAL DOMESTIC ASSISTANCE, https://cfda.gov/?s=program&mode=form&tab=step1&id=d7d5612c73e492de79196d1cd3e085c2 (last visited Jan. 20, 2014).

³⁵⁸ *Id*.

³⁵⁹ 16 U.S.C. § 1003(a).

Watershed and Flood Prevention Operations Program, U.S. NATURAL RESOURCES CONSERVATION SERVICE (NRCS), http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/landscape/wfpo/ (last visited Jan. 20, 2014).

³⁶¹ USDA Watershed Program: Meeting Today's Natural Resource Needs, NRCS (2006),

 $http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1042257.pdf. \\$

³⁶² Watershed and Flood Prevention Operations Program, *supra* note 360.

³⁶³ Historical Watershed Operations Funding, NRCS (2012),

http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1048252.pdf.

Purpose	To encourage scientific research and education efforts to improve coastal resource management ³⁶⁴
Types of Projects Funded	Funds university-based programs carried out by the state in order to help understand, utilize, and conserve coastal resources
Matching Requirements	33% ³⁶⁵
2013 Funding	\$48 million ³⁶⁶
Applicant Type	States, political subdivisions, eligible Sea Grant institutions
CFDA	11.417 ³⁶⁷
Funding Cycle	Applications are made available through the grants.gov website and are usually due by November 1 of each year.
Grant Process	States with active Sea Grant programs can apply for federal funds through the institution that administers the program for projects that (1) fit within the Sea Grant strategic plan, (2) are adequately reviewed, and (3) promote conservation and responsible use of ocean and coastal resources. ³⁶⁸
Notes	Sea Grant programs are active in all five Gulf States.

2. COORDINATION PROGRAMS:

For **Coastal Zone Enhancement Grants** (CFDA 11.419) under CZMA Section 309, NOAA may provide grants to states with coastal zone assessment and strategy reports for voluntary enhancement of their coastal management programs. The funds are used for development and submission for approval of state coastal programs that achieve specified objectives, such as the protection, restoration, or enhancement of coastal wetlands. The grants also may be used for developing the state's Section 309 assessment and strategy. Section 309 grants do

³⁶⁴ 33 U.S.C. § 1121.

³⁶⁵ *Id.* § 1124.

³⁶⁶ Sea Grant: Announcement of Federal Funding Opportunity, NOAA (2013),

http://seagrant.noaa.gov/Portals/0/Documents/network_resources/implementation/2013ObnibusGuidence.pdf. ³⁶⁷ Sea Grant Support, CATALOG OF FEDERAL DOMESTIC ASSISTANCE,

 $https://www.cfda.gov/index?s=program\&mode=form\&tab=core\&id=fb40979b21b64d695b9dd3d61a79618e. \\ {\it ld.}$

³⁶⁹ 16 U.S.C. § 1456b.

³⁷⁰ *Id.* § 1456b(a)-(b). The nine enhancement areas are: (1) wetlands, (2) coastal hazards, (3) public access, (4) marine debris, (5) cumulative and secondary impacts, (6) special area management planning, (7) ocean/Great Lakes resources, (8) energy and government facility siting, and (9) aquaculture. *Id.*

³⁷¹ NOAA's current Section 309 guidance states that, starting in FY 2012, 10 percent of grant funds will support Projects of Special Merit, which are "innovative projects that further approved enhancement area strategies and focus on national coastal priorities." NOAA OFFICE OF OCEAN & COASTAL RES. MGMT., FINAL COASTAL ZONE MANAGEMENT ACT, SECTION 309 PROGRAM GUIDANCE (2009),

http://coastal management.noaa.gov/backmatter/media/guidancefy 11309.pdf.

not require a state match. All five Gulf States have received Section 309 grants, and all have current FY 2011-15 assessment and strategy reports in place. Because the entities involved in this program overlap with some of those involved in the *Deepwater Horizon* restoration processes, grants under the CZMA could provide an avenue for coordination.

Habitat Conservation Grants (CFDA 11.463)³⁷² are administered by the National Marine Fisheries Service "to identify and support proactive restoration project(s), which use a habitatbased approach to foster species recovery and increase fish production." NOAA anticipates that \$20 million will be available between FY 2013 and FY 2015. 374 There is no statutory matching requirement, but NOAA encourages applicants to build partnerships that allow a 1:1 match.³⁷⁵ Eligible applicants include states, political subdivisions, NGOs, and private individuals. ³⁷⁶ Project examples have similarities to RESTORE restoration and protection objectives, including coral reef restoration, wetlands protection, and shellfish habitat projects.³⁷⁷

The Coastal Program (CFDA 15.630) provides \$6 million in annual non-matching grants to state agencies, local governments, and private landowners "to identify, protect, and restore or improve habitats in priority coastal areas for fish and wildlife." Administered by FWS, grants are available in 24 high-priority areas, including the Gulf of Mexico and several Gulf state estuaries.³⁷⁹ Projects include restoring intertidal marsh and habitat enhancement at nature preserves. 380 More information can be found at the FWS Coastal Program website. 381

G. WATER QUALITY AND WATER QUANTITY

Water is the unifying trait connecting most of the natural resource impacts from the *Deepwater* Horizon oil spill. Recognizing water's importance to the ecosystems and economy of the Gulf, early restoration NRDA funding has already been used to finance many projects in the waters of

³⁷² Habitat Conservation, CATALOG OF FEDERAL DOMESTIC ASSISTANCE,

https://www.cfda.gov/index?s=program&mode=form&tab=core&id=4884783c2b1bf92260b8d068e722f892.

³⁷³ NOAA & NMFS, FY 2013 COASTAL AND MARINE HABITAT RESTORATION PROJECT GRANTS (2013), available at http://www.habitat.noaa.gov/pdf/NOAA NMFS HCPO 2013 2003587 Funding Opportunity.pdf. ³⁷⁴ *Id.*

³⁷⁵ *Id*.

³⁷⁶ Id.

³⁷⁸ Coastal Program, CATALOG OF FED. DOMESTIC ASSISTANCE,

https://www.cfda.gov/index?s=program&mode=form&tab=core&id=31fef83458e17b9488a435423dc7a619 (last visited Jan. 29, 2014).

³⁷⁹ *Id*.

³⁸⁰ U.S. FISH & WILDLIFE SERV., COASTAL PROGRAM (2010),

http://www.gulfalliancetraining.org/dbfiles/USFWS%20Coastal%20Program%20Funding.pdf.

³⁸¹ Coastal Program, U.S. FISH & WILDLIFE SERV., http://www.fws.gov/coastal (last updated Feb. 20, 2012).

the Gulf of Mexico, and the RESTORE Act authorizes funds for projects relating to marine habitat.³⁸²

Wat	Water Quality and Water Quantity Federal Programs						
Program	Applicant Type	Minimum State Funding Requirement	Types of Projects				
Clean Water Act (CWA) Section 319 Grants	States	40%	River restoration projects, nutrient management projects, education/outreach, monitoring/assessment				
Clean Water Act (CWA) Section 106 Grants	States	50%	Monitoring, permitting, water protection				
Pollution Prevention Program	States, state universities, and tribes	50%	Technical assistance and training programs				

It is important to note that the Clean Water Act (CWA) Section 319 and Section 106 grants are focused on land-based sources of pollution into navigable waters, whereas the spill occurred dozens of miles off the Gulf coast. Though originating in different places, these sources' impacts potentially overlap and may lead to cumulative impacts in coastal and offshore areas.

The CWA's nonpoint pollution provisions address sources of water and sediment quality degradation—primarily agricultural and urban-stormwater runoff—including in areas affected by the spill. For example, in Alabama, the Caney Branch project installed riparian buffers, stream crossings, and exclusion fencing along the Weeks Bay impaired area to address nonpoint source pollution, including elevated fecal coliform levels from upstream agricultural practices. This \$750,000 investment from CWA Section 319 led to the removal of the water body from the impaired waters list in 2002.

1. MATCHING GRANT PROGRAMS:

Clean Water Act (CWA) Section 319 Grants

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³⁸² RESTORE Act, § 1603(t)(1)(B)(i).

³⁸³ See, e.g., COASTAL PROTECTION AND RESTORATION AUTHORITY OF LOUISIANA ET AL., REVIEW DRAFT: LOUISIANA NUTRIENT MANAGEMENT STRATEGY 3 (2014) (discussing runoff concerns and nonpoint pollution in relation to impaired water quality in the Gulf of Mexico).

Nonpoint Success Stories: Caney Branch, Alabama, ENVTL. PROT. AGENCY, http://water.epa.gov/polwaste/nps/success319/al_caney.cfm#partners (last updated March 29, 2012).

Purpose To assist states in implementing nonpoint source management programs ass River restoration projects, nutrient management projects, education/outreach, monitoring/assessment assessment assess		
education/outreach, monitoring/assessment 386 Matching Requirements 40% 2013 Funding \$164.5 million in FY 2012 387 Eligible Applicants States Funding Cycle In 2013, application guidelines were released in April for proposals for funding for the following year. 388 CFDA Number 66.460 Grant Process States must submit draft work plans to EPA Regional Offices; after receiving comments from the Regional Office, states will revise and submit the final work plan. 389 Example Projects In Alabama, the Caney Branch project installed riparian buffers, stream crossings, and exclusion fencing along the Weeks Bay impaired area. 390 This \$750,000 investment led to the removal of the water body from the impaired waters list in 2002. In Florida, the Roberts Bay project installed 13 nutrient-separating baffle boxes (which remove organic matter and sediment from runoff) and pump station/sewer enlargements, in addition to conducting an education and outreach effort to encourage private actions that were beneficial for the water body. 391 An initial grant of \$1.6 million was matched by state funds, and the project resulted in a significant drop in pollutant loads in Roberts Bay. Public Participation State assessment reports must describe the process used to solicit public participation regarding best management practices for nonpoint source pollution. 392	Purpose	, , , , , , , , , , , , , , , , , , , ,
2013 Funding \$164.5 million in FY 2012 ³⁸⁷ Eligible Applicants States Funding Cycle In 2013, application guidelines were released in April for proposals for funding for the following year. ³⁸⁸ CFDA Number 66.460 Grant Process States must submit draft work plans to EPA Regional Offices; after receiving comments from the Regional Office, states will revise and submit the final work plan. ³⁸⁹ Example Projects In Alabama, the Caney Branch project installed riparian buffers, stream crossings, and exclusion fencing along the Weeks Bay impaired area. ³⁹⁰ This \$750,000 investment led to the removal of the water body from the impaired waters list in 2002. In Florida, the Roberts Bay project installed 13 nutrient-separating baffle boxes (which remove organic matter and sediment from runoff) and pump station/sewer enlargements, in addition to conducting an education and outreach effort to encourage private actions that were beneficial for the water body. ³⁹¹ An initial grant of \$1.6 million was matched by state funds, and the project resulted in a significant drop in pollutant loads in Roberts Bay. Public Participation State assessment reports must describe the process used to solicit public participation regarding best management practices for nonpoint source pollution. ³⁹²	Types of Projects Funded	
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Notes All Gulf States have used CWA Section 319 grants to fund water	Public Participation	solicit public participation regarding best management practices
	Notes	All Gulf States have used CWA Section 319 grants to fund water

³⁸⁵ 33 U.S.C. § 1329(h).

https://www.cfda.gov/index?s=program&mode=form&tab=core&id=3ed3af9732aabc731076efcc3a43403b (last visited Feb. 17, 2014).

http://water.epa.gov/polwaste/nps/success319/fl_roberts.cfm (last updated March 6, 2012). 392 33 U.S.C. § 1329(a)(1)(C).

U.S. ENVTL. PROTECTION AGENCY, A NATIONAL EVALUATION OF THE CLEAN WATER ACT SECTION 319 PROGRAM (2011), http://water.epa.gov/polwaste/nps/upload/319evaluation.pdf.

³⁸⁷ Nonpoint Source Implementation Grants, CODE OF FED. DOMESTIC ASSISTANCE,

³⁸⁸ *Id.*

³⁸⁹ ENVTL. PROT. AGENCY, NONPOINT SOURCE PROGRAM AND GRANTS GUIDELINES FOR STATES AND TERRITORIES (2013), http://water.epa.gov/polwaste/nps/upload/319-guidelines-fy14.pdf.

³⁹⁰ Nonpoint Success Stories: Caney Branch, *supra* note 384.

³⁹¹ Nonpoint Success Stories: Roberts Bay, Florida, ENVTL. PROT. AGENCY,

management projects.

Clea	n Water Act (CWA) Section 106 Grants
Purpose:	To provide funding for developing and implementing water pollution control programs ³⁹³
Types of Projects Funded	Monitoring, permitting, water protection
Matching Requirements	50%
Eligible Entity	States
2013 Funding	\$226 million FY 2013 obligations ³⁹⁴
CFDA Number	66.419
Grant Process	The state should consult with EPA and submit an application to the appropriate regional office. Funds are allotted based on the extent of water pollution control problems in the state. Six components are considered: (1) surface water area; (2) ground water use; (3) water quality impairment; (4) point sources; (5) non-point sources; and (6) population of urbanized areas.

	Pollution Prevention Program
Purpose:	To promote the use of source reduction techniques by businesses by providing matching grants to states ³⁹⁶
Types of Projects Funded	Technical assistance and training programs
Matching Requirements	50%
Eligible Entities	States, state universities, and tribes
2013 Funding	\$4.9 million ³⁹⁷
CFDA	66.708 ³⁹⁸
Grant Process	In 2014, proposals were due on March 20 through grants.gov. ³⁹⁹ Proposals should comply with the Pollution Prevention 5-year

https://www.cfda.gov/index?s=program&mode=form&tab=core&id=68f347ac81af17195e58709ef6e7ad59.

Water Pollution Control State, Interstate, and Tribal Program Support, CATALOG OF FEDERAL DOMESTIC ASSISTANCE, https://www.cfda.gov/?s=program&mode=form&tab=step1&id=b7633892da3d45c3cff68d037c9f66cb.³⁹⁵ 40 C.F.R § 35.162

³⁹⁶ Pollution Prevention Act of 1990, § 6605; 42 U.S.C. § 13104.

³⁹⁷ Pollution Prevention Grants Program, CATALOG OF FEDERAL DOMESTIC ASSISTANCE,

	strategic plan, which has five goals: "(1) Reduce the generation of greenhouse gas emissions to mitigate climate change; (2) Reduce the manufacture and use of hazardous materials to improve human and ecological health; (3) Reduce the use of water and conserve other natural resources to protect ecosystems; (4) Create business efficiencies that derive economic benefits and improve environmental performance while addressing goals 1, 2, or 3; and, (5) Institutionalize and integrate pollution prevention practices by way of technical assistance, policies, and/or initiatives while addressing goals 1, 2, or 3." ⁴⁰⁰
Example Projects	In 2011, the Mississippi Department of Environmental Quality received a Pollution Prevention grant to support its Environmental Stewardship Program, promote the use of energy efficient buildings, and generate environmental management systems for wastewater and water utilities to prevent water pollution. The project is purported to have saved 655 megatons of CO ₂ equivalent, eliminated 563 pounds of hazardous materials, saved 63 million gallons of water, and saved businesses \$533,568 in costs. 402

2. COORDINATION PROGRAMS:

Under **CWA Section 105**, EPA can make grants to states for the purpose of developing research programs that promote or demonstrate advanced treatment and pollution control techniques. ⁴⁰³ These technologies and the institutional overlap of EPA grant programs could play a role in the *Deepwater Horizon* restoration process.

The **Gulf of Mexico Program** (CFDA 66.475) is authorized under the Clean Water Act,⁴⁰⁴ with the purpose of "expand[ing] and strengthen[ing] cooperative efforts to restore and protect the health and productivity of the Gulf of Mexico in ways consistent with the economic well-being of the region."⁴⁰⁵ Funding is available to states, local governments, NGOs, and universities to improve water quality, conduct habitat restoration and protection activities, and carry out

 $^{^{}m 399}$ U.S. EPA, Fiscal Year 2014 Pollution Prevention Grant Program (2014),

http://www.epa.gov/p2/pubs/grants/ppis/2014rfpp2grant.pdf.

⁴⁰⁰ Id.

⁴⁰¹ EPA, 2011 END OF THE YEAR POLLUTION PREVENTION GRANT RESULTS SUMMARY (2013), available at http://www.epa.gov/p2/pubs/grants/ppis/FY2011P2Grant.pdf.

⁴⁰³ 33 U.S.C. § 1255.

⁴⁰⁴ See 33 U.S.C. § 1254(b)(3).

⁴⁰⁵ Gulf of Mexico Program, Catalog of Federal Domestic Assistance,

https://www.cfda.gov/index?s=program&mode=form&tab=core&id=1e149b3092c79ca29f8609f2632644e1.

ecosystem-based management, among other activities. 406 In FY 2014, an estimated \$1.85 million will be available for projects in the Gulf States. 407 An example project is the Development of a Nutrient Reduction Strategy for the Mississippi Delta, which partnered the Mississippi Department of Environmental Quality, agricultural stakeholders, and resource agencies to develop a strategy "to guide future nutrient reduction planning, monitoring, implementation, and evaluation activities."

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What is the Gulf of Mexico Program?, EPA, http://www.epa.gov/gmpo/about/whatisgmp.html.

⁴⁰⁷ Gulf of Mexico Program, EPA CATALOG OF FEDERAL FUNDING SOURCES FOR WATERSHED PROTECTION,

 $https://ofmpub.epa.gov/apex/watershedfunding/f?p=116:2:0::NO::P2_X_PROG_NUM,P2_X_YEAR:103,2014.$

⁴⁰⁸ EPA, EPA GULF OF MEXICO PROGRAM GRANTS AWARDED IN FY 08 (2008), *available at* http://www.epa.gov/gmpo/pubinfo/pdf/gmp-grants-awarded-fy2008.pdf.

IV. CONCLUSION

If the five Gulf of Mexico states were a single country, it would have the seventh largest economy in the world. ⁴⁰⁹ The foundation of that economy is the abundant natural resources of the Gulf. Ninety-seven percent of fish and shellfish in the region rely on estuaries or wetlands at some point during their life cycle. ⁴¹⁰ The Gulf has the highest species diversity of any region in the United States. ⁴¹¹ And the Gulf region's ecosystem services may be among the most valuable in the world. ⁴¹²

However, the natural resources foundation has been shaken time and again, by both anthropogenic and natural disasters. Decades of development have weakened species and ecosystem structures by depleting populations and degrading or eradicating habitat. Increasingly powerful storm events are eroding natural systems and buffers that make the coastline and its resources even more vulnerable to future events. The Gulf continues to be a national treasure of economy and ecology, but the natural resource base has been weakened.

Nearly four years ago, the *Deepwater Horizon* oil spill shook the foundation once again, on an unprecedented scale. But the tragedy also presents an opportunity—to unite the disaster-specific recovery processes with existing conservation efforts and capacity to enable large-scale, long-term, sustainable restoration that may repair some of the cracks.

Building bridges among RESTORE, NRDA, NFWF, and other post-disaster restoration funding opportunities can promote optimal recovery of the Gulf environment. Building bridges between the post-disaster efforts and the long-term institutions that steward the Gulf can set the changes for the long term.

This assessment reviews some of the programs that might help us achieve this integration, focusing specifically on opportunities to capitalize on program synergies and to leverage matching funds. This is one of numerous ways to create the essential linkages that will help transform *Deepwater Horizon* recovery monies from a one-time transfusion of funds into a turning point for Gulf Coast health and resiliency for decades to come.

NOAA, THE GULF OF MEXICO AT A GLANCE: A SECOND GLANCE (2011), available at http://stateofthecoast.noaa.gov/features/gulf-of-mexico-at-a-glance-2.pdf.

⁴¹¹ *Id*.

⁴¹² See id.

Appendix: Table of Federal Programs

The following table lists the federal programs reviewed in the assessment, with cross-references to the page number in the assessment and hyper-links to the Catalog of Federal Domestic Assistance application page, along with the applicable match requirement, eligible entities, and sample projects.

	Wetlands and Estuaries Federal Programs						
Program	Page No.	Eligible Entities	Minimum State Funding Requirement	Types of Projects	CFDA No.		
North American Wetlands Conservation Fund	19	Public and private organizations	40%	Land acquisition projects that protect wetlands and waterfowl habitat	<u>15.623</u>		
Federal Aid to Wildlife Restoration Act	21	States	25%	Land acquisitions and improvement for wildlife habitat or public use, wildlife introductions into new habitat, research, and hunter education	<u>15.611</u>		
Coastal Wetlands Planning, Protection, and Restoration Act	22	Coastal states	15% for Louisiana, 50% for other Gulf States	Coastal wetlands conservation, land acquisition	15.614		
Estuary Restoration Act	25	States, political subdivisions, Indian tribes, regional or interstate agencies, or NGOs	35%	On-the-ground restoration, including restoring salt-marsh vegetation and replanting seagrass beds	12.130		
Coastal and Estuarine Land	26	Coastal States	50%	Land acquisition and conservation easements	<u>11.419</u>		

Conservation Program					
National Estuarine Research Reserve Program	27	States	50%	Land acquisition, maintenance, and educational activities	<u>11.420</u>
Water Resources Development Act	29	Projects chosen through federal and state agency collaboration	25%	Land acquisition, stream bank stabilization, non-point source pollution control projects, water supply and storage projects	n/a
Aquatic Ecosystem Restoration Program	30	States, political subdivisions, NGOs, and individuals	35%	Habitat restoration and ecosystem protection	n/a
Wetland Program Development Grants	31	States, political subdivisions, NGOs	25%	Developing monitoring and assessment programs, restoring and protecting wetlands	66.461 and 66.462
Coastal Impact Assistance Program	32	States and political subdivisions	n/a	Conservation, protection, and restoration of coastal areas	<u>15.668</u>
Emergency Wetlands Resources Act	33	States, political subdivisions, NGOs, and individuals	n/a	Research and restoration of wetlands	<u>15.665</u>
Agricultural Conservation Easement Program	34	States, local governments, and individuals	50%	Wetlands and riparian area land purchases, among other things	n/a
		Harvested Species Ha	abitat Federal F	Programs	
Federal Aid in Sport Fish Restoration Act	35	States	25%	Acquisition of habitat, fish- stocking, and research	<u>15.605</u>
National Fishing Enhancement Act	36	States, local governments, NGOs and individuals	n/a	Primarily coordinating artificial reef projects	n/a

	Coral Reefs Federal Programs					
Coral Reef Protection Act	38	State agencies, educational institutions, and NGOs	50%	Restoration, clean-up, and research	11.482	
		Beaches and Dun	es Federal Prog	rams		
Erosion Protection Act	40	States, political subdivisions, and private enterprises	50%	Beach nourishment and erosion control	<u>12.101</u>	
Coastal Barrier Resources Act	41	n/a	n/a	Restricts Federal expenditures that encourage development in some coastal areas	n/a	
BEACH Act	41	States and local governments	n/a	Primarily water quality testing	66.472	
		Protected Species and Prot	ected Places Fed	deral Programs		
Endangered Species Act (ESA) Grant Programs	44	States and territories	25%	Implementing ESA provisions, land acquisition, and habitat conservation planning assistance	15.615, 15.657, and 15.660	
Land and Water Conservation Fund (LWCF)	45	States	50%	Land acquisition and outdoor recreation planning	<u>15.916</u>	
Forest Legacy Program	47	Private landowner through State Forester	25%	Partial-interest land acquisition to ensure forest protection on private lands	<u>10.676</u>	
Community Forest Program	48	Local governments, Indian tribes, and qualified nonprofit organizations	50%	Local government land acquisition	<u>10.675</u>	
State Wildlife Grants	49	State fish and wildlife agencies	25%	Landscape-scale conservation planning, climate change adaptation, species and habitat	<u>15.634</u>	

				management, acquisition of real property	
National Fish and Wildlife Foundation	51	States, local governments, educational institutions, and nonprofit organizations	50%	Projects that sustain, restore, and enhance our nation's fish, wildlife, and plants and their habitats	10.683 and 15.663
Migratory Bird Conservation Act	51	States, local governments, and NGOs	n/a	Projects that protect migratory bird habitat in the United States and abroad	15.647
Partners for Fish and Wildlife	51	States, local governments, and private landowners	n/a	Projects that conserve private land with high environmental value	<u>15.631</u>
Landowner Incentive Program	51	Private landowners, often involving public partnerships	n/a	Funds for states to supply technical or financial assistance to private landowners for habitat improvement, restoration, land protection	15.633
Tribal Wildlife Grants	52	Tribal governments	n/a	Technical and financial assistance to Tribes for the development and implementation of programs that benefit fish and wildlife resources and their habitat	<u>15.639</u>
Cooperative Landscape Conservation Grants	52	States, local governments, tribal governments, non-profits, and individuals	n/a	Science and other projects that support conservation planning and implementation	15.669
Watershed Restoration and Enhancement Agreements	52	States, local governments, tribal governments, non-profits, and individuals	n/a	Stream bank stabilization, watershed restoration, conservation planning	10.693
Environmental	53	Agricultural producers,	n/a	Projects benefitting soil health,	10.912

Quality Incentives Program	r2	owners of non-industrial private forestland, and Tribes	2/2	water quality, nutrient management, pest management, air quality improvement, wildlife habitat development, and invasive species management	n/a
Regional Conservation Partnership Program	53	States, political subdivisions, tribes, agricultural producers, and some private organizations and individuals	n/a	Conservation, restoration, and sustainable use of soil, water, wildlife, and related natural resources on eligible land	n/a
		Coastal N	lanagement		
Coastal Zone Management Administration and Project Grants (CZMA Section 306 and 306A)	55	Coastal States	50%	Administration of coastal programs, restoring specific coastal areas or coastal resources, and redeveloping urban waterfronts and ports of particular concern	<u>11.419</u>
Watershed Protection and Flood Prevention Act	56	States and their political subdivisions, soil or water conservation districts, flood prevention or control districts, and other local public agencies	50%	Land acquisition, habitat conservation, wetland restoration	10.904
Sea Grant Programs	57	States, political subdivisions, eligible Sea Grant institutions	33%	Funds university-based programs carried out by the state in order to help understand, utilize, and conserve coastal resources	11.417
Coastal Zone Enhancement Grants	58	Coastal States	n/a	Voluntary enhancement of coastal management programs	<u>11.419</u>

Habitat Conservation Grants	59	States, political subdivisions, NGOs, and private individuals	n/a	Proactive restoration project(s), which use a habitat-based approach to foster species recovery and increase fish production	11.463
Coastal Program	59	State agencies, local governments, and private landowners	n/a	Identify, protect, and restore or improve habitats in priority coastal areas for fish and wildlife	<u>15.630</u>
		Water Quality and Water	r Quantity Federa	al Programs	
Clean Water Act (CWA) Section 319 Grants	60	States	40%	River restoration projects, nutrient management projects, education/outreach, monitoring/assessment	66.460
Clean Water Act (CWA) Section 106 Grants	61	States	50%	Monitoring, permitting, water protection	66.419
Pollution Prevention Program	62	States, state universities, and tribes	50%	Technical assistance and training programs	66.708
CWA Section 105	63	States	n/a	Developing research programs that promote or demonstrate advanced treatment and pollution control techniques	n/a
Gulf of Mexico Program	63	States, local governments, NGOs, and universities	n/a	Improve water quality, conduct habitat restoration and protection activities, and carry out ecosystem-based management, among other activities	<u>66.475</u>

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