

# Building Gulf Coast Resilience

Appendices



## APPENDIX A — Timeline and History of Events

<b>The Gulf Pre-spill</b> 1930s to 2009	<ul style="list-style-type: none"> <li>■ In the <b>1930s</b>, the U.S. Army Corps of Engineers began dredging canals and installing levees, which slowly degraded Gulf Coast ecosystems over time and contributed to the loss of wetlands.</li> <li>■ In the <b>2005</b> hurricane season, Hurricanes Katrina, Rita, and Wilma hit the Gulf Coast region. Several years later, in <b>2008</b>, Hurricanes Gustav and Ike hit the region, further damaging and challenging infrastructure, ecosystems, and communities.</li> </ul>
<b>DWH Spill and Legal Action</b> Apr. 2010 – Sep. 2010	<ul style="list-style-type: none"> <li>■ On <b>April 20, 2010</b>, the Deepwater Horizon (DWH) mobile drilling rig exploded and sank, causing a release of 134 million gallons of oil from the Macondo oil well over the course of 87 days.</li> <li>■ In <b>June</b>, legal proceedings against British Petroleum (BP), Transocean, and others were initiated by the U.S. Department of Justice (USDOJ) in Louisiana Federal District Court. In <b>August</b>, cases were consolidated into a single action, <i>In re Oil Spill by the Oil Rig Deepwater Horizon in the Gulf of Mexico</i>. In <b>December</b>, USDOJ filed civil suits for violations of the Clean Water Act that were later consolidated with these cases as well.</li> <li>■ On <b>September 19, 2010</b> the DWH well was declared officially sealed.</li> </ul>
<b>Early Recovery and Federal Response</b> Sep. 2010 – Sep. 2012	<ul style="list-style-type: none"> <li>■ In <b>September 2010</b>, the Secretary of the Navy released its report on Gulf Coast recovery and made preliminary recommendations: America's Gulf Coast: A Long-term Recovery Plan after the Deepwater Horizon Oil Spill.</li> <li>■ On <b>October 5, 2010</b>, President Obama signed Executive Order 13554, establishing the Gulf Ecosystem Restoration Task Force to facilitate planning and information delivery, intergovernmental coordination, and recommendations relating to ecosystem restoration following the DWH incident.</li> <li>■ In <b>April 2011</b>, while legal proceedings were ongoing, BP agreed to pay \$1 billion to NRDA Trustees so that the Trustees could fund early restoration efforts in the region. Early restoration projects have advanced in five phases over the years since 2011.</li> <li>■ In <b>December 2011</b>, the Task Force released the Gulf of Mexico Regional Ecosystem Restoration Strategy.</li> <li>■ In <b>July 2012</b>, Congress passed the Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act of 2012 (RESTORE Act) as part of the Moving Ahead for Progress in the 21st Century (MAP-21) Act. The RESTORE Act called for a significant portion of Clean Water Act penalties arising from the DWH proceedings to be dedicated in specified proportions for different restoration and recovery efforts, and for further scientific studies.</li> <li>■ In <b>September 2012</b>, the Task Force was disbanded, as the RESTORE Act established a new state-federal interagency coordinating body, the RESTORE Council.</li> </ul>

## Restoration Planning Phases and Legal Settlements

2013 to 2016

- In **early 2013**, a federal court approved plea agreements on criminal charges (under the Clean Water Act and other environmental statutes) against BP and Transocean. Under the [agreements](#), the National Fish and Wildlife Federation administers approximately \$2.5 billion in settlement funds for restoration projects across the region.
- In **August 2013**, the RESTORE Council approved its Initial Comprehensive Restoration Plan (updated in 2016), identifying region-wide restoration goals and a framework for funding restoration projects and programs as RESTORE funds become available over time. Sixty percent of RESTORE funds must be administered consistent with the Comprehensive Restoration Plan.
- On **December 9, 2015**, the RESTORE Council approved its first Funded Priority List, which designated projects to be funded through the Council-Selected Restoration Component (RESTORE “Bucket 2”) and utilized a watershed-based approach for prioritizing projects.
- In **February 2016**, the NDRA Trustee Council adopted the Programmatic Damage Assessment and Restoration Plan and Programmatic Environmental Impact Statement (PDARP/PEIS). The PDARP assesses the impacts from the DWH spill incident on natural resources in the Gulf of Mexico, and describes the types and amount of restoration that are needed to compensate the public for those impacts. Subsequent state- and area-specific Restoration Plans for using NRD funds are being developed consistent with the PDARP.
- On **April 4, 2016**, a federal court in Louisiana entered a [consent decree](#) and settlement agreement resolving the government’s claims against BP. Under the agreement, BP is to pay \$5.5 billion in Clean Water Act civil penalties (subject to the RESTORE Act) and \$8.1 billion in natural resource damages (\$1 billion of which was paid for early restoration), among other fines.

## APPENDIX B — Summary of Deepwater Horizon Funding Programs

As a result of the settlement with British Petroleum (BP) and the other parties responsible for the Deepwater Horizon (DWH) spill, the Gulf Coast region will receive \$20.8 billion in funds over the next 15 years.<sup>1</sup> These funds will flow through a variety of different programs to the five Gulf Coast states and federal agencies, and funds can be used to restore coastal ecosystems, rebuild Gulf economies, and enhance coastal resilience. One of the primary challenges of implementing restoration in Gulf Coast states is the ability of the project proponents to patch together the different funding streams needed to develop and implement comprehensive, holistic restoration approaches rather than piecemeal restoration projects. To understand these challenges, this appendix presents the unique rules, limitations, processes, and timelines imposed by each of the individual funding sources and programs.

This appendix also describes the important actions that are already being taken to facilitate larger-scale, more holistic restoration efforts in the Gulf Coast region — including developing comprehensive restoration plans and programmatic environmental review documents to guide deployment of these funds. These important steps should be acknowledged and built upon, as described here.

### RESTORE Funding

The Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act of 2012 (RESTORE Act) was passed by Congress as part of the Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) Act<sup>2</sup> in order to ensure effective administration of Clean Water Act civil penalties arising out of the DWH oil spill event. Eighty percent (\$5.5 billion) of the civil and administrative penalties paid under the Clean Water Act will be allocated through the Gulf Coast Restoration Trust Fund established by the RESTORE Act.<sup>3</sup> The RESTORE Act also created a new coordinating body, the RESTORE Council, to develop a framework (the Comprehensive Plan)<sup>4</sup> for how the RESTORE funding should be allocated and to direct a portion of the funding to specific projects.

The RESTORE Act funds are allocated through five different “buckets” each with their own rules and requirements (described below), and many of the projects selected for RESTORE funding must be consistent with the Comprehensive Plan adopted by the Council.

- **Bucket 1 — Direct Component:** Thirty-five percent (\$1.86 billion) of the RESTORE Act funds were directed in equal shares to each of the five affected states for uses specified by the statute.<sup>5</sup> To receive its share of the funds, each state must develop a Multi-Year Implementation Plan (MIP) that describes its intended uses for the funds.<sup>6</sup>
- **Bucket 2 — Council-selected Component:** Thirty percent (\$1.6 billion) of the funds will be directed to projects selected by the RESTORE Council, from a pool of projects proposed by RESTORE Council members. Projects selected for funding must be consistent with the RESTORE Council’s Comprehensive Plan,<sup>7</sup> and the Council must select projects for funding by adopting a Funded Priority List (FPL).<sup>8</sup>
- **Bucket 3 — Spill-impact Component:** Thirty percent (\$1.6 billion) of the funds are allocated to the states in shares according to a formula estimating the proportionate spill impact in that state.<sup>9</sup> Each state must develop a State Expenditure Plan (SEP) describing how it intends to spend the funds and describing how the selected projects are consistent with the RESTORE Act’s eligible uses and the Comprehensive Plan (prerequisites to receiving Bucket 3 funds).<sup>10</sup> The Council has developed rules specifying how Bucket 3 funds can be obtained and used, specifying two purposes: planning (to develop SEPs) and implementation (to carry out projects and programs prioritized in a state’s SEP).<sup>11</sup> States have some flexibility in meeting their planning requirements. Louisiana, for example, opted to develop a single plan satisfying requirements of the MIP (Bucket 1) and SEP (Bucket 3), which can improve planning efficiencies and help ensure better cross-utilization of funding across funding streams.<sup>12</sup>



- **Bucket 4 — Science Component:** Two and a half percent (\$133.3 million) in RESTORE Act funds were provided to the National Oceanic and Atmospheric Administration (NOAA) to support scientific research in the Gulf through the Gulf Coast Ecosystem Restoration, Science, Observation, Monitoring and Technology Program.<sup>13</sup>
- **Bucket 5 — Centers of Excellence Component:** Another 2.5 percent (\$133.3 million) was provided in equal shares to establish “centers of excellence” in each state to support research.<sup>14</sup>

The RESTORE Council adopted its first Comprehensive Plan, which guides the use of 60 percent of the total RESTORE Act funds, in 2013 and adopted an updated plan in 2016.<sup>15</sup> The Comprehensive Plan lays out five goals: (1) Restore and Conserve Habitat; (2) Restore Water Quality and Quantity; (3) Replenish and Protect Living Coastal and Marine Resources; (4) Enhance Community Resilience; and (5) Restore and Revitalize the Gulf Economy.<sup>16</sup> The Plan provides a framework for funding restoration projects and programs as funds become available over time, in accordance with the region-wide restoration goals laid out in the Plan and high-priority restoration criteria specified in the RESTORE Act.<sup>17</sup> It also defines principles for facilitating effective restoration in the region, including calling for the use of adaptive management approaches and watershed approaches to restoration.

The RESTORE Council made many positive commitments in its Comprehensive Plan and other policies that should be supported, continued, and built upon in the future, including:

- encouraging states and federal agencies to focus on priority watershed and estuaries to ensure the strategic deployment of scarce resources and control against “random acts of restoration”;<sup>18</sup>
- adopting criteria prioritizing large-scale solutions;<sup>19</sup>
- providing funding to project proponents to assist with coordination across funding streams, to promote early coordination on permitting, and to host meetings and workshops to facilitate regional planning processes and coordination with a broad array of stakeholders;<sup>20</sup>
- requiring that projects consider and use best-available science on sea-level rise, water quality, and other risks affecting coastal restoration;<sup>21</sup>
- promoting adaptive management approaches;<sup>22</sup>
- calling for early coordination and increased efficiency on permitting and environmental review processes<sup>23</sup> and the use of U.S. Army Corps of Engineers’ statutory authority to accept outside funds to pay for staff time to review and expedite environmental permitting and review;<sup>24</sup>
- using external reviewers to inform project selection;<sup>25</sup> and
- recognizing the need to have consistent protocols for monitoring and measuring project outcomes and funding a Council Monitoring and Assessment Work Group.<sup>26</sup>

The Council approved its Initial FPL in December 2015, which focused on two restoration goals laid out in the Comprehensive Plan (i.e., Goal 1: restoring and conserving habitat and Goal 2: restoring water quality), and announced projects to be funded that align with these goals. The Initial FPL organized projects around ten priority watersheds or estuaries in the areas affected by the spill to advance holistic restoration projects that can deliver the greatest environmental benefits in those watersheds.<sup>27</sup> The RESTORE Council also announced its intent to limit the number of future FPLs to allow the Council to pool resources from multiple years’ worth of funding allocations and to identify innovative financing opportunities.<sup>28</sup>

## Natural Resource Damage Assessment and Restoration (NRDA) Funding

In addition to the RESTORE money, up to \$8.8 billion<sup>29</sup> in penalties are also to be paid based upon an assessment of damages to natural resources under the Oil Pollution Act (OPA).<sup>30</sup> When oil is spilled in U.S. waters, OPA establishes liability for response and restoration costs caused by the spill. OPA sets up a process by which a panel of state and federal “Trustees,”<sup>31</sup> acting on behalf of the public’s interest in affected resources, conduct a natural resource damage assessment (NRDA) to determine the extent of the injury and the costs of mitigating the impacts of the spill.<sup>32</sup> Unlike RESTORE funds, NRDA funds must be applied to projects that directly remediate the injury to that resource caused by the spill and, thus, have different rules and requirements for their use.<sup>33</sup>

Rather than identifying specific restoration projects, the DWH Trustees took a programmatic approach to planning by developing a comprehensive, integrated ecosystem restoration plan that provides a blueprint for guiding restoration efforts.<sup>34</sup> In February 2016, the NDRAR Trustees adopted a final Programmatic Damage Assessment and Restoration Plan<sup>35</sup> (with a Final Programmatic Environmental Impact Statement<sup>36</sup>), which included three components: (1) a damage assessment evaluating the impacts from the DWH spill on natural resources in the Gulf of Mexico and determining the types and amount of restoration needed to compensate the public for those impacts; (2) a restoration plan for remediating the injuries to natural resources in the Gulf caused by the spill; and (3) a Programmatic Environmental Impact Statement (PEIS) evaluating the environmental impacts of the proposed restoration plan and plan alternatives in compliance with NEPA.

The Restoration Plan allocates settlement funds to thirteen restoration types designed to achieve five restoration goals:

- **Goal 1:** Restore and Conserve Habitat (including the restoration types of wetlands, coastal, and nearshore habitats and habitat projects on federally-managed lands)
- **Goal 2:** Restore Water Quality (including the restoration types of nutrient reduction and water quality improvement)
- **Goal 3:** Replenish and Protect Living Coastal and Marine Resources (including the restoration types of fish and water column invertebrates, sturgeon, submerged aquatic vegetation, oysters, sea turtles, marine mammals, birds, and mesophotic and deep-benthic communities)
- **Goal 4:** Provide and Enhance Recreational Opportunities
- **Goal 5:** Provide for Monitoring, Adaptive Management, and Administrative Oversight to Support Restoration Implementation

Seven Trustee Implementation Groups (TIGs; one for each of the five affected states, a region-wide TIG comprising all of the trustees, and an Open Ocean TIG with just the federal trustees)<sup>37</sup> were established to identify, evaluate, and select specific restoration projects that could be implemented with the funding allocated to their restoration area consistent with the Programmatic Restoration Plan.<sup>38</sup>

When specific restoration projects are advanced, each project will have to comply with its own environmental review and permitting requirements. However, because the NRDA Trustees developed a programmatic EIS for the Restoration Plan, individual projects will likely enjoy expedited environmental reviews because agencies can adopt, incorporate by reference, or tier from the PEIS (in whole or part) in lieu of completing a full standalone environmental review for each project.<sup>39</sup> In addition to setting overall direction and priorities, the PEIS is a positive example of coordinated foresight to increase project-specific efficiency and minimize duplication of environmental review efforts across the region.

## National Fish and Wildlife Foundation (NFWF) Funding

A third source of funding (\$2.544 billion), in settlement of criminal penalties from BP and Transocean, is being administered by the National Fish and Wildlife Foundation (NFWF) through the Gulf Environmental Benefit Fund (GEBF). Legal agreements specified that over \$2.5 billion be directed to NFWF for the purpose of funding projects to restore natural resources affected by the spill. Approximately half of the payments are going towards Louisiana projects,<sup>40</sup> and the other half are to be split among the remaining states (28% each to Alabama, Florida, and Mississippi, and 16% to Texas). The GEBF funding priorities are: to (1) restore and maintain ecological functions of landscape-scale coastal habitats; (2) restore and maintain the ecological integrity of priority coastal bays and estuaries; and (3) replenish and protect living resources (including oysters, reef fish, bird populations, sea turtles, and marines mammals).<sup>41</sup>

Although some of the GEBF funds have been used to support projects, NFWF has also prioritized planning and pre-project engineering and design to help lay the groundwork for projects to receive funding from other sources. Some of the funding helped the states develop a comprehensive watershed approach for restoration efforts pursued with DWH funding (e.g., the Mississippi Coastal Restoration Plan was developed with GEBF funding). Funds also supported engagement with important stakeholders in each state (e.g., organizations and individuals representing environment interests, fisheries, and tourism).



## APPENDIX B - ENDNOTES

- <sup>1</sup> The funds settle criminal and civil claims under the Clean Water Act and Oil Pollution Act brought against British Petroleum (BP), Transocean, and other companies responsible for causing the oil spill. Section 311(b)(v) (33 U.S.C. § 1321) of the Clean Water Act prohibits the “discharge of oil or hazardous substances . . . into or upon the navigable waters of the United States, [or] adjoining shorelines . . . in such quantities as may be harmful.” Under the Section 311, owners, operators, and persons in charge of vessels, onshore and offshore facilities responsible for a discharge are subject to civil penalties. The Clean Water Act also established the Oil Spill Liability Trust Fund to pay for oil spill response activities and to recover cleanup costs from responsible parties. The settlement also resolves claims under the Oil Pollution Act, which establishes liability for damages relating to an oil spill incident in U.S. waters.
- <sup>2</sup> Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act of 2012 (RESTORE Act), P.L. 112-141, Div. A, Tit. I, Subtit. F (§§ 1601-08).
- <sup>3</sup> *Id.* at § 1602(b) (“The Secretary of the Treasury shall deposit in the Trust Fund an amount equal to 80 percent of all administrative and civil penalties paid by responsible parties after the date of enactment of this Act in connection with the explosion on, and sinking of, the mobile offshore drilling unit Deepwater Horizon pursuant to a court order, negotiated settlement, or other instrument in accordance with section 311 of the Federal Water Pollution Control Act (33 U.S.C. 1321).”).
- <sup>4</sup> 33 U.S.C. § 1321(t)(2).
- <sup>5</sup> Certain specified counties and parishes in Florida and Louisiana are also eligible as direct applicants for grants through the Direct Component; in these cases, the counties and parishes receive specified portions of the state’s one-fifth share of the Direct Component funding. 33 U.S.C. § 1321(t)(1)(C)-(D).
- <sup>6</sup> The Department of the Treasury, which administers the Direct Component funding, has developed guidelines setting out requirements for Multiyear Implementation Plans (MIPs) that the states and eligible local governments must follow before receiving funds. In December 2015, the Department of the Treasury issued a final rule laying out the policies and procedures relating to the Gulf Coast Ecosystem Restoration Trust Fund and to each of the five buckets, including setting out requirements for states’ MIPs. U.S. Dep’t of the Treasury, Department of the Treasury Regulations for the Gulf Coast Restoration Trust Fund, 80 Fed. Reg. 77,239 (Dec. 14, 2015) (codified at 31 C.F.R. pt. 34). The final rule followed two iterations of interim final rules, issued in August and October 2014. *See also*, e.g., 31 C.F.R. §§ 34.201, 34.303 & 34.305 (describing eligible activities, application procedures and MIP requirements, and uses of funds for the Direct Component).
- <sup>7</sup> The RESTORE Council’s Comprehensive Plan is an important document because 60 percent of projects receiving RESTORE funding must be consistent with the plan. The Council adopted its first Plan in 2013 and adopted an update to the Plan in 2016. The Plan provides region-wide restoration goals and a framework for funding restoration projects and specifies the process by which the Council will approve State Expenditure Plans. The 2016 Plan update lays out five goals for restoration efforts to: (1) restore and conserve habitat; (2) restore water quality and quantity; (3) replenish and protect living coastal and marine resources; (4) enhance community resilience; and (5) restore and revitalize the Gulf economy. The Plan also lays out priority criteria for evaluating and prioritizing projects to receive funding under the Council-selected component (“Bucket 2”): (1) projects will make the greatest contribution to restoring and protecting natural resources, ecosystems, fisheries, habitats, beaches, and coastal wetlands without regard to geographic location; (2) large-scale projects that will substantially contribute to restoration goals; (3) projects consistent with existing state comprehensive plans for restoration and protection of coastal resources; and (4) projects that restore the long-term resiliency of natural resources and ecosystems. GULF COAST ECOSYSTEM RESTORATION COUNCIL, COMPREHENSIVE PLAN UPDATE 2016: RESTORING THE GULF COAST’S ECOSYSTEM AND ECONOMY (2016) [hereinafter RESTORE CP2016], available at [https://www.restorethegulf.gov/sites/default/files/CO-PL\\_20161208\\_CompPlanUpdate\\_English.pdf](https://www.restorethegulf.gov/sites/default/files/CO-PL_20161208_CompPlanUpdate_English.pdf). The 2016 Plan supersedes the 2013 Initial Comprehensive Plan to provide “strategic guidance that will help the Council more effectively address these complex and critical challenges” (i.e., improve Council decisions). *Id.* at 5.
- <sup>8</sup> The RESTORE Council approved its initial Funded Priority List (FPL) on December 9, 2015. The Initial FPL focused on Goals 1 and 2 of the Comprehensive Plan — restoring and conserving habitat and improving water quality. The Initial FPL organized projects around ten priority watersheds or estuaries in the affected states in an attempt to advance holistic restoration projects that can deliver the greatest environmental benefits in priority watersheds. Gulf Coast Ecosystem Restoration Council, *Initial (2015) Funded Priorities List*, RESTORETHEGULF.GOV [hereinafter Initial FPL], <https://www.restorethegulf.gov/council-selected-restoration-component/initial-2015-funded-priorities-list> (last visited May 15, 2018).
- <sup>9</sup> 33 U.S.C. § 1321(t)(3)(A). Pursuant to a formula developed by the RESTORE Council, the states were allocated funds based upon the miles of shoreline affected by the oil spill, distance from the spill site, and populations within affected counties. Gulf Coast Ecosystem Restoration Council, RESTORE Act Spill Impact Component Allocation, 80 Fed. Reg. 58,417 (Sept. 29, 2015) (codified at 40 C.F.R. pt. 1800). Application of this formula, resulted in the following allocation of Bucket 3 funds: Alabama (20.4%), Florida (18.36%), Louisiana (34.59%), Mississippi (19.07%), and Texas (7.58%). *Id.*; RESTORE CP2016, *supra* n.7, at 30.
- <sup>10</sup> 33 U.S.C. § 1321(t)(3)(B)(i).
- <sup>11</sup> Gulf Coast Ecosystem Restoration Council, *Spill Impact Component*, RESTORETHEGULF.GOV, <https://www.restorethegulf.gov/spill-impact-component> (last visited May 8, 2018).

- <sup>12</sup> Louisiana combined the MIP and SEP into a single integrated [RESTORE Plan](#), which was finalized in January 2017 and [approved](#) by both the Department of the Treasury and the RESTORE Council in March 2017. The state opted for this integrated approach given the nearly identical overlap of eligible activities for both components and the similarity in planning requirements for both. COASTAL PROT. & RESTORATION AUTH. (CPRA), STATE OF LA., THE STATE OF LOUISIANA'S FIRST AMENDED RESTORE PLAN 4 (approved Jan. 18, 2017), available at <http://coastal.la.gov/deepwater-horizon-oil-spill-content/oil-spill-overview/restore-act/>.
- <sup>13</sup> RESTORE Act, *supra* n.2, at § 1604.
- <sup>14</sup> *Id.* at § 1605.
- <sup>15</sup> The 2016 Plan superseded the 2013 Initial Comprehensive Plan to provide “strategic guidance that will help the Council more effectively address these complex and critical challenges” (i.e., improve Council decisionmaking and outcomes). RESTORE CP2016, *supra* n.7, at 5.
- <sup>16</sup> *Id.* at 10. The goals as laid out in the 2016 Update are the same as in the Initial Comprehensive Plan, except that water quantity was added in the Update to the second goal relating to water quality.
- <sup>17</sup> The RESTORE Act directs the Council to give highest priority to projects that meet one of the following criteria:
- (I) Projects that are projected to make the greatest contribution to restoring and protecting the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast region, without regard to geographic location within the Gulf Coast region.
  - (II) Large-scale projects and programs that are projected to substantially contribute to restoring and protecting the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast ecosystem.
  - (III) Projects contained in existing Gulf Coast State comprehensive plans for the restoration and protection of natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast region.
  - (IV) Projects that restore long-term resiliency of the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands most impacted by the Deepwater Horizon oil spill.
- 33 U.S.C. § 1321(t)(2)(D)(iii).
- <sup>18</sup> See RESTORE CP2016, *supra* n.7, at 22.
- <sup>19</sup> *Id.* at 19.
- <sup>20</sup> The RESTORE Council issued a Funded Priorities List: Comprehensive Plan Commitment and Planning Support (FPL-CPS) in 2017, announcing funding that would be provided to Council members specifically to improve coordination and collaboration efforts. One of the purposes of the FPL-CPS funding is to “facilitate long-term planning and leveraging efforts across funding streams,” and the Council “anticipates that the CPS funds will be used to collaborate with the Deepwater Horizon NRDA Trustees, NFWF's GEBF and/or other relevant funding programs.” RESTORE COUNCIL, FUNDED PRIORITIES LIST: COMPREHENSIVE PLAN COMMITMENT AND PLANNING SUPPORT 2-3, available at [https://www.restorethegulf.gov/sites/default/files/2017\\_CPS\\_FPL\\_Final.pdf](https://www.restorethegulf.gov/sites/default/files/2017_CPS_FPL_Final.pdf). Provision of this type of funding for improved coordination, hosting workshops, etc. was called for in the RESTORE Comprehensive Plan (2016 Update). RESTORE CP2016, *supra* n.7, at 22.
- <sup>21</sup> RESTORE CP2016, *supra* n.7, at 23, 26.
- <sup>22</sup> *Id.* at 27.
- <sup>23</sup> *Id.* at 26.
- <sup>24</sup> Section 214 of the Water Resources Development Act (WRDA) of 2000, as amended (33 U.S.C. § 2352) provides the Secretary of the Army authority to accept funds from certain entities (e.g., non-Federal public entities, public utilities, and others) to expedite review of permit applications. Similar authority is provided to the Secretary of Transportation, to authorize the provision of non-federal public funds to federal agencies to assist with the environmental review process for certain transportation projects or programs. 23 U.S.C. § 139(j); see also *Section 214/Transportation Information*, U.S. ARMY CORPS OF ENG'RS, <http://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/Section-214/> (last visited May 15, 2018).
- <sup>25</sup> RESTORE CP2016, *supra* n.7, at 27.
- <sup>26</sup> *Id.* at 27-28.
- <sup>27</sup> The priority watersheds included the following: The Laguna Madres (TX), Matagorda Bay (TX), Galveston Bay (TX), Mississippi River Delta (LA, MS), Mississippi Sound (MS), Mobile Bay (AL, MS), Pensacola Bay (FL, AL), Apalachicola Bay (FL), Suwannee Watershed (FL), and Tampa Bay (FL). Initial FPL, *supra* n.8, at 12-19.
- <sup>28</sup> RESTORE CP2016, *supra* n.7, at 19.
- <sup>29</sup> In April 2011, the DWH NRDA Trustees reached an agreement with BP under which BP committed to providing \$1 billion for early restoration efforts and an additional \$7.1 billion was awarded pursuant to the final consent decree, with up to an additional \$700 million being allocated to support adaptive management. *Deepwater Horizon*, ENV'T & NATURAL RES. DIV., U.S. DEP'T OF JUSTICE, <https://www.justice.gov/enrd/deepwater-horizon> (last visited May 15, 2018).



- <sup>30</sup> Oil Pollution Act (OPA), P.L. 101-380 (1990), 33 U.S.C. §§ 2701 *et seq.* OPA establishes liability for injuries, response, and restoration costs relating to the discharge of oil into U.S. waters, and creates a process for assessing damages — called natural resource damage assessment or NRDA. The NRDA process is designed to determine the extent of injuries to natural resources that occur as a result of an oil spill, and to develop a plan for restoration that will address those injuries. Federal, state, and in some cases local, officials are designated as public “trustees” for damaged natural resources and are responsible for leading the assessment of damages and the restoration efforts to mitigate the impacts from a spill. *See* 33 U.S.C. § 2706; 15 C.F.R. § 990.11.
- <sup>31</sup> In the wake of the spill, a Deepwater Horizon Natural Resource Damage Assessment Trustee Council (DWH NRDA Trustee Council) was formed, comprising representatives from four federal agencies with jurisdiction over impacted resources (Department of the Interior, Department of Commerce/National Oceanic and Atmospheric Administration, Environmental Protection Agency, and Department of Agriculture) and representatives from the five Gulf states (Alabama, Florida, Louisiana, Mississippi, and Texas). DEEPWATER HORIZON NATURAL RESOURCE DAMAGE ASSESSMENT TRS, DEEPWATER HORIZON OIL SPILL: FINAL PROGRAMMATIC DAMAGE ASSESSMENT AND RESTORATION PLAN AND FINAL PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT 1-5 (Feb. 2016) [hereinafter Final PDARP/PEIS], available at <http://www.gulfspillrestoration.noaa.gov/restoration-planning/gulf-plan>.
- <sup>32</sup> 33 U.S.C. § 2706.
- <sup>33</sup> *See* 15 C.F.R. § 990.53 (describing the development of restoration alternatives).
- <sup>34</sup> Restoration goals are among the requirements of a Restoration Plan under the OPA regulations. 15 CFR § 990.55.
- <sup>35</sup> The PDARP was developed as a programmatic Restoration Plan because of the “ecosystem-level nature of the injuries.” Final PDARP/PEIS, *supra* n.31, at ch. 1, § 1.3.1.
- <sup>36</sup> OPA requires that the restoration plan be integrated with NEPA review and compliance (15 C.F.R. § 990.23 (“when a federal trustee proposes to take restoration actions under this part, it must integrate this part with NEPA, the CEQ regulations, and NEPA regulations promulgated by that federal trustee agency.”)). The final PDARP/PEIS evaluates programmatic alternatives to restoring natural resources, ecological services, and recreational uses that were injured due to the DWH spill incident, and also evaluates the environmental consequences (direct, indirect, and cumulative impacts) of those alternatives under NEPA. NOAA was the lead agency for completing the environmental review in compliance with NEPA.
- <sup>37</sup> For more information on the region-wide and individual restoration areas and TIGs, see *Gulf Spill Restoration*, NAT’L OCEANIC & ATMOSPHERIC ADMIN., <http://www.gulfspillrestoration.noaa.gov/> (last visited May 15, 2018).
- <sup>38</sup> The PDARP provides guidance to help each TIG (the Region-Wide, Open Ocean, and state TIGs) in evaluating and selecting future restoration projects, rather than identifying specific restoration projects within the PDARP itself. However, the amount of NRD funds going to each restoration area (region-wide, open ocean, and each of the five states) for the purposes of each restoration goal and type is pre-determined by the [DWH settlement](#) with BP (the amounts of which can be seen in the consent decree documents hosted at the Department of Justice’s Deepwater Horizon webpage at <https://www.justice.gov/enrd/deepwater-horizon>). Each restoration area’s TIG must administer their NRD funding in a manner consistent with the PDARP and with the allocations for specific restoration types.
- <sup>39</sup> *See* Final PDARP/PEIS, *supra* n.31, at 7-14–7-15 (“TIGs will integrate into draft and final restoration plans the appropriate level of NEPA analysis tiered from this PEIS (Chapter 6, Environmental Consequences and Compliance with Other Laws, provides additional detail on tiering) . . . or a tiered NEPA analysis, the Trustees must analyze the affected environment and environmental impacts with a focus on project-specific issues not addressed in this PEIS . . .”).
- <sup>40</sup> In the case of Louisiana specifically, the agreements dictate that the payments 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, in order to remedy harm to those resources where there has been injury to, or destruction of, loss of, or loss of use of those resources resulting from the Macondo oil spill.” The agreements further specify that NFWF is to consult with state and federal resource managers, and to consider Louisiana’s Coastal Master Plan, in determining the highest priority projects. BP Guilty Plea Agreement, Exhibit B, para. 37 (Nov. 2012), available at <http://www.nfwf.org/gulf/Documents/us-v-bp-plea-agreement.pdf>; Transocean Cooperation Guilty Plea Agreement, Order, para. 4 (Jan. 3, 2013), available at <http://www.nfwf.org/gulf/Documents/transocean-plea-agreement%20p2.pdf>.
- <sup>41</sup> *See, e.g.*, STATE OF FLA., FLORIDA GULF ENVIRONMENTAL BENEFIT FUND DRAFT RESTORATION STRATEGY VII (Sept. 2016), available at [https://softlive.dep.state.fl.us/sites/default/files/draft\\_restoration\\_strategy\\_0916.pdf](https://softlive.dep.state.fl.us/sites/default/files/draft_restoration_strategy_0916.pdf).

## APPENDIX C — Summary of Environmental Review and Permitting Requirements for DWH Projects

### Overview of Environmental Review and Permitting Requirements

In addition to meeting the requirements of the different funding sources, project proponents will also have to navigate a complex regime of laws and regulations to implement these projects. Coastal projects, in particular, often require compliance with a number of different laws and input from a variety of federal agencies. Federal environmental laws triggered by coastal restoration projects often include the National Environmental Policy Act (NEPA), Clean Water Act (CWA), Rivers and Harbors Act (RHA), Endangered Species Act (ESA), and Marine Mammals Protection Act (MMPA), among others. These laws were all passed in the 1970s (or earlier) without consideration of climate change impacts to habitats, species, and coastal geographies. Although compliance with these statutes takes time and human and financial capital, these laws all provide important safeguards for ensuring public safety and environmental sustainability. Thus, when evaluating ways to expedite permitting and environmental review, it is important to acknowledge the valuable purposes served by the rules and processes established by these laws while also acknowledging the need to accommodate new considerations of changing environmental conditions.

The following presents an overview of some of the main environmental statutes that must be complied with to implement many of the restoration projects being proposed along the Gulf Coast.

- **National Environmental Policy Act (NEPA)** — “Major” federal agency actions require environmental review under the National Environmental Policy Act.<sup>1</sup> Many of the larger-scale restoration projects will require a full Environmental Impact Statement (EIS) describing the scope of the project, potential environmental impacts (including direct and indirect individual and cumulative impacts), and different project alternatives (including a “no-action” alternative).<sup>2</sup> EISs can also be used as a singular document to provide the scientific data and analyses needed to determine compliance with the different environmental laws and regulations triggered by a project (e.g., Clean Water Act and Endangered Species Act compliance), described below. Additionally, where more than one agency has jurisdiction over — or interest in a project — a “lead” agency can be designated to guide and coordinate production of an EIS. For example, with many coastal restoration projects the U.S. Environmental Protection Agency (EPA) and Army Corps of Engineers (USACE or Corps) evaluate potential impacts to water quality and the National Marine Fisheries Service (NMFS) or U.S. Fish and Wildlife Service (FWS) evaluate potential impacts to protected species and their habitats. One lead agency, such as the Corps, can help to lead development of an EIS and coordinate reviews with all other agencies. Although environmental review involves time and expense, the NEPA review process can provide a useful framework for improving agency coordination, minimizing environmental impacts, laying the groundwork for adaptive management, engaging the public, and building public support. As case studies in this report illustrate, NEPA can be a powerful tool for improving project outcomes.
- **Section 10 of the Rivers and Harbors Act (RHA) and Section 404 of the Clean Water Act (CWA)** — Projects that may affect navigation or that involve dredging or filling in wetlands or waterways require permits from the Corps under Section 10 of the Rivers and Harbors Act<sup>3</sup> and Section 404 of the Clean Water Act.<sup>4</sup> The Corps has issued Nationwide General Permits<sup>5</sup> to provide expedited review for certain categories of similar activities, often smaller-scale projects (including maintenance of existing structures, construction of small seawalls, and minor discharges or dredging).<sup>6</sup> In 2017, the Corps issued a Nationwide Permit for Living Shorelines, which may provide a streamlined mechanism for permitting smaller-scale (i.e., no more than 500-feet in length) nature-based erosion control projects in the Gulf Coast region.<sup>7</sup> Larger-scale projects, however, will often require an individual permit, which involves more detailed, site-specific review. Individual permits also require consultation with other federal and state agencies including the EPA regarding environmental impacts<sup>8</sup> and state agencies to ensure compliance with a state’s water pollution



control standards (per Section 401 of the Clean Water Act)<sup>9</sup> and the state’s coastal zone management program (per Section 307(c) of the Coastal Zone Management Act).<sup>10</sup> Many of the more complex restoration projects that could involve the conversion of habitats or impacts to species will likely trigger the Corps’ individual permit process and could require consultation with NMFS.

- **Section 408 of the Rivers and Harbors Act** — Projects that could affect Corps civil works projects (i.e., flood protection or water infrastructure projects constructed by the Corps with federal funds) also require a permit under Section 408 of the RHA.<sup>11</sup> The Corps can only issue a permit if it finds that the alteration will not be injurious to the public interest and will not impair the usefulness of the asset.<sup>12</sup> Some of the Gulf restoration projects — such as the sediment diversion projects in Louisiana — call for alterations to the Mississippi River levee system and will thus require a Section 408 permit from the Corps.
- **Section 7 of the Endangered Species Act (ESA)** — Many of the Gulf Coast restoration projects could also affect endangered or threatened species<sup>13</sup> or their habitats and, thus, may trigger review under the Endangered Species Act (ESA). ESA prohibits the “taking” of any listed species.<sup>14</sup> The term “take”<sup>15</sup> is defined to include harming or harassing individual animals, or destroying a species’ “critical habitat.”<sup>16</sup> If a project could affect a listed species, a federal agency issuing permits (or otherwise directing or funding a project) must consult with NMFS or FWS<sup>17</sup> and the project could require a Biological Opinion and Incidental Take Statement. Project proponents may also be required to mitigate potential adverse impacts to listed species.
- **Marine Mammal Protection Act (MMPA)** — Projects that could affect marine mammals will also trigger review and permitting under MMPA. MMPA places a moratorium on actions that could result in the “take”<sup>18</sup> of a marine mammal (the definition of “take” includes injury, harassment,<sup>19</sup> or killing). Certain “small takes” may be authorized; however, a project proponent must show that only a small number of marine mammals will be affected and that the activity will only have a “negligible impact on the species or stocks.”<sup>20</sup>
- **Section 106 of the National Historic Preservation Act (NHPA)** — NHPA<sup>21</sup> requires federal agencies to account for impacts<sup>22</sup> to properties listed on the National Register of Historic Properties or properties that could be eligible for inclusion on the Register, including sunken vessels.<sup>23</sup> To determine whether a site may have a historic property, the National Register must be consulted, and archival research and archeological surveys may be required, as well as consultation with experts and interested parties.<sup>24</sup> Adverse effects to historic properties must be avoided, minimized, and mitigated.<sup>25</sup> If historic properties are discovered during the construction of a project, the applicant must avoid further harm to the site (by stopping construction if possible).
- **Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act)** — The Magnuson-Stevens Act<sup>26</sup> provides for the conservation and management of the nation’s fisheries and limits actions that have an adverse effect on Essential Fish Habitat (EFH). The Act requires development of Fisheries Management Plans (FMPs) designating EFH for each fishery<sup>27</sup> and specifying actions for minimizing impacts to, conserving, and enhancing EFH.<sup>28</sup> Where a federal action could adversely affect EFHs, the agency must consult with NMFS and analyze possible effects and include actions to mitigate impacts to EFHs.<sup>29</sup>
- **Executive Orders (EO)** — Federal actions affecting coastal resources and environmental justice concerns may also trigger reviews under different executive orders. For example, EO 11988 requires federal agencies to minimize the impacts of federal actions on floodplains;<sup>30</sup> EO 11990 requires federal agencies to preserve and protect wetlands;<sup>31</sup> and EO 12898 requires federal agencies to consider and address environmental justice.<sup>32</sup>

## Spotlight on the Louisiana Sediment Diversion Projects

The projects most cited for demonstrating the challenges posed by the environmental review and permitting process are the sediment diversion projects that are being proposed to rebuild land in coastal Louisiana in the Barataria Bay and Breton Sound. These projects have been designated as high-priority projects for the State of Louisiana, are detailed in the state's Coastal Master Plan, and have been slated for funding from Louisiana's share of the Deepwater Horizon (DWH) settlement.

### Background

The sediment diversion projects would create a channel in the Mississippi River levee system to divert silt and sand being carried down the River to replenish sediments and rebuild marshes that historically characterized the Barataria Bay and Breton Sound. When the levee system along the Mississippi River was created, it directed sediments out into the Gulf of Mexico, depriving these delta ecosystems of the resources needed to build and maintain wetlands. In addition, canals built to expedite oil and gas activity have led to saltwater intrusion, killing marshes.<sup>33</sup> Hurricanes and sea-level rise have also contributed to the loss of coastal wetlands. Damage done during the DWH spill further took a toll on marsh grasses and wetlands that serve as important natural buffers. These cumulative impacts have caused these once-wetland ecosystems to gradually convert to open water.

To address these historic impacts, Louisiana is proposing to build sediment diversion projects. Channels would be created in the levee system to divert sediments from the Mississippi River and replicate the delivery of natural sediment deposits into these estuaries and bays. The hope is that the sediments will gradually rebuild coastal wetlands in these areas to provide natural storm surge buffers for communities in Plaquemines Parish and neighboring Orleans Parish. Two sediment diversion projects are currently moving forward:

- **The Mid-Barataria Sediment Diversion project** would divert approximately 75,000 cubic feet of sediment per second into the Barataria Bay during high-river periods at a total estimated cost of \$1.4 billion. Louisiana's Coastal Protection and Restoration Authority (CPRA) estimates that the project would build 53 square miles of land by 2070 providing needed natural flood buffers for communities in southern Louisiana.<sup>34</sup>
- **The Mid-Breton Sediment Diversion project** would divert 35,000 cubic feet of sediment per second into the Breton Sound. Over 50 years, the state estimates that 70 million tons of sediment will be introduced to the area rebuilding important coastal wetland ecosystems in south Louisiana.<sup>35</sup>

### Regulatory Challenges

Because the sediment diversion projects are novel, they face unique regulatory questions for federal agencies completing environmental review and permitting. Efforts have been made at the state and federal levels, in both the executive and legislative branches, to expedite environmental review and permitting for these projects. In January 2017, the Mid-Barataria sediment diversion project was added to a federal Dashboard designed to expedite high-priority projects,<sup>36</sup> but regulators still estimated that it could take between five to eight years to complete environmental review and permitting. On January 26, 2018, the State of Louisiana signed a memorandum of understanding with seven federal agencies, where all parties agreed to strive to complete environmental review and permitting for the Mid-Barataria diversion project on an expedited timeline, in accordance with applicable law.<sup>37</sup> Then on February 9, 2018, the Bipartisan Budget Act of 2018<sup>38</sup> was signed into law, which included provisions issuing a waiver from MMPA permitting requirements for both diversion projects.<sup>39</sup> Given the presence of marine mammal species in the bays, MMPA compliance raised complex questions that no longer have to be confronted given this legislative waiver.

While these provisions in the Budget Act will preclude the need for an MMPA incidental take authorization for the sediment diversion projects, these projects will still require environmental review under NEPA and compliance with other federal statutes. To issue permits, federal regulators will need to assess compliance with as many as 82 different federal laws and executive orders all designed to protect people, infrastructure, and natural and historical resources.<sup>40</sup> These two water bodies house important habitats for species and wetlands. Because former wetlands in these areas were converted to open water as a result of the levee system, they have now



become home to many species, including bottlenose dolphins, and economically important fisheries, including shrimp and oyster fisheries.

Additionally, these projects, collectively, would be one of the first sediment diversion projects implemented in the U.S.<sup>41</sup> Accordingly, the projects may raise new and complex questions about environmental review and permitting because there is, in many ways, no precedent or “test case” for assessing the potential environmental effects of either project or for determining how either project might be operated differently to minimize negative impacts to the environment and stakeholders.

This section describes some of the laws that regulators will need to consider as they evaluate permits for both sediment diversion projects in the sensitive environmental context of the Gulf.

- **MMPA** — Approximately 2,000 dolphins live in the Barataria Bay and 800 live in the Breton Sound.<sup>42</sup> The sediment diversion projects would introduce both freshwater and sediment into these water bodies, which NMFS has indicated could adversely affect the resident dolphins.<sup>43</sup> There was concern that MMPA could impede implementation of the sediment diversion projects because of uncertainties about how the dolphins would respond to the changes in the water’s salinity as the diversions are operated. These MMPA compliance concerns, however, were removed legislatively by provisions added to the 2018 Budget Act issuing a waiver from MMPA permitting requirements for the Mid-Barataria and Mid-Breton projects.<sup>44</sup> Absent these provisions, the project would have required a “take” authorization from NMFS. Under the MMPA, such an authorization can only be issued for activities that will have a “negligible impact” on the species or the stock.<sup>45</sup> Given the uncertainty of the impacts to marine mammal species in these water bodies, MMPA posed complex compliance questions about how to balance restoration of degraded ecosystems that have become home to marine mammal species.
- **RHA Section 408** — The diversion projects also involve alterations to the Mississippi River levee system, a Corps civil works project, requiring a permit under RHA Section 408. The Corps will review the proposed project to ensure that it will not cause injury to the public’s interest in the levee system and that the design will not limit the ability of the levees to perform their intended purpose of providing important flood-risk-reduction benefits.
- **RHA Section 10/CWA Section 404** — Because the diversion projects will add sediment to these water bodies, these projects must also be evaluated for their impacts to navigability, shipping, and wetlands. As part of this review the Corps, EPA, and state regulators will also evaluate impacts to water quality caused by changes in salinity and the addition of sediment to these water bodies. Given the novelty of these projects, it is likely that an individual permit (in lieu of a Nationwide General Permit) will be required considering site-specific impacts to wetlands from the diversions.
- **ESA** — The projects will be reviewed for impacts to threatened and endangered species (including sea turtles) and their habitats in the project areas and additional consultation with resource agencies may be required.
- **Magnuson-Stevens Act** — Regulators will also have to evaluate how the project could affect fisheries in federal waters and Essential Fish Habitats in these water bodies (including important shrimp and oyster fisheries) and the effects on commercial and recreational fishing.

In addition to complying with federal permitting, Louisiana wants to apply an adaptive management approach for operating the sediment diversion projects and minimizing the impacts of the project on species and habitats in the project areas. Federal agencies have occasionally recognized adaptive management approaches in federal permits authorizing activities with uncertain environmental impacts.<sup>46</sup> However, the sediment diversion projects provide an important opportunity for federal and state agencies to evaluate the use of adaptive management approaches for authorizing large-scale restoration projects in compliance with federal environmental statutes and using adaptive management as a strategy for minimizing project impacts that are uncertain at the time of permitting.

## APPENDIX C - ENDNOTES

- <sup>1</sup> 42 U.S.C. §§ 4321 *et seq.* NEPA aims to promote informed decisionmaking and ensure that federal decisions account for the range of potential social, economic, environmental, and other interests for both present and future generations. NEPA states that the federal government has a continuing responsibility to improve and coordinate federal decisions and actions such that the Nation may:
  - (1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
  - (2) assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
  - (3) attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
  - (4) preserve important historic, cultural, and natural aspects of America's national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice;
  - (5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and
  - (6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.
- 42 U.S.C. § 4331.
- <sup>2</sup> 40 C.F.R. § 1502 (2010).
- <sup>3</sup> Rivers and Harbors Act (RHA) of 1899, 33 U.S.C. §§ 401 *et seq.* RHA Section 10 makes it unlawful to “excavate or fill, or in any manner to alter or modify the course, location, condition, or capacity of, any port, roadstead, haven, harbor, canal, lake, harbor, or refuge, or inclosure within the limits of any breakwater or of the channel of any navigable water without the appropriate permit.” Accordingly, RHA Section 10 gives the Corps authority to permit any activity that obstructs “navigable waters.” RHA limits the term “navigable waters” to those waters that are truly navigable. 33 U.S.C. § 403.
- <sup>4</sup> 33 U.S.C. § 1344. The Clean Water Act (CWA) expanded the Corps’ jurisdiction to “waters of the United States,” which is more broadly defined than “navigable waters” under RHA. 33 U.S.C. § 1362. This term includes navigable waters and all their tributaries, adjacent wetlands, and other waters or wetlands where degradation or destruction could affect interstate or foreign commerce. *See* 33 C.F.R. § 328.3(a). Under Section 404, permits are required for the discharge of “dredged or fill material” in these waters. For purposes of enhancing efficiency and review, the Corps has combined permitting for eligible activities under CWA and RHA .

“Dredge material” is defined as “material that is excavated or dredged from waters of the United States.” 33 C.F.R. § 323.2(c). “Fill material” is defined as material that “has the effect of: (i) Replacing any portion of a water of the United States with dry land; or (ii) Changing the bottom elevation of any portion of a water of the United States.” 33 C.F.R. § 323.2(e)(1).

While EPA is given authority to regulate point source pollution (i.e., any confined and discrete discharge of pollution, like from a pipe or well), the Corps is authorized by Section 404 of CWA to administer a separate permit program for discharges of dredged or fill material. The Corps Section 404 permit program has evolved into the federal government's primary mechanism to limit development in valuable wetlands. MARK CHERTOK, *FEDERAL REGULATION OF WETLANDS* 976 (American Law Institute-American Bar Association Continuing Legal Education 2011).
- <sup>5</sup> 33 U.S.C. § 1344(e).
- <sup>6</sup> Reissuance of Nationwide Permits, 72 Fed. Reg. 11,101, 11,101 & 11,111-112 (Mar. 12, 2007).
- <sup>7</sup> Nationwide Permit 54 for Living Shorelines authorizes small-scale “living shorelines” projects to stabilize banks in coastal waters. Living shorelines must incorporate mostly native materials and “soft” elements, like vegetation, although some harder shoreline structures (like oyster reefs or rock sills) are allowed provided that “natural continuity of the land-water interface” and natural “shoreline ecological processes” are maintained. Structures and fill cannot extend more than 30 feet into the waterbody from the mean low water line and the living shoreline cannot be more than 500 feet in length. Issuance and Reissuance of Nationwide Permits, 82 Fed. Reg. 1860, 1998 (Jan. 6, 2017) (issuing Nationwide Permit 54).
- <sup>8</sup> Under Section 404(b)(1), the Corps is directed to work with the EPA Administrator to develop permitting guidelines (Guidelines, 33 U.S.C. § 1344(b)(1)). The guidelines were formally adopted as regulations at 40 C.F.R. §§ 230.10 *et seq.* (2010).). The guidelines require that projects minimize impacts on the ecosystem and consider practicable alternatives that would have less adverse environmental impacts. 40 C.F.R. § 230.10(a)-(d).
- <sup>9</sup> 33 U.S.C. § 1341.
- <sup>10</sup> 16 U.S.C. § 1456(c).
- <sup>11</sup> The Corps reviews proposed alterations to civil works projects under 33 U.S.C. § 408. USACE Policy — Engineering Circular 1165- 2-216 defines “alteration” as “any action by any entity other than USACE that builds upon, alters, improves, moves, occupies, or otherwise affects the usefulness, or the structural or ecological integrity, of a USACE project. Alterations also include actions approved as “encroachments” pursuant to 33 C.F.R. § 208.10. U.S. ARMY CORPS OF ENG’RS, ENGINEERING CIRCULAR (EC) 1165-2-216, WATER RESOURCES POLICIES AND AUTHORITIES: POLICY AND PROCEDURAL GUIDANCE FOR PROCESSING REQUESTS TO ALTER U.S. ARMY CORPS OF

ENGINEERS CIVIL WORKS PROJECTS PURSUANT TO 33 U.S.C. § 408 (Sept. 30, 2015), *available at* [http://www.publications.usace.army.mil/Portals/76/Publications/EngineerCirculars/EC\\_1165-2-216.pdf](http://www.publications.usace.army.mil/Portals/76/Publications/EngineerCirculars/EC_1165-2-216.pdf).

- <sup>12</sup> 33 U.S.C. § 408(a).
- <sup>13</sup> Endangered species are defined as species “in danger of extinction throughout all or a significant portion of its range” (16 U.S.C. § 1532(2)) and threatened species are defined as species “likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range” (16 U.S.C. § 1532(20)).
- <sup>14</sup> To garner protection under ESA, the species must be “listed” by the Secretary of the Interior (and Secretary of Commerce for marine and anadromous species) as meeting the definition of endangered or threatened based upon five factors: (1) threats to the species’ habitat or range; (2) overutilization of the species; (3) disease or predation; (4) inadequacy of regulatory protections; and (5) other natural or manmade factors affecting the species’ continued existence. Listing decisions must be made based upon best-available science. 16 U.S.C. § 1533.
- <sup>15</sup> Endangered Species Act, 16 U.S.C. § 1532(19) (definition of “take”) (1982).
- <sup>16</sup> Endangered Species Act, 16 U.S.C. § 1532(5)(a)(i)-(ii) (definition of “critical habitat”) (1982). Critical habitat is defined as:
  - (i) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 1533 of this title, on which are found those physical or biological features
    - (I) essential to the conservation of the species and
    - (II) which may require special management considerations or protection; and
  - (ii) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 1533 of this title, upon a determination by the Secretary that such areas are essential for the conservation of the species.
- <sup>17</sup> Under ESA Section 7 (16 U.S.C. § 1536), a Biological Assessment must be completed if an agency determines that a proposed federal action “may affect” a listed species or its critical habitat. When applicable, the Secretary of the Interior/Commerce must issue a Biological Opinion assessing whether an action could jeopardize the species or its critical habitat and suggest “reasonable or prudent” alternatives to the proposed action. If the action may result in some incidental “take” of a listed species but will not jeopardize the species’ survival, the Secretary may issue an “incidental take authorization” and require reasonable and prudent measures to mitigate harm to the species. 16 U.S.C. § 1536(a)(1)(A); 50 C.F.R. § 402.14(g)(4); 16 U.S.C. § 1539(a)(1); 33 C.F.R. § 325.2(b)(5) (2010).
- <sup>18</sup> 16 U.S.C. § 1362(13) defines “take” as “to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal.” NOAA regulations at 50 C.F.R. § 216.3 mirror this definition of “take.”
- <sup>19</sup> MMPA Section 1362(18)(A) defines “harassment” as “any act of pursuit, torment, or annoyance which —
  - (i) has the potential to injure a marine mammal or marine mammal stock in the wild; or
  - (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering.
- <sup>20</sup> The Marine Mammal Protection Act (MMPA) provides several different pathways for authorizing small “takes” of protected marine mammals. First, 16 U.S.C. § 1371(a)(3)(A) provides the Secretary of Commerce with the power to issue a catch-all waiver of the moratorium, allowing a “take” when certain statutory requirements are met: the waiver must be based on the best-available scientific evidence; issued in consultation with the Marine Mammal Commission; issued with consideration of the “distribution, abundance, breeding habits, and times and lines of migratory movements;” and must assure that the “take” is in accordance with “sound principles of resource protection and conservation.” Waivers are limited for depleted species or stocks. The waiver must also be issued through a formal rulemaking process with public notice and comment.

Second, 16 U.S.C. § 1371(a)(5)(A) provides a process for authorizing incidental (non-intentional) “small takes” for activities unrelated to commercial fishing. Small takes can be authorized for a period up to five years pursuant to either of two types of incidental take authorizations: an Incidental Harassment Authorization (IHA) or Letter of Authorization (LOA). Pursuant to 16 U.S.C. § 1371(a)(5)(D), small takes that only have the potential to cause harassment can be authorized through an IHA for up to one year without a regulatory process. LOAs are required for actions that have the potential to result in serious injury or mortality to marine mammals (or only result in harassment, but for a period of multiple years up to five years) and require a regulatory notice and comment period. All takings must be found to be limited to a specific geographic region and only have a “negligible impact on species or stocks.” A small take authorization must also specify the method of the taking and must ensure that the taking will have the “least practicable adverse impact on such species and stock and its habitat,” and include monitoring requirements. In reviewing applications for small take authorizations, NMFS evaluates the impacts to marine mammals in the area, their habitats, and the availability of marine mammals for subsistence uses. *Incidental Take Authorizations Under the Marine Mammal Protection Act*, NAT’L MARINE FISHERIES SERV., <https://www.fisheries.noaa.gov/node/23111> (last visited May 17, 2018); *see also* Donald C. Baur et al., *The Law of Marine Mammal Conservation*, in *OCEAN AND COASTAL LAW AND POLICY* (Donald C. Baur et al. eds., 2d ed. 2015).

It should also be noted that legislation was introduced in the 115<sup>th</sup> Congress that would have weakened MMPA protections for marine mammals by removing the limitation that exemptions can only be issued for “small takes” and the requirements that “takes” only have a “negligible impact on species and stocks.” Streamlining Environmental Approvals Act, H.R. 3133, 115th Cong. (introduced June 29, 2017), <https://www.congress.gov/bill/115th-congress/house-bill/3133/text>. For a discussion of the proposed bill, see S. Beaux Jones, *Streamlining, Dolphins & Coastal Restoration: How might the proposed Streamlining Environmental Approvals Act of 2017 affect*



coastal restoration efforts?, BALDWIN HASPEL BURKE & MAYER LLC LAW OFFICES (Sept. 12, 2017), <http://bhbmlaw.com/streamlining-dolphins-coastal-restoration-might-proposed-streamlining-environmental-approvals-act-2017-affect-coastal-restoration-efforts/>.

The Bipartisan Budget Act of 2018 also included provisions issuing a waiver from MMPA requirements for two of the Louisiana sediment diversion projects. *See infra* n.39.

- <sup>21</sup> NHPA was originally enacted as Pub. L. No. 89-665 (1966).
- <sup>22</sup> NHPA Section 106 (now codified at 54 U.S.C. § 306108), requires federal agencies to take into account the effects of their directed, authorized, or funded actions to sites, buildings, or structures (collectively “properties”) listed on the National Register of Historic Properties (or eligible for inclusion). Adverse effects to historic properties could include physical destruction, damage or alteration of the property, or a change in the property’s character. 36 C.F.R. § 800.5(a).
- <sup>23</sup> 33 C.F.R. pt. 325, app. C — Procedures for the Protection of Historic Properties.
- <sup>24</sup> Agencies must also consult with experts and interested parties that may have knowledge about unknown historic properties in the project area, including Native American tribes. 36 C.F.R. § 800.4.6. Tribes are defined to include only those “recognized as eligible for special programs and services provided by the United States to Indians because of their status as Indians.” 54 U.S.C. § 300309. While this definition only includes federally recognized tribes, guidance developed by the Advisory Council on Historic Preservation (ACHP) encourages consultation with non-federally recognized tribes as well. ADVISORY COUNCIL ON HISTORIC PRES., GUIDE TO WORKING WITH NON-FEDERALLY RECOGNIZED TRIBES IN SECTION 106 PROCESS (Aug. 2017), *available at* <http://www.achp.gov/docs/Working%20with%20Non-Fed%20Rec%20tribes%20Guidance%20-%208-11-17.pdf>.
- <sup>25</sup> 36 C.F.R. § 800.5(a).
- <sup>26</sup> Magnuson-Stevens Fishery Conservation and Management Act of 1976, 16 U.S.C. §§ 1801-1891d.
- <sup>27</sup> Essential Fish Habitat (EFH) is defined as “those waters and substrates necessary for fish spawning, breeding, feeding, or growth to maturity.” 16 U.S.C. § 1802(10).
- <sup>28</sup> *Id.* at § 1853(a)(7).
- <sup>29</sup> NMFS can provide conservation recommendations and the action agency must provide a detailed response in writing, including a description of any proposed final actions that are inconsistent with NMFS’s conservation recommendations (including a scientific justification for any disagreement with NMFS) and a description of how the action will mitigate impacts to EFH. 16 U.S.C. § 1855; 50 C.F.R. § 600.920. For an example of Corps procedures for complying with Magnuson-Stevens EFH requirements, see SOUTH PACIFIC DIV., U.S. ARMY CORPS OF ENGINEERS, 12504-SPD REGULATORY PROGRAM ESSENTIAL FISH HABITAT (EFH) PROCEDURES (Jan. 2015), *available at* <http://www.spd.usace.army.mil/Portals/13/docs/regulatory/qmsref/efh/efh.pdf>.
- <sup>30</sup> Exec. Order No. 11988, Floodplain Management, 42 Fed. Reg. 26,951 (May 24, 1977).
- <sup>31</sup> Exec. Order No. 11990, Protection of Wetlands, 42 Fed. Reg. 26,961 (May 24, 1977).
- <sup>32</sup> Exec. Order No. 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations (Feb. 11, 1994), 59 Fed. Reg. 7629 (Feb. 11, 1994).
- <sup>33</sup> L.M. Carter et al., *Chapter 17: Southeast and the Caribbean*, in U.S. GLOBAL CLIMATE CHANGE RESEARCH PROGRAM, CLIMATE CHANGE IMPACTS IN THE UNITED STATES: THE THIRD NATIONAL CLIMATE ASSESSMENT 404 (Jerry M. Melillo, Terese “T.C.” Richmond & Gary W. Yohe, eds., 2014), *available at* [http://s3.amazonaws.com/nca2014/low/NCA3\\_Climate\\_Change\\_Impacts\\_in\\_the\\_United%20States\\_LowRes.pdf?download=1](http://s3.amazonaws.com/nca2014/low/NCA3_Climate_Change_Impacts_in_the_United%20States_LowRes.pdf?download=1) (citing B.H. Strauss, R. Ziemlinski, J. L. Weiss & J. T. Overpeck, *Tidally adjusted estimates of topographic vulnerability to sea level rise and flooding for the contiguous United States*, ENVTL. RESEARCH LETTERS 7 (2012 [doi:10.1088/1748-9326/7/1/014033]). Louisiana has one of the highest rates of relative sea-level rise in the world, and accounts for the vast majority of wetland loss in the United States. Krista L. Jankowski, Torbjörn E Törnqvist & Anjali M Fernandes, *Vulnerability of Louisiana’s coastal wetlands to present-day rates of relative sea-level rise*, 8 NATURE COMM’NS 8 (2017) (doi:10.1038/ncomms14792) (indicating that Louisiana accounts for 40% of wetlands in the contiguous U.S., but for 80% of the total wetland loss). Loss of sediment delivery and increasing rates of subsidence are major contributors to the coastal land loss challenges in the region: “While a variety of factors have contributed to Louisiana’s wetland loss problem, the fundamental culprit is the isolation of the sediment-delivery system (the Mississippi River) from its delta plain and the adjacent coastal zone due to the construction of flood-protection levees. As a result, the majority of the sediment carried by this system is funneled into the deep waters of the Gulf of Mexico, rather than offsetting the naturally occurring high subsidence rates.” Jaap H. Nienhuis et al., *The Geological Soc’y of America, A New Subsidence Map for Coastal Louisiana*, 27 GSA TODAY 58(2017) ( doi: 10.1130/GSATG337GW.1). This 2017 GSA study calls for updating Louisiana’s subsidence map and rates, finding that the current subsidence rates (9 millimeter (mm) per year +/- 1 mm) are consistent with the “worst case scenario” rates used throughout the 21st century.
- <sup>34</sup> CPRA describes the Mid-Barataria Sediment Diversion as “a large scale, complex civil works and ecosystem restoration project. When operated, up to 75,000 cubic feet per second (cfs) of sediment laden water would be diverted from the Mississippi River to the mid-Barataria Basin to reconnect and re-establish the natural or deltaic sediment deposition process between the Mississippi River and the Barataria Basin to deliver sediment, freshwater, and nutrients to reduce land loss and sustain wetlands.” CPRA describes that the purpose of the project is to “reconnect and reestablish the natural or deltaic sediment deposition process between the Mississippi River and the

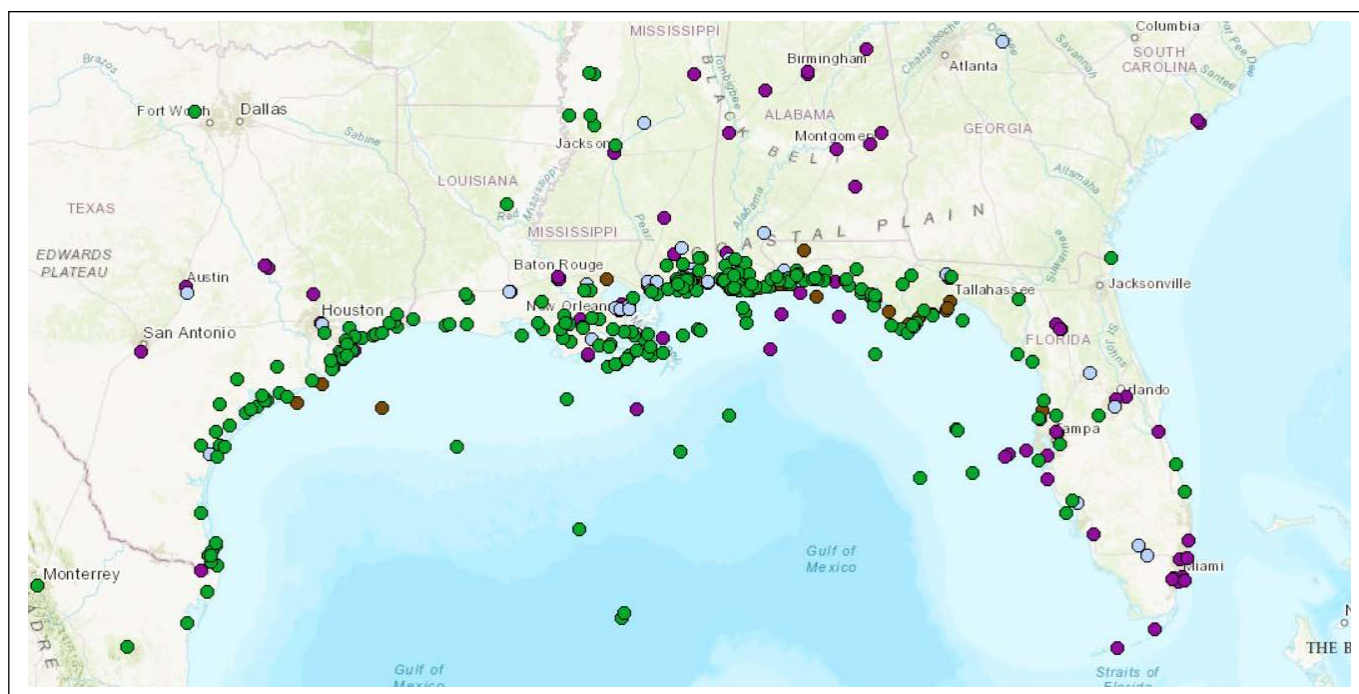
Barataria Basin; the project is needed as a long-term resilient, sustainable strategy to reduce land loss rates and sustain Deepwater Horizon injured wetlands through the delivery of sediment, freshwater, and nutrients.” Coastal Prot. & Res. Auth. (CPRA), State of La., Joint Permit Application (June 23, 2016), available at <https://www.permits.performance.gov/permitting-projects/mid-barataria-sediment-diversion> (last visited May 17, 2018).

- <sup>35</sup> Nat’l Fish & Wildlife Fed’n, Gulf Envtl. Fund, Louisiana Mid-Breton Sediment Diversion: Engineering and Design, <http://www.nfwf.org/gulf/Documents/la-mid-breton-16.pdf> (last updated Feb. 2018).
- <sup>36</sup> In January 2017, the Mid-Barataria sediment diversion project was added to the federal fast-track permitting Dashboard qualifying the project for expedited environmental review and permitting. As part of the Fixing America’s Surface Transportation (FAST or FAST-41) Act enacted in 2015 (42 U.S.C. §§ 4370m *et seq.*), new coordination requirements for the environmental review and authorization processes of certain infrastructure projects were adopted. For projects that are designated as “covered,” a lead agency is selected and responsible for developing a Coordinated Project Plan that outlines how the various NEPA reviews, consultations, and permits or authorizations required for the project will be coordinated and timed to expedite these processes as best as possible. All FAST-41 covered projects are tracked through an online Federal Permitting Dashboard, which is intended to increase transparency in the project delivery process by clearly publicizing the reviews and permits needed for each project and the estimated amount of time for each decision. When the project was first added to the Dashboard, the Corps estimated that environmental review and permitting could take up to eight years. Given legal updates (i.e., MMPA waiver, signed memorandum of understanding between Louisiana and seven federal agencies) presented in this report, that timeline has been reduced. As of June 12, 2018, the Federal Permitting Dashboard shows that the estimated “Target Completion Date” for this project (November 16, 2020) is approximately 32 months from the date the memorandum of understanding was signed. See *Permitting Dashboard, Federal Infrastructure Projects: Mid-Barataria Sediment Diversion*, <https://www.permits.performance.gov/permitting-projects/mid-barataria-sediment-diversion> (last visited May 17, 2018).
- <sup>37</sup> Press Release, Office of the Governor John Bel Edwards, CPRA Signs Landmark MOU with Trump Admin for 2-year federal permitting of Mid-Barataria Sediment Diversion Project (Jan. 26, 2018), <http://gov.louisiana.gov/index.cfm/newsroom/detail/1247>; Exec. Order No. 13807, Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure (Aug. 15, 2017), 82 Fed. Reg. 40,463 (Aug. 24, 2017).
- <sup>38</sup> Pub. L. No. 115-123 (2018).
- <sup>39</sup> Division B, Section 20201 of the Bipartisan Budget Act of 2018 (Pub. L. No. 115-123) includes provisions issuing a waiver for the sediment diversion projects in Louisiana from regulatory requirements of the Marine Mammal Protection Act:
- (a) In recognition of the consistency of the Mid- Barataria Sediment Diversion, Mid-Breton Sound Sediment Diversion, and Calcasieu Ship Channel Salinity Control Measures projects, as selected by the 2017 Louisiana Comprehensive Master Plan for a Sustainable Coast, with the findings and policy declarations in section 2(6) of the Marine Mammal Protection Act (16 U.S.C. 1361 *et seq.*, as amended) regarding maintaining the health and stability of the marine ecosystem, within 120 days of the enactment of this section, the Secretary of Commerce shall issue a waiver pursuant to section 101(a)(3)(A) and this section to section 101(a) and section 102(a) of the Act, for such projects that will remain in effect for the duration of the construction, operations and maintenance of the projects. No rulemaking, permit, determination, or other condition or limitation shall be required when issuing a waiver pursuant to this section.
  - (b) Upon issuance of a waiver pursuant to this section, the State of Louisiana shall, in consultation with the Secretary of Commerce:
    - (1) To the extent practicable and consistent with the purposes of the projects, minimize impacts on marine mammal species and population stocks; and
    - (2) Monitor and evaluate the impacts of the projects on such species and population stocks.
- <sup>40</sup> Bob Marshall, *Permit for first sediment diversion will take at least 2.5 years (and that’s fast)*, THE LENS (Feb. 13, 2017), <https://thelensnola.org/2017/02/13/permit-for-louisianas-first-sediment-diversion-will-take-at-least-2-5-years-and-thats-fast/> (article includes a list of the 82 laws and executive orders with which the Mid-Barataria and other federal projects may have to comply).
- <sup>41</sup> See *id.*
- <sup>42</sup> Mark Schleifstein, *Fate of bottlenose dolphins factors into proposed southeast Louisiana sediment diversions*, TIMES-PICAYUNE (Sept. 1, 2016), [http://www.nola.com/environment/index.ssf/2016/09/new\\_concern\\_for\\_sediment\\_diver.html](http://www.nola.com/environment/index.ssf/2016/09/new_concern_for_sediment_diver.html).
- <sup>43</sup> Mark Schleifstein, *Bottlenose dolphins could be harmed by sediment diversions, scientists say*, TIMES-PICAYUNE (Sept. 1, 2016) (quoting September 3, 2015 letter by Andrew Strelcheck, Assistant Administrator for the National Marine Fisheries Service Southeast Region: “While modeling efforts are still underway, preliminary analyses indicate all the Mississippi River diversion alternatives being considered in the feasibility study will adversely impact resident bottlenose dolphin populations in the Barataria Bay and Breton Sound basins by eliminating suitable estuarine and nearshore coastal habitats . . . This will present a significant permitting challenge under the Marine Mammal Protection Act (MMPA), making it critical for our agencies to closely communicate on marine mammal requirements and issues throughout this process.”)
- <sup>44</sup> See *supra* n.20.
- <sup>45</sup> 50 C.F.R. § 216.104(c).
- <sup>46</sup> See, e.g., case studies on California WaterFix and Glen Canyon Dam included in this report.

## APPENDIX D — Overview of State Restoration Plans and Projects

After the Deepwater Horizon (DWH) spill, each of the Gulf Coast states began taking steps to develop restoration plans and to select projects for allocating the funding they will receive from the DWH settlement. Each state is taking a different approach for determining how to allocate the funds flowing to their state. Louisiana, for example, is using the state's comprehensive Coastal Master Plan to prioritize projects for implementation using DWH settlement funding and to help align restoration efforts across funding streams. The Louisiana Coastal Master Plan used sophisticated predictive modeling to ensure that the state's restoration efforts would be sustainable and help the state build resilience to future sea-level rise, subsidence, precipitation events, and coastal storms. Other states, like Texas, have a comprehensive coastal resilience plan that looks at potential damage from future storms, but it is unclear whether or how the state is using this plan to direct allocations of DWH funding. The following table summarizes the plans that have been adopted in each state to allocate DWH funding and meet programmatic requirements for each of the funding sources.

Each of the states is also focusing on different priority watersheds and habitats and pursuing different types of restoration projects to achieve state-specific goals. In Louisiana, the state is using DWH funding to advance land-building projects like the construction of sediment diversions in the Barataria Bay and Breton Sound. Texas is pursuing both acquisition and restoration projects in coastal areas like the Laguna Madre Watershed, while also pursuing upland projects to restore riparian corridors in the City of Houston and Harris County, which were devastated by Hurricane Harvey in 2017. Mississippi is utilizing dredge spoils to rebuild marshes and is conducting fisheries assessments to help improve ecosystem-based management approaches for important fisheries in the region. Alabama is pursuing projects to rebuild barrier islands that provide important storm-surge protections and projects to acquire and restore high-priority conservation lands, such as properties adjacent to the Bon Secour National Wildlife Refuge. Florida is funding studies to assess management opportunities for fisheries affected by the spill and projects to improve water quality in priority watersheds. A detailed summary of Gulf-wide projects and projects that are being implemented in each state with the different sources of DWH funding can be found on the Environmental Law Institute's Gulf of Mexico Restoration Projects Database.



Deepwater Horizon Projects Throughout the Gulf Coast Region.

Credit: Deepwater Horizon Project Tracker, <http://web.tplgis.org/DWH/>



TABLE OF STATE RESTORATION PLANS

	ALABAMA	FLORIDA	LOUISIANA	MISSISSIPPI	TEXAS
Overarching Resilience Plan	Alabama Coastal Comprehensive Plan under development	No overarching plan	Louisiana's Comprehensive Master Plan for a Sustainable Coast (June 2017)	Mississippi Gulf Coast Restoration Plan (updated 2016) primarily informs uses of NFWF funding. GoCoast 2020 Final Report (2013) informs uses of RESTORE funding.	Texas Coastal Resiliency Master Plan (March 2017) — no apparent uses for DWH-related funding efforts. Conserve, Restore, Renew Framework (2015) guides RESTORE funding.
RESTORE Direct Component (Bucket 1)	Draft Multiyear Implementation Plan (MIP) (April 2018)	N/A — funding is directly awarded to counties and municipalities	Louisiana RESTORE Plan (approved March 2017) meets both MIP (Bucket 1) and SEP (Bucket 3) requirements	Amended Mississippi MIP (July 2017)	Texas MIP (approved December 2017)
RESTORE Spill Impact (Bucket 3)	Projects selected for inclusion in State Expenditure Plan (SEP)	Florida's Planning SEP (completed in 2015); "Standup" SEP (approved April 2018)		Mississippi SEP (April 2017)	Texas's Planning SEP (completed in 2016)
NRDA	Alabama Restoration Plan and EIS (April 2017)  Draft Restoration Plan and EA II (March 2018)	Phase V.2 Florida Coastal Access Project: Final Restoration Plan and Supplemental EA (Feb. 2018)	Louisiana's First Restoration Plan (January 2017)  Strategic Barataria Restoration Plan (March 2018)  Recreational Use and Nutrient Reduction Draft Restoration Plan (April 2018)	2016–2017 Restoration Plan and EA (June 2017)	Texas Final Restoration Plan and EA (October 2017)
NFWF (Gulf Environmental Benefit Fund)	\$115 million for 19 projects awarded through 2016	Florida GEBF Restoration Strategy (completed in January 2018)	GEBF funds awarded for engineering and design of sediment diversion and other projects	Mississippi Gulf Coast Restoration Plan developed with GEBF funding	\$108 million for 41 projects awarded

## Alabama

**Overarching planning efforts:** In the months following the DWH incident, Alabama’s then-Governor Riley issued an executive order establishing a Coastal Recovery Commission,<sup>1</sup> which led an expedited process to develop a **Roadmap for Recovery and Restoration** in the region.<sup>2</sup> Since then, Alabama has been working with the Army Corps, Mississippi-Alabama Sea Grant, and the Mobile Bay National Estuary Program to develop an Alabama Coastal Comprehensive Plan (ACCP).<sup>3</sup> The ACCP will be informed by a sea-level rise vulnerability assessment.<sup>4</sup>

**RESTORE funding:** The Alabama Gulf Coast Recovery Council (Council),<sup>5</sup> the creation of which was called for by the RESTORE Act,<sup>6</sup> is responsible for carrying out Alabama’s responsibilities under the RESTORE Act.<sup>7</sup> The Council solicited and selected project proposals for both Bucket 1 (Direct Component) and Bucket 3 (Spill Impact Component) funding, which will be included in the state’s first Multiyear Implementation Plan and State Expenditure Plan.<sup>8</sup> In April 2018, the Council released its **first draft MIP** for a public review period before it is submitted to Treasury.<sup>9</sup>

**NRDA funding:** The Alabama Trustee Implementation Group (TIG) finalized its **first restoration plan** for using NRDA funding in April 2017, focusing on projects that will provide and enhance recreational opportunities.<sup>10</sup> In March 2018, the TIG released **a draft of its second restoration plan**, focusing on seven different restoration types dealing with habitats, nutrient reduction, marine life, birds, and oysters.<sup>11</sup>

**NFWF funding:** The Alabama Department of Conservation and Natural Resources consults with NFWF in project funding decisions and NFWF has awarded \$148 million to fund 24 projects in Alabama.<sup>12</sup>

**Exemplar projects:** Alabama is pursuing a restoration assessment of Little Dauphin Island, restoration of coastal marshes along the western shore of Mobile Bay, and acquisitions of high-priority conservation lands for inclusion in Bon Secour National Wildlife Refuge, among other projects.

## Florida

**Overarching planning efforts:** The State of Florida has not completed any overarching planning to direct expenditures of the state’s apportionment of DWH settlement funding; however, the state has undertaken planning to implement projects specific to different funding sources.

**RESTORE funding:** Florida has taken the first planning step to develop its State Expenditure Plan for using Spill Impact Component (Bucket 3) funds.<sup>13</sup> Unlike the other states, Florida does not make project decisions for using the Direct Component; instead, eligible counties develop their own plans and apply directly to the U.S. Department of the Treasury for RESTORE Bucket 1 funds.

**NRDA funding:** The Florida TIG finalized its first NRDA restoration plan, **Phase V.2 Florida Coastal Access Project: Final RP and EA**, in February 2018.<sup>14</sup> The plan focuses on alternatives for the **Florida Coastal Access Project**, a recreational use restoration project involving acquisition and enhancement of coastal land on the Florida Panhandle; planning for the Coastal Access Project was initiated originally during Phase V of NRDA Early Restoration. While this first final NRDA plan does not address it, ultimately about half of Florida’s NRDA funding ultimately will go toward the “Restore Water Quality” goal (Goal 2 from the Programmatic Damage Assessment and Restoration Plan [PDARP]).

**NFWF funding:** Florida opted to use some of its NFWF funding to develop a Restoration Strategy that will aim to identify priority watershed restoration and conservation projects appropriate for GEBF funding.<sup>15</sup> In developing the strategy, the Florida Fish and Wildlife Conservation Commission (FWC) and Florida Department of Environmental Protection (FDEP) reviewed existing ecological conservation and management plans for relevance to GEBF actions, and developed a scoring system to prioritize restoration needs within relevant watersheds.

**Exemplar projects:** Florida is funding data collection and assessments to facilitate restoration of fisheries affected by the oil spill, and projects to restore specific habitats (e.g., coastal birds, sea turtles, oysters) and improve water quality in specific high priority watersheds (e.g., Bayou Chico watershed in southern Escambia County, Choctawhatchee River and Bay).

## Louisiana

**Overarching planning efforts:** In the aftermath of Hurricanes Katrina and Rita, the State of Louisiana developed a comprehensive Coastal Master Plan to guide the state’s investments in coastal restoration and protection; the plan was recently updated in 2017.<sup>16</sup> The state is using the Coastal Master Plan to prioritize projects for implementation with DWH settlement funding. The Coastal Master Plan was developed using sophisticated predictive models for assessing future sea-level rise, subsidence, precipitation, and coastal storms and the plan predicts that the state will lose up to 2,250 additional square miles of land by 2050 if no action is taken to reduce land loss. The Plan proposes a robust multiple-lines-of-defense strategy that includes projects to restore coastal habitats, to construct armoring, and to reduce flood risks to coastal communities using land-use approaches. To implement the Plan, the state also created a dedicated Coastal Protection and Restoration Fund in the state treasury. State law provides for RESTORE Act money, as well as other sources, to be deposited in the Fund.<sup>17</sup> State law specifies that the Fund may only be used for integrated coastal protection efforts — specifically, for projects and programs that are consistent with the Coastal Master Plan.<sup>18</sup> Additionally, in April 2016, the Governor John Bel Edwards signed **Executive Order JBE 2016-09**, requiring all state agencies, departments, and offices to “administer their regulatory practices, programs, projects, contracts, grants, and all other functions vested in them in a manner consistent with the Coastal Master Plan and public interest to the maximum extent possible.”

**RESTORE funding:** Louisiana has taken a unique approach to the planning requirements for RESTORE Buckets 1 and 3. Instead of developing multiple plans, the state has combined the two into a single integrated **RESTORE Plan**, which was finalized in January 2017 and **approved** by both the RESTORE Council and the Department of the Treasury in March 2017. The state opted for this integrated approach given the nearly identical overlap of eligible activities for both components, and the similarity in planning requirements for both.<sup>19</sup> Further, the state’s RESTORE Plan includes a discussion of how the Coastal Master Plan (which guides the state’s approach to integrated hurricane protection and coastal restoration) is consistent with the RESTORE Council’s own **Comprehensive Plan**, satisfying the prerequisite to show that Spill Impact Component funds will be used in a manner consistent with the Council’s goals and objectives articulated in its Comprehensive Plan.<sup>20</sup>

**NRDA funding:** The Louisiana TIG approved its **first restoration plan** for how to address natural resource injuries resulting from the DWH oil spill in January 2017. In developing this plan, the Louisiana TIG sought to ensure consistency between the plan and the statewide Coastal Master Plan, in accordance with the Governor’s executive order. In March 2018, the TIG approved an **additional restoration plan** focusing on wetland, coastal, and nearshore habitat restoration in Barataria Basin, a region heavily impacted by oil from the DWH incident. And in April 2018, the TIG released a **draft restoration plan** focused on restoring recreational uses and reducing nutrient runoff.

**NFWF funding:** Of the \$2.394 billion directed to the National Fish and Wildlife Foundation for restoration in the Gulf, approximately \$1.2 billion is dedicated for Louisiana impacts to “create or restore barrier islands off the coast of Louisiana and/or to implement river diversion projects . . . for the purpose of creating, preserving and restoring coastal habitat.”<sup>21</sup> NFWF is directed to consider the Louisiana Coastal Master Plan as well as the Louisiana Coastal Area Mississippi River Hydrodynamic and Delta Management Study in prioritizing projects. So far, NFWF has awarded funding to the state’s Coastal Protection and Restoration Authority to advance engineering and design phases of two major sediment diversion projects.

**Exemplar projects:** The state has identified several high-priority projects from its Coastal Master Plan that it is seeking to implement with DWH funding including: the Calcasieu Ship Channel Salinity Control Project to minimize wetland loss by managing the salinity of water being introduced to water bodies adjacent to the ship channel;<sup>22</sup> the Houma Navigation Canal Lock Complex to reduce saltwater intrusion and distribute freshwater in the Terrebonne Basin, to reduce land loss, and to enhance storm surge protection;<sup>23</sup> sediment diversion projects to reintroduce sediments into waterbodies that are being starved of sediment by the Mississippi River levee system; and projects to fill canals and restore wetlands in areas of the Mississippi River Delta affected by oil industry activities (e.g., Lafitte Park Preserve).<sup>24</sup>



## Mississippi

**Overarching planning efforts:** The Mississippi Gulf Coast Restoration Plan (MGCRP), developed in 2015 with NFWF funding, appears to be the central planning document that the state is using to inform other restoration plans and use of different funding streams. The state’s Department of Environmental Quality (MDEQ) released **version 1 of the plan** in October 2015. In developing the plan, MDEQ developed the Mississippi Comprehensive Ecosystem Restoration Tool (MCERT) and a Decision Support System (DSS) to help guide science and data to inform restoration projects.<sup>25</sup> These tools in particular are important for enabling the state to take a “comprehensive ecosystem approach to restoration project planning” across all spill-related funding streams.<sup>26</sup> In 2016, MDEQ released an **addendum** to the plan with quantitative, science-based goals tied to specific coastal resources or environments.

**RESTORE funding:** In August 2012, Governor Phil Bryant signed an executive order establishing the GoCoast 2020 Commission to serve as an official advisory body for allocating RESTORE funds. The **GoCoast 2020 Final Report**, released in 2013, provided recommendations for protecting the coastal environment, improving job creation and economic opportunities, and enhancing quality of life for coastal residents. Mississippi used the GoCoast recommendations and priorities in developing its initial Multiyear Implementation Plan for projects to fund through the RESTORE Direct Component. Mississippi has also developed its first **State Expenditure Plan** for directing funds available through the Spill Impact Component.

**NRDA funding:** The Mississippi TIG released its **first restoration plan and environmental assessment** in July 2017. The plan prioritizes three specific restoration types and identifies how these restoration types are also consistent with and further the restoration visions described in the state’s coastal restoration plan (the MCGRP).

**NFWF funding:** The state has received over \$100 million in NFWF funding for restoration projects and has been able to utilize the MCERT tool for more recent NFWF projects to help prioritize land parcels for restoration.

**Exemplar projects:** Mississippi used early allocations of funding to study the use of dredge materials to support marsh restoration, to collect data and study impacts to reef fish from the oil spill, to improve ecosystem-based approaches for managing fisheries, and to acquire priority floodplain habitat and riparian buffers.

## Texas

**Overarching planning efforts:** In March 2017, Texas’s General Land Office (GLO) released a **Texas Coastal Resiliency Master Plan** (CRMP) that identifies preferred projects that will help safeguard the coast and its communities, and mitigate damages from future storms. It represents the state’s overarching plan for coordinating coastal protection and restoration efforts, prioritizing projects, and improving coastal resilience. It is unclear, however, whether the state will utilize the CRMP to inform investments of DWH funds.

**RESTORE funding:** Texas developed a framework in August 2015 for guiding the state’s planning and project selection efforts for RESTORE funding. The Framework, known as “**Conserve, Restore, Renew**,” recognizes the impact that sea-level rise has had and will continue to have on ecosystems, communities, and economies. Texas finalized its **Multiyear Implementation Plan** (for Bucket 1 funding) in December 2017, and has taken the first step of planning its State Expenditure Plan (for Bucket 3 funding).

**NRDA funding:** The Texas Trustee Implementation Group (Texas TIG) released a **first restoration plan** and environmental assessment in October 2017, which prioritized 13 projects over two restoration types: oysters; and wetlands, coastal, and nearshore habitats.<sup>27</sup>

**NFWF funding:** To date, NFWF has funded a range of shoreline protection, acquisition, and restoration projects and habitat enhancement in Texas.<sup>28</sup>

**Exemplar projects:** The state has identified several projects for funding including acquisitions and restoration of coastal ecosystems in the Laguna Madre Watershed<sup>29</sup> and the Matagorda Bay;<sup>30</sup> acquisition and restoration of riparian corridors to implement “Bayou Greenways”; and reuse of dredge spoils to facilitate marsh restoration in Galveston Bay.

## APPENDIX D - ENDNOTES

- <sup>1</sup> John Shyrock, *Governor Riley signs order creating Coastal Recovery Commission*, WSFA (Sept. 27, 2010), <http://www.wsfa.com/Global/story.asp?S=13226616>.
- <sup>2</sup> COASTAL RECOVERY COMM’N OF ALA., A ROADMAP TO RESILIENCE: TOWARDS A HEALTHIER ENVIRONMENT, SOCIETY, AND ECONOMY FOR COASTAL ALABAMA, available at <http://crcalabama.org/wp-content/uploads/2011/02/CRC-Report-02-2011.pdf>.
- <sup>3</sup> *Alabama Coastal Comprehensive Plan Announcement*, MOBILE BAY NAT’L ESTUARY PROGRAM (Sept. 16, 2016), [http://www.mobilebaynep.com/news/accp\\_survey\\_announcement](http://www.mobilebaynep.com/news/accp_survey_announcement).
- <sup>4</sup> *Alabama Coastal Comprehensive Plan*, U.S. ARMY CORPS OF ENG’RS, [www.sam.usace.army.mil/Missions/Program-and-Project-Management/Alabama-Coastal-Comprehensive-Plan/](http://www.sam.usace.army.mil/Missions/Program-and-Project-Management/Alabama-Coastal-Comprehensive-Plan/) (last visited May 17, 2018).
- <sup>5</sup> The Council is comprised of state-level (Governor, State Port Authority), county-level (Baldwin and Mobile Counties), and municipal-level (Mayors of Bayou La Batre, Dauphin Island, Fairhope, Gulf Shores, Mobile, and Orange Beach) representatives. *Alabama Gulf Coast Recovery Council*, ALA. GULF COAST RECOVERY COUNCIL, <http://www.restorealabama.org/The-Council> (last visited May 17, 2018).
- <sup>6</sup> 33 U.S.C. § 1321(t)(1)(F)(i).
- <sup>7</sup> These responsibilities include, for example, selecting projects and administering the funds provided to the state through the RESTORE Direct Component, proposing projects for the RESTORE Council-selected component, and developing the Alabama State Expenditure Plan and administering funding for projects it selects through the Spill Impact Component.
- <sup>8</sup> *AGCRC Selects Projects for Inclusion in Draft Multiyear Implementation Plan and Draft State Expenditure Plan*, ALA. GULF COAST RECOVERY COUNCIL, <http://restorealabama.org/DRAFT-MIP-SEP-PROJECTS> (last visited May 21, 2018).
- <sup>9</sup> *AGCRC releases Draft Multiyear Implementation Plan for 45-day public comment period*, ALA. GULF COAST RECOVERY COUNCIL, <http://restorealabama.org/Draft-MIP-1> (last visited May 21, 2018). Alabama received a grant from the U.S. Department of the Treasury in February 2018 to assist with development of its Multiyear Implementation Plan (Bucket 1). *Direct Component*, U.S. DEP’T OF TREASURY, <https://www.treasury.gov/services/restore-act/Pages/Direct%20Component/Direct-Component.aspx> (last visited May 21, 2018).
- <sup>10</sup> DEEPWATER HORIZON OIL SPILL ALA. TR. IMPLEMENTATION GRP., FINAL RESTORATION PLAN I AND ENVIRONMENTAL IMPACT STATEMENT: PROVIDE AND ENHANCE RECREATIONAL OPPORTUNITIES (Apr. 2017), available at <http://www.gulfspillrestoration.noaa.gov/sites/default/files/DWH%20Oil%20Spill%20AL%20TIG%20Final%20Restoration%20Plan%20I%20and%20EIS%20Provide%20and%20Enhance%20Recreational%20Opportunities.pdf>.
- <sup>11</sup> DEEPWATER HORIZON OIL SPILL ALA. TR. IMPLEMENTATION GRP., DRAFT RESTORATION PLAN II AND ENVIRONMENTAL ASSESSMENT: RESTORATION OF WETLANDS, COASTAL, AND NEARSHORE HABITATS; HABITAT PROJECTS ON FEDERALLY MANAGED LANDS; NUTRIENT REDUCTION (NONPOINT SOURCE); SEA TURTLES; MARINE MAMMALS; BIRDS; AND OYSTERS (Mar. 2018), available at [http://www.gulfspillrestoration.noaa.gov/sites/default/files/2018\\_03\\_AL%20RP%20II%20Camera%20Ready%20EA\\_clean.pdf](http://www.gulfspillrestoration.noaa.gov/sites/default/files/2018_03_AL%20RP%20II%20Camera%20Ready%20EA_clean.pdf).
- <sup>12</sup> *Gulf Environmental Benefit Fund in Alabama*, NAT’L FISH & WILDLIFE FOUND., <http://www.nfwf.org/gulf/Pages/GEBF-Alabama.aspx> (last visited Feb. 28, 2018).
- <sup>13</sup> The Florida Gulf Consortium, the entity in charge of developing the state’s SEP, developed a [Planning SEP](#) that was approved in May 2015. More recently, the Consortium developed a “Standup” SEP detailing how over \$220,000 will be used to “stand up” managerial and financial structures that will be necessary to implement the state’s SEP, which is still under development as of May 2018. The Standup SEP was approved in April 2018. *See State Expenditure Plans*, GULF COAST ECOSYSTEM RESTORATION COUNCIL, <https://restorethegulf.gov/state-expenditure-plans> (last visited May 21, 2018).
- <sup>14</sup> FLA. TR. IMPLEMENTATION GRP., DEEPWATER HORIZON OIL SPILL PHASE V.2 FLORIDA COASTAL ACCESS PROJECT: FINAL RESTORATION PLAN AND SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT (Feb. 2018), available at [http://www.gulfspillrestoration.noaa.gov/sites/default/files/2018\\_02\\_FL\\_TIG\\_Final%20Phase%20V.2%20RP-SEA.pdf](http://www.gulfspillrestoration.noaa.gov/sites/default/files/2018_02_FL_TIG_Final%20Phase%20V.2%20RP-SEA.pdf).
- <sup>15</sup> *See* FLA. FISH & WILDLIFE CONSERVATION COMM’N & FLA. DEP’T OF ENVTL. PROT., STATE OF FLA., FLORIDA GULF ENVIRONMENTAL BENEFIT FUND RESTORATION STRATEGY 1-2 (Jan. 2018) (final strategy), available at <https://floridadep.gov/sites/default/files/Gulf%20Environmental%20Benefit%20Fund%20Restoration%20Strategy%20Report%20FINAL.pdf>.
- <sup>16</sup> COASTAL PROT. & RESTORATION AUTH. (CPRA), STATE OF LA., LOUISIANA’S COMPREHENSIVE MASTER PLAN FOR A SUSTAINABLE COAST (eff. June 2, 2017), available at [http://coastal.la.gov/wp-content/uploads/2017/04/2017-Coastal-Master-Plan\\_Web-Book\\_CFinal-with-Effective-Date-06092017.pdf](http://coastal.la.gov/wp-content/uploads/2017/04/2017-Coastal-Master-Plan_Web-Book_CFinal-with-Effective-Date-06092017.pdf).
- <sup>17</sup> LA. REV. S. § 49:214.5.4(I) (“Any monies received by the state for violations pursuant to section 311 of the Federal Water Pollution Control Act, 33 U.S.C. 1321; R.S. 30:2025(E)(1) and (2); and R.S. 30:2001 et seq., including R.S. 30:2071 et seq., associated with the Deepwater Horizon oil spill . . . shall be deposited and credited by the treasurer to the Coastal Protection and Restoration Fund for integrated coastal protection efforts, including coastal restoration, hurricane protection, and improving the resiliency of the Louisiana Coastal Area affected by the Deepwater Horizon oil spill.”).

- <sup>18</sup> *Id.* at § 49:214.5.4(G).
- <sup>19</sup> COASTAL PROT. & RESTORATION AUTH. (CPRA), STATE OF LA., THE STATE OF LOUISIANA’S FIRST AMENDED RESTORE PLAN 1 (plan approved by CPRA Board on January 18, 2017 and the RESTORE Council and U.S. Department of the Treasury in March 2017) [hereinafter RESTORE PLAN], available at [https://restorethegulf.gov/sites/default/files/SEP\\_LA\\_20170118.pdf](https://restorethegulf.gov/sites/default/files/SEP_LA_20170118.pdf); see also Press Release, Coastal Prot. & Restoration Auth., State of La., Louisiana’s First Amended RESTORE Act Plan Approved for \$811.9M, (Mar. 27, 2017), available at <http://coastal.la.gov/wp-content/uploads/2017/04/2017.03.27-RESTORE.pdf>.
- <sup>20</sup> See GULF COAST ECOSYSTEM RESTORATION COUNCIL, OIL SPILL IMPACT COMPONENT: STATE EXPENDITURE PLAN GUIDELINES § 5.2 (Mar. 17, 2016), available at [https://restorethegulf.gov/sites/default/files/SEP-Guidelines\\_Approved-20160317.pdf](https://restorethegulf.gov/sites/default/files/SEP-Guidelines_Approved-20160317.pdf).
- <sup>21</sup> *Deepwater Horizon Oil Spill Restoration: NFWF*, COASTAL PROT. & RESTORATION AUTH. (CPRA), STATE OF LA., <http://coastal.la.gov/deepwater-horizon-oil-spill-content/oil-spill-overview/nfwf/> (last visited June 8, 2017).
- <sup>22</sup> The Calcasieu Ship Channel Salinity Control Measures project will be funded by the Direct Component (Bucket 1). The primary eligible activity being funded is restoration and protection of natural resources, ecosystems, fisheries, marine and wildlife habitats, and coastal wetlands (eligible activity #1). RESTORE PLAN, *supra* n.22, at 15.
- <sup>23</sup> The Houma Navigation Canal Lock Complex project will be funded by the Spill Impact Component (Bucket 3). The project falls under eligible activities #1, restoration and protection of natural resources, ecosystems, fisheries, marine and wildlife habitats, and coastal wetlands (primary) and #7, providing coastal flood protection, under the RESTORE Council’s SEP guidelines.
- <sup>24</sup> The state is using \$8.7 million in RESTORE funds to fill 16.5 miles of canals in the Jean Lafitte National Historical Park and Preserve that were constructed to access oil well sites and lay pipelines. The funds will be used to fill the canals and restore wetlands and shallow water habitats in the park. Another \$7.25 million of funding was approved to renourish and stabilize the Barataria/Plaquemines barrier island system complex extending 25 miles from West Grand Terre to Sandy Point in Jefferson Parish, Louisiana. The funds will be used for engineering and design and to develop an adaptation management plan for building 12,700 feet of beach and a dune system, restoring back-barrier marsh systems, and installing rock revetments to protect restored marshes. Outcomes from the project will be storm surge attenuation and restoration of habitats. The project is leveraging over \$400 million in funds from other sources including NRDA funds.
- <sup>25</sup> MISS. TR. IMPLEMENTATION GRP., 2016-2017 RESTORATION PLAN/ENVIRONMENTAL ASSESSMENT 6-8, available at <http://gulfspillrestoration.noaa.gov/sites/default/files/MSTIG%20RP%20EA%202016-2017%20FINAL%20Combined%20508.pdf>.
- <sup>26</sup> *Id.* at 6-7. The Final Restoration Plan/Environmental Assessment identifies areas of overlap between the Mississippi River Gulf Coast Restoration Plan and the NRDA Trustees’ PDARP/PEIS Restoration Types.
- <sup>27</sup> TEX. TR. IMPLEMENTATION GRP., FINAL 2017 RESTORATION PLAN/ENVIRONMENTAL ASSESSMENT: RESTORATION OF WETLANDS, COASTAL, AND NEARSHORE HABITATS; AND OYSTERS (2017), available at [http://www.gulfspillrestoration.noaa.gov/sites/default/files/nrda\\_tx\\_tig\\_final\\_rpea\\_2017.pdf](http://www.gulfspillrestoration.noaa.gov/sites/default/files/nrda_tx_tig_final_rpea_2017.pdf).
- <sup>28</sup> *Gulf Environmental Benefit Fund in Texas*, NAT’L FISH & WILDLIFE FOUND., <http://www.nfwf.org/gulf/Pages/GEBF-Texas.aspx> (last visited May 17, 2018).
- <sup>29</sup> GULF COAST ECOSYSTEM RESTORATION COUNCIL, RESOURCES AND ECOSYSTEMS SUSTAINABILITY, TOURIST OPPORTUNITIES, AND REVIVED ECONOMIES OF THE GULF COAST STATES ACT (RESTORE ACT) INITIAL FUNDED PRIORITIES LIST at app. A, pp. 39-46, available at [https://www.restorethegulf.gov/sites/default/files/FPL\\_forDec9Vote\\_Errata\\_04-07-2016.pdf](https://www.restorethegulf.gov/sites/default/files/FPL_forDec9Vote_Errata_04-07-2016.pdf).
- <sup>30</sup> *Id.* at app. B, pp. 47-51.

## APPENDIX E — Glossary and Acronyms

Army Corps or Corps	U.S. Army Corps of Engineers
Biological Assessment or BA	Assessment completed under the Endangered Species Act to evaluate the potential effects of an action on listed species. 50 C.F.R. § 402.12
Biological Opinion or BiOp	Opinion from NMFS or USFWS on whether a federal action is likely to jeopardize the continued existence of a species listed under the Endangered Species Act and can include proposed reasonable and prudent alternatives or measures. 50 C.F.R. § 402.14
California WaterFix Project	Project in the Sacramento-San Joaquin River Delta in California designed to improve water delivery
CDBG	Community Development Block Grant program administered by HUD
Center	Grand Canyon Monitoring and Research Center
CEQ	White House Council on Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
Consent decree	The April 4, 2016, federal court order settling the civil claims brought against British Petroleum for damages from the Deepwater Horizon Oil Spill.
CMP	Louisiana Coastal Master Plan
CVP	California Central Valley Project
CWA	Clean Water Act (33 U.S.C. §§ 1251 <i>et seq.</i> (1972))
DWH	Deepwater Horizon — the mobile offshore drilling unit that exploded and sank causing the oil spill.
DWR	California Department of Water Resources
DOI	Department of the Interior
DOJ	Department of Justice
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ESA	Endangered Species Act (16 U.S.C. §§ 1531 <i>et seq.</i> (1973))



Federal Trustees (NRDA Trustees)	Federal officials designated by the President under Section 1006(b)(2) of the Oil Pollution Act of 1990 (33 U.S.C. § 2706(b)(2)) to act as Trustees on behalf of the public for the natural resources affected by the oil spill, including the Secretary of Commerce, the Secretary of the Interior, and the Secretary of Agriculture, and their respective delegates.
FEMA	Federal Emergency Management Agency
FPL	Funded Priorities List for allocating funding through the RESTORE Act
FRPT	Federal Review and Permitting Teams set up to facilitate Hurricane Sandy disaster recovery
GCD or dam	Glen Canyon Dam
GOSR	New York State Governor’s Office of Storm Recovery
Gulf Coast States	States affected by the oil spill including Alabama, Florida, Louisiana, Mississippi, and Texas.
HUD	U.S. Department of Housing and Urban Development
LA-SAFE	Louisiana Strategic Adaptations for Future Environments program, the flood-risk-reduction program that the State of Louisiana is implementing with funding from HUD as a winner of the National Disaster Resilience Competition
LTEMP	Long-term Experimental Management Plan for the Glen Canyon Dam
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. §§ 1801 <i>et seq.</i> (1976))
MIP	Multiyear Implementation Plan that the states must develop to get RESTORE Act, Direct Component funds (Bucket 1).
MMPA	Marine Mammal Protection Act (16 U.S.C §§ 1361 <i>et seq.</i> (1972))
NEPA	National Environmental Policy Act (42 U.S.C. §§ 4321 <i>et seq.</i> (1970))
NFWF	National Fish and Wildlife Foundation
NHPA	National Historic Preservation Act (Pub. L. 89-665; 54 U.S.C. §§ 300101 <i>et seq.</i> (1966))
NMFS	National Marine Fisheries Services
NPS	National Park Service
NRDA	National Resources Damage Assessment authorized by Section 1002(b)(2)(A) of the Oil Pollution Act of 1990 (33 U.S.C. § 2702(b)(2)(A)) to assess injury to, destruction of, or loss of natural resources from the release of oil or hazardous substances and to determine the compensation that the responsible parties must pay.
NOAA	National Oceanic and Atmospheric Administration
NRDAR Fund	DOI’s Natural Resource Damage Assessment and Restoration Fund
NRDA Trustee Council	Council of federal and state Trustees for the public for natural resources affected by the oil spill and designated by the President or Governor of an affected state pursuant to Section 1006(b)(3) of the Oil Pollution Act (33 U.S.C. § 2706(b)(3)).

OPA	Oil Pollution Act of 1990 (33 U.S.C. §§ 2701-2762)
PDARP	Programmatic Damage Assessment and Restoration Plan
PDARP/PEIS	Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental Impact Statement — the restoration plan and EIS adopted by the Trustee Council in February 2016 as required by OPA to implement NDRA projects.
RBD	Rebuild by Design competition held after Hurricane Sandy
Reclamation	Bureau of Reclamation
Responsible parties	Companies named in the complaint as being responsible for the oil spill and liable for the costs of the clean up and restoration of affected natural resources.
RESTORE Act	Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act of 2012 (Pub. L No. 112-141, Div. A, Tit. I, Subtitle F)
RESTORE Council	The Council established by the RESTORE Act to administer settlement funding paid to the Gulf Coast Restoration Trust Fund under the RESTORE Act, including the governors of the five affected states, the Secretaries of the U.S. Departments of Agriculture, Army, Commerce, Homeland Security, and Interior and the Administrator of the EPA.
RHA	Rivers and Harbors Act (33 U.S.C. §§ 401 <i>et seq.</i> (1899))
SEP	State Expenditure Plans that the states must develop to get RESTORE Act, Spill Impact Component funds (Bucket 3).
SWP	California State Water Project
SWRCB	California State Water Resources Control Board
Task Force	Hurricane Sandy Rebuilding Task Force
TCT	Technical Coordinating Teams set up to facilitate Hurricane Sandy disaster recovery efforts
TIG	NRDA Trustee Implementation Groups
USDA	U.S. Department of Agriculture
USFWS or FWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
Work Group	Glen Canyon Dam Adaptive Management Work Group



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