Alabama Trustee Implementation Group

Final Supplemental Restoration Plan II and Environmental Assessment: Marine Mammals



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1.0 INTRODUCTION / BACKGROUND

1.1 Overview

In the Deepwater Horizon Oil Spill Alabama Trustee Implementation Group Final 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 (RP II/EA), the Alabama (AL) Trustee Implementation Group (TIG) selected 20 projects for implementation, allocating funds from several restoration types identified in the Deepwater Horizon (DWH) oil spill consent decree, including the Marine Mammals Restoration type. This Supplemental Restoration Plan II and Environmental Assessment (Supplemental RP II/EA) supplements the RP II/EA, evaluating the AL TIG's proposal to use additional funds from the Marine Mammals restoration type to extend the implementation of one or more projects selected in RP II/EA to continue the restoration of Marine Mammals. In this Supplemental RP II/EA, the Alabama TIG proposes using the remaining allocation of marine mammals' restoration funds.

Through this document, the AL TIG is supplementing the RP II/EA and providing information about additional proposed marine mammal projects. The AL TIG has determined that using additional funds under the Marine Mammals restoration type requires evaluation under the National Environmental Policy Act (NEPA). Additionally, in this Supplemental RP II/EA, the AL TIG is evaluating alternatives under the Oil Pollution Act (OPA) and its natural resource damage assessment (NRDA) regulations.

1.2 Authorities and Regulations

As an oil pollution incident, the DWH oil spill is subject to the provisions of OPA, 33 United States Code (U.S.C.) § 2701 *et seq*. The DWH Trustees are the governmental entities authorized under OPA to act as Trustees on behalf of the public to assess the natural resource injuries resulting from the DWH oil spill and develop and implement restoration plans to compensate for those injuries. Collectively, these Trustees make up the DWH Trustee Council.

As required under OPA, the DWH Trustees conducted an NRDA and prepared the *Final Programmatic Damage Assessment and Restoration Plan/Programmatic Environmental Impact Statement* (Final PDARP/PEIS). NRDA is described under Section 1006 of OPA (33 U.S.C. § 2706) and the OPA NRDA implementing regulations (15 Code of Federal Regulations [C.F.R.] Part 990). The Final PDARP/PEIS sets forth the process for DWH restoration planning to select specific projects for implementation and establishes a distributed governance structure that assigns a TIG for each of eight Restoration Areas. The TIGs include different Trustees depending on the Restoration Area they represent. The AL TIG is composed of the following six DWH Trustees (two state and four federal Trustee agencies):

- Alabama Department of Conservation and Natural Resources (ADCNR)
- Geological Survey of Alabama
- Department of the Interior
- National Oceanic and Atmospheric Administration (NOAA)
- Environmental Protection Agency
- U.S. Department of Agriculture

In accordance with the OPA NRDA regulations (15 C.F.R. 990.53(2)), the AL TIG evaluates a reasonable range of restoration alternatives and identifies its preferred alternative of the Enhancing Capacity for the Alabama Marine Mammal Stranding Network (ALMMSN) Project Extension.

Federal Trustees are also required to comply with NEPA, 42 U.S.C. § 4321 *et seq.*, and the Council on Environmental Quality's (CEQ) NEPA implementing regulations, 40 C.F.R. § 1500 *et seq.*, when planning restoration projects. NEPA requires federal agencies to consider the potential environmental impacts of proposed actions. It provides a mandate and framework for federal agencies to determine if their proposed actions have significant environmental and related social and economic effects. It also mandates that federal agencies consider these effects when choosing between alternative approaches, and that federal agencies inform and involve the public in the environmental analysis and decision-making process. NEPA and its implementing regulations (40 C.F.R. Parts 1500–1508) outline the responsibilities of federal agencies in the NEPA process.

The Fiscal Responsibility Act (June 2023) amended NEPA to require that when a federal agency relies on a programmatic environmental document more than 5 years old, the agency must reevaluate the analysis and any underlying assumptions in the programmatic environmental document to ensure they remain valid. The DWH Federal Trustees reviewed the framework of the PDARP/PEIS for continued relevance, and affirmed the continued validity of the PDARP/PEIS to the overall program via Resolution TC-2024-002 on June 28, 2024. The federal trustees will evaluate whether new information or changed circumstances may affect the continued validity of the PDARP/PEIS at the project level during the preparation of each tiered RP/EA. Consistent with the FRA amendment to NEPA, and with 40 CFR 1501.11, the DWH Oil Spill Federal Trustees of the AL TIG determined that the analysis in the PDARP/PEIS (DWH Trustees, 2016) and the underlying assumptions therein in the context of the projects proposed in this Supplemental RPII/EA remain valid and that it continues to be applicable as a programmatic evaluation for DWH restoration planning.

1.2.1 Lead and Cooperating Agencies

CEQ NEPA implementing regulations require a federal agency to serve as lead agency to supervise the NEPA analysis when more than one federal agency is involved in the same action (40 C.F.R. § 1501.7). NOAA serves as the lead federal agency for NEPA compliance on this Supplemental RP II/EA and has reviewed this document in accordance with the CEQ's NEPA implementing regulations and NEPA implementing procedures (43 C.F.R. Part 46). Each of the other federal and state co-Trustees on the AL TIG is participating as a cooperating agency pursuant to NEPA (40 C.F.R. § 1501.8(a)).

1.2.2 Supplemental OPA and NEPA Analysis

This Supplemental RP II/EA provides OPA and NEPA analyses for the reasonable range of alternatives by supplementing the analyses from RP II/EA. The supplemental analyses provided in this Supplemental RP II/EA augment and incorporate by reference the applicable sections of the RP II/EA, including Chapter 11 (NEPA Analysis – Marine Mammals) and Chapter 3 (OPA, Section 3.5.2). This Supplemental RP II/EA also considers any additional environmental impacts that would result from implementation of the alternatives presented herein, focusing on those impacts that would fall outside the scope of those described and analyzed in the RP II/EA.

1.2.3 Intent to Adopt the Supplemental Restoration Plan II and Environmental Assessment: Marine Mammals by Federal Agency Members of the AL TIG

Each federal cooperating agency on the AL TIG intends to adopt, if appropriate, the NEPA analysis in this Supplemental RP II/EA. In accordance with 40 C.F.R. § 1506.3(a), each of the three federal cooperating agencies participating on the AL TIG will review the Final Supplemental RP II/EA for adequacy in meeting

the standards set forth in its own NEPA implementing procedures. Each agency will then decide whether to adopt the analysis contained herein to inform its own federal decision-making and fulfill its responsibilities under NEPA. More information about OPA and NEPA, as well as their application to DWH oil spill restoration planning, can be found in Chapters 5 and 6 of the Final PDARP/PEIS and Section 1.3 of the RP II/EA.

1.3 Purpose and Need

The purpose of the potential restoration actions evaluated in this Supplemental RP II/EA is to provide for additional restoration benefits for marine mammals in the Alabama Restoration Area. Additional marine mammal restoration is needed to provide for continued compensation for and restoration of natural resources and resource services injured in the Alabama Restoration Area as a result of the DWH oil spill. This purpose and need falls within the general scope of the purpose and need identified in the RP II/EA and is consistent with the Final PDARP/PEIS, as it focuses on the restoration of injuries to Alabama's natural resources and services arising from the DWH oil spill—specifically, the restoration of "Marine Mammals," using funds made available through the DWH consent decree (see Final PDARP/PEIS [DWH Trustees 2016: Chapter 10]).

1.4 Public Involvement and Changes between Draft and Final RP/EA

Following public notice, the Draft Supplemental RP II/EA was made available to the public for a 30-day comment period from March 19 – April 18, 2024. No comments were received during the comment period. The only change made in preparing the Final Supplemental RPII/EA was the addition of a more detailed summary of the "no action" alternative analysis under NEPA.

Electronic copies of the Draft and Final Supplemental RP II/EA are available at http://www.gulfspillrestoration.noaa.gov/restoration-areas/alabama.

1.5 Summary of Current Marine Mammals Restoration Type Funds Allocations

Table 1 below provides a summary of the Marine Mammals Restoration Type funds allocated by the AL TIG to date.

Project	Restoration Plan	Amount
Enhancing Capacity for the Alabama Marine Mammal Stranding Network	AL TIG Final 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	\$2,432,389
	Oysters	
Alabama Estuarine Bottlenose Dolphin Protection: Enhancement and Education	AL TIG Final 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	\$686,374
	TOTAL FUNDS ALLOCATED:	\$3,118,763
	TOTAL FUNDS REMAINING:	\$1,881,237

Table 1: Summary of Allocated Marine Mammals Restoration Type Funds to Date

1.6 Proposed Action: Implement Preferred Alternative 1: Enhancing Capacity for the Marine Mammal Stranding Network Project Extension

To meet the Purpose and Need identified in Section 1.3, the AL TIG proposes to fund the preferred alternative, the ALMMSN Project Extension with a total budget of \$1,881,237. Implementing this project extension would commit the remaining Marine Mammals Restoration Type funding allocated to the Alabama Restoration Area through the DWH consent decree.

1.7 Coordination with Other Gulf Restoration Programs

As discussed in Section 1.5.6 of the Final PDARP/PEIS, the DWH Trustees are committed to coordinating with other Gulf of Mexico restoration programs to maximize the overall ecosystem impact of DWH NRDA restoration efforts. During the course of its restoration planning process, the AL TIG has coordinated and will continue to coordinate with other DWH oil spill and Gulf of Mexico restoration programs, including restoration programs under the Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act, as implemented by the Gulf Coast Ecosystem Restoration Council; the Gulf Environmental Benefit Fund managed by the National Fish and Wildlife Foundation; and other state and federal funding sources. These other restoration efforts are considered in the analysis of cumulative impacts in this Supplemental RP II/EA (Chapter 4.5).

As part of its coordination efforts, the AL TIG has been reviewing the implementation of marine mammal projects in other coastal restoration programs and is working to create synergies with those programs to ensure the most effective use of available funds for the maximum cost benefit. This coordination will ensure that funds are allocated for critical restoration projects across the affected regions of the Gulf of Mexico and within appropriate coastal Alabama areas. The AL TIG will continue to collaborate with other restoration programs to maximize cost savings and restoration benefits to the resources in coastal Alabama that were injured by the DWH oil spill.

1.8 Administrative Record

Pursuant to 15 C.F.R. § 990.45, the Trustees opened a publicly available Administrative Record for the DWH oil spill NRDA, including restoration planning activities, concurrently with the publication of the 2010 Notice of Intent to Conduct Restoration Planning (75 Federal Register 60800). DOI is the lead federal Trustee for maintaining the Administrative Record, which can be found at https://www.doi.gov/deepwaterhorizon/adminrecord. Information about AL TIG restoration project implementation is being provided to the public through the Administrative Record, the Gulf Spill Restoration website, NOAA's Data Integration Visualization and Exploration data warehouse, and other outreach efforts.

2.0 RESTORATION ALTERNATIVES

2.1 Summary of Restoration Goals and Approaches

The Final PDARP/PEIS (Section 5.5.11) established Gulf-wide goals for marine mammal restoration, which the AL TIG refined to a set of three specific goals for marine mammals in coastal Alabama waters in the RP II/EA.

Projects should:

- 1. Make direct contributions to reducing mortality or morbidity of Alabama marine mammal populations caused by direct anthropogenic stressors or threats; or
- 2. Reduce natural stressors or take other actions that support the ecological needs of marine mammals resulting in increased resilience of Alabama populations; or
- 3. Play a significant role in the collection and/or analysis of data that improves the ability of the AL TIG to restore marine mammal populations in Alabama.

The projects evaluated as part of this Supplemental RP II/EA employ the following restoration approaches identified in the Final PDARP/PEIS:

- 1. Increase marine mammal survival through better understanding of the causes of illness and death, as well as early detection and intervention for anthropogenic and natural threats; and
- 2. Reduce injury, harm, and mortality to bottlenose dolphins by reducing illegal feeding and harassment activities.

2.2 Summary of Marine Mammal Project Screening Process

To identify a reasonable range of restoration alternatives for this Supplemental RP II/EA, the AL TIG looked first to the screening conducted as part of RP II/EA. In the RP II/EA, the Trustees identified 18 potential marine mammals' restoration projects in the master project database. After evaluating these projects against the TIG's Marine Mammals restoration goals and considering whether the projects may be more appropriate for implementation by the Regionwide or Open Ocean TIGs, which address a larger geographic scope, the AL TIG determined that 9 of the 18 projects were appropriate for further

evaluation for implementation within the Alabama Restoration Area. The AL TIG investigated the nine remaining projects and reconfigured and refined them into the three marine mammals projects analyzed in the RP II/EA. The marine mammals projects funded as part of RP II/EA included the ALMMSN Project and the Alabama Estuarine Bottlenose Dolphin Protection: Enhancement and Education (Dolphin Education) Project. The non-preferred marine mammals alternative from the RP II/EA—the Assessment of Alabama Estuarine Bottlenose Dolphin Populations and Health restoration project—was then selected by the AL TIG for implementation in the RP II/EA, using Monitoring and Adaptive Management (MAM) funds.

The AL TIG is considering the two projects selected for implementation using marine mammals' funds in the RP II/EA as potential restoration alternatives in this Supplemental RP II/EA; specifically, the AL TIG is evaluating a continuation of each project as the restoration choices. For the ALMMSN Project, the TIG is evaluating adding more money to, and extending the time frame for, the already funded project. For the Dolphin Education Project, the TIG is evaluating a follow-on project that would continue the component of the Dolphin Education Project that focuses on the prevention of illegal feeding.

In developing goals and objectives for this Supplemental RP II/EA, the AL TIG considered the goals and objectives for the Marine Mammals Restoration Type projects established during the RP II/EA process, those marine mammals' projects already funded using AL TIG and other TIG funds, the amount of Marine Mammals Restoration Type funds available, and other factors, such as cetacean strandings over the last several years. Accordingly, the AL TIG determined that the goals and objectives for this Supplemental RP II/EA were to maximize the remaining funds available for the Marine Mammals Restoration Type in the Alabama Restoration Area by implementing projects with proven records of providing restoration benefits. An extension of the Enhancing Capacity for the Alabama Marine Mammal Stranding Network Project (Alternative 1) and a partial extension of the Alabama Estuarine Bottlenose Dolphin Protection: Enhancement and Education Project (Alternative 2) are therefore fully evaluated in this Supplemental RP II/EA.

2.3 Project Descriptions

Alternative 1: Enhancing Capacity for the Alabama Marine Mammal Stranding Network Project Extension

Project Summary/Background. The ALMMSN Project Extension would continue the restoration activities of the ALMMSN Project, which was originally approved in the RP II/EA. The AL TIG approved a no-cost extension for the ALMMSN Project in early 2023, allowing it to operate through the end of 2024. The ALMMSN Project Extension evaluated in this Supplemental RP II/EA would allow work under the original project to continue through at least 2027.

An extension of the ALMMSN Project would continue to enhance the capacity of the ALMMSN by providing funding for staff time, equipment and supplies, and sample analyses. The ALMMSN is operated out of the Dauphin Island Sea Lab (DISL) on Dauphin Island, Alabama. This Project Extension would allow ALMMSN to continue to use and expand on its existing infrastructure for cetacean stranding response and communications and data management to enhance the ALMMSN's operations. Information on dead or stranded cetaceans is usually obtained by collecting basic stranding data (Level A) and performing necropsies; however, without the enhanced financial assistance that comes from the ALMMSN Project, the ALMMSN has limited capacity for live cetacean stranding response. In addition, ALMMSN's resources to conduct in-depth analysis of causes of illness and mortality in stranded cetaceans have been limited. The ALMMSN Project Extension would allow ALMMSN to continue to better respond to live or dead stranded cetaceans, to necropsy animals, and to analyze samples collected from cetaceans stranded in Alabama waters to better understand the causes of marine

mammal illness and death. It would also continue to support increased data consistency for information collected from stranded marine mammals by supporting ALMMSN to enter its data into regional or national marine mammal databases (e.g., GulfMAP or its online successor, supported by NOAA, or the National Stranding database). The information collected by ALMMSN from stranded cetaceans should enable managers to better mitigate impacts on marine mammals from natural and anthropogenic threats and to monitor population recovery post-DWH oil spill. Accordingly, the ALMMSN Project Extension is expected to support continued work toward a better understanding of the causes of illness/mortality in dolphins and the early detection and intervention of anthropogenic and natural threats. The ALMMSN Project Extension is also expected to contribute to the increased survival of rescued animals by continuing to improve marine mammal stranding response, data collection, data analyses, and reporting for Alabama waters. ADCNR would be the Implementing Trustee for this project.

Construction Methodology (or Implementation Methodology) and Timing. The ALMMSN Project Extension would provide funds to continue to support ALMMSN's current data collection efforts, including the more in-depth data analysis provided by the ALMMSN staff in collaboration with the National Marine Fisheries Service Southeast Regional Office and Southeast Fisheries Science Center. Funds to support this increased collaboration would assist the ALMMSN in continuing to build capacity within the region, with the goal of improving live stranding responses in the future. The ALMMSN Project Extension would also provide funds to allow the ALMMSN to maintain its current reporting, databases, publications, necropsy reports, number of metadata records relative to cetaceans responded to, necropsies conducted, and samples processed for several years. Specifically, the proposed timing of the Project Extension is January 1, 2025, to at least December 31, 2027, which includes all activities under this program.

Maintenance Requirements. There would be no operation and maintenance requirements associated with the ALMMSN Project Extension because it would not include new infrastructure, maintenance of existing infrastructure, including vehicles and/or boats, or other elements requiring maintenance.

Project Monitoring Summary. A MAM plan was developed for the original ALMMSN Project as part of RP II/EA and would be extended as part of the ALMMSN Project Extension; the updated MAM plan is included in Appendix A.

Costs. The cost estimate for the ALMMSN Project Extension is \$1,881,237, with implementation activities accounting for \$1,713,859, oversight totaling \$20,000 and contingency funds of \$147,378.

Alternative 2: Reducing Illegal Feeding of Bottlenose Dolphins

Project Summary/Background. The Reducing Illegal Feeding of Bottlenose Dolphins Project (Reducing Illegal Feeding Project) would build upon the work conducted in the RP II/EA under the Dolphin Education Project. The overall goal of the Reducing Illegal Feeding Project would be to provide restoration benefits to Gulf bottlenose dolphins by supporting on-going work to reduce the number of dolphin injuries and mortalities due to illegal feeding. This Project would aim to reduce lethal impacts to dolphins from illegal feeding activities by changing human behaviors through a targeted outreach and education strategy. Specifically, the Reducing Illegal Feeding Project would:

- Review and build on outcomes from social science studies previously conducted for dolphinhuman interactions and evaluate additional needs;
- Conduct additional social science studies (e.g., focus groups, interviews) in a portion of user groups (e.g., ecotour businesses, residents, tourists);
- Build on the comprehensive, targeted outreach strategy and study results developed in the RP II/EA Dolphin Education Project and implement the resulting recommendations;

- Design and produce outreach materials based on the outreach strategy and results;
- Distribute and communicate education tools and messages, through partnerships with ADCNR and other stakeholders to reach targeted user groups; and
- Repeat social science studies to evaluate the use of informed and targeted outreach to effectively change human behaviors.

The goal of the Reducing Illegal Feeding Project would be to reduce the occurrence of people illegally feeding dolphins, and thus prevent associated injury and mortality of dolphins in Alabama state waters. Illegal feeding of wild dolphins has been documented extensively along the Gulf Coast by various water users (e.g., tourism vessels, commercial fisheries, and recreational anglers). Fed dolphins approach boats more readily looking for handouts, which increases the animals' risk for boat strike or gear entanglement. Fed dolphins can also become targets for human acts of retaliation, including anglers frustrated by dolphins begging, removing bait or catch from their lines, or scavenging on undersized throwbacks. Begging behaviors can be taught to other dolphins via social learning, thus perpetuating and increasing the prevalence of the problem over time. By working to decrease the frequency of these illegal feeding events, the Reducing Illegal Feeding Project would aim to reduce the likelihood of these dangerous interactions. The goal of the Reducing Illegal Feeding Project would be to benefit bottlenose dolphins in all areas of Alabama where illegal feeding activities could occur.

The Reducing Illegal Feeding Project would be implemented by NOAA in coordination with ADCNR.

Construction Methodology (or Implementation Methodology) and Timing. The human-dimension social science studies component of this restoration alternative would be conducted in several Alabama Gulf Coast locations, as determined by the Implementing Trustees in coordination with the professional contractor conducting the studies. The following information would be used to determine locations for conducting social science studies: (1) known hotspot locations for illegal feeding activities, and (2) outcomes of previously conducted social science studies. Studies would be anticipated to occur at select locations in Alabama and include a portion of representative user groups (e.g., commercial tour operators, residents, tourists). Distribution and communication of the outreach strategies could be conducted throughout Alabama, as determined by the comprehensive outreach strategy developed and implemented in the RP II/EA Dolphin Education Project.

Maintenance Requirements. There would be no operation and maintenance requirements for the Reducing Illegal Feeding Project because this project would not include new infrastructure, maintenance of existing infrastructure, including vehicles and/or boats, or other elements requiring maintenance.

Project Monitoring Summary. Because the Reducing Illegal Feeding Project has not been identified as a preferred alternative by the AL TIG, an updated MAM plan has not been developed for this potential project.

Costs. The cost estimate for the Reducing Illegal Feeding Project is \$2,400,000, with implementation activities accounting for \$2,013,700, oversight totaling \$100,000, and contingency funds of \$286,300. Fully funding this project alternative would require use of available AL TIG earned interest, however, this project is scalable.

2.4 Natural Recovery/No Action

As provided by the OPA NRDA regulations, the Final PDARP/PEIS considered a "natural recovery alternative in which no human intervention would be taken to directly restore injured natural resources and services to baseline" (15 C.F.R. 990.53(b)(2)) following the DWH oil spill. Under a natural recovery alternative, no additional restoration would be done by the DWH Trustees or the AL TIG to accelerate the recovery of injured natural resources or to compensate for lost services. Instead, the AL TIG would

allow natural recovery processes to occur, which could result in one of four outcomes for injured resources: (1) gradual recovery, (2) partial recovery, (3) no recovery, or (4) further deterioration. Although injured resources could presumably recover to at or near baseline conditions under this scenario, recovery would take much longer compared to a scenario in which restoration actions were undertaken. Given that technically feasible restoration approaches are available to compensate for interim natural resource and service losses, the DWH Trustees (including those on the AL TIG) rejected this alternative from further OPA evaluation within the Final PDARP/PEIS. Based on this determination, and tiering this Supplemental RP II/EA from the Final PDARP/PEIS and the RP II/EA, and incorporating that analysis by reference, the AL TIG is not further evaluating natural recovery for the Marine Mammals Restoration Type as a viable alternative under OPA in this Supplemental RP II/EA.

Under NEPA, consideration of a no action alternative may be used as a basis to compare the potential environmental consequences of the action alternatives(s). A no action alternative is evaluated in that sense within this Supplemental RP II/EA. This analysis presents the conditions that would result if the AL TIG selected not to undertake any additional marine mammals restoration to compensate for the injuries to marine mammals resulting from the DWH oil spill at this time. The environmental consequences of a no action alternative are evaluated in Chapter 7 of the RP II/EA for comparison with the proposed action alternative and that analysis is incorporated here.

3.0 OPA EVALUATION

Under the NRDA regulations, Trustees are responsible for identifying a reasonable range of restoration alternatives (15 C.F.R. 990.53(a)(2)) to be evaluated according to the OPA standards (15 C.F.R. 990.54). The criteria and process for the OPA evaluation are detailed in the RP II/EA in Section 3.0, including the Restoration Goals and Approaches for marine mammals' restoration projects that are provided in Section 3.5.1 (and summarized in Section 2.1 of this Supplemental RP II/EA).

This section provides the OPA evaluation for the ALMMSN Project Extension and the Reducing Illegal Feeding Project alternatives.

Alternative 1: Enhancing Capacity for the Marine Mammal Stranding Network Project Extension

The OPA evaluation for the Enhancing Capacity for the Marine Mammal Stranding Network Project Extension is provided in Table 2.

Allalysis	
Resource Area	OPA Analysis for the Enhancing Capacity for the Marine Mammal Stranding Network Project Extension
Trustee Goals and Objectives	This project meets the TIG's Marine Mammal restoration goals by working to increase marine mammal survival through a better understanding of the causes of illness and death, as well as the facilitation of the early detection of and potential intervention for anthropogenic and natural threats. Consistent with both the Final PDARP/PEIS and the <i>Strategic Framework for Marine Mammal</i> <i>Restoration Activities</i> (Module 4, section 2.4, page 11), the ALMMSN Project Extension would aim to do this by reducing stranding response time; improving the quantity, quality, and consistency of reporting data for marine mammals; increasing the number of personnel trained for stranding response in the region; increasing the number of biological samples analyzed to determine causes of

Table 2: Enhancing Capacity for the Marine Mammal Stranding Network Project Extension OPA Analysis

Resource Area	OPA Analysis for the Enhancing Capacity for the Marine Mammal Stranding Network Project Extension		
	death and population status; expanding community awareness; and providing long-term data sharing, storage, and retrieval capacity. Project efforts would directly enhance the number of reports and quality of information available to dolphin management authorities. Relationships among regional network responders would also be expected to be strengthened by the increased capacity for trained response, and increased veterinarian participation could ease workloads. These combined efforts would aim to reduce marine mammal mortality in Alabama waters, to better define the specific causes of serious injury and death among stranded marine mammals, and to establish baseline conditions or shifts from previous conditions for comparison to immediate and longer-term threats to marine mammals. In the long term, the project efforts would be intended to increase the abundance and stability of marine mammal populations in the region, identify larger patterns in stranding data that would allow managers and policy makers to define and focus management and conservation efforts, improve knowledge of and response to future environmental emergencies like the DWH oil spill or longer term effects such as climate change and habitat loss, and potentially reduce the likelihood of future unusual or mass mortality events.		
Cost to Carry Out the Alternative	The proposed cost of this restoration alternative is \$1,881,237. These costs are based on actual operation of the existing ALMMSN program, and the implementation of the original ALMMSN Project from RP II/EA. The AL TIG reviewed the costs to carry out this alternative and found them to be reasonable estimates of the levels of effort required for the proposed activities. The program costs are representative of direct and indirect costs incurred by other similar stranding networks in the Gulf of Mexico. The AL TIG also reviewed the estimated project oversight, supervision, and contingency costs. Based on similar past projects, the AL TIG found these costs to be reasonable. In summary, based on this review, the AL TIG finds the total estimate of the proposed costs for this project reasonable and appropriate.		
Likelihood of Success	This alternative has a high likelihood of success, including the potential to strengthen the ALMMSN program and contribute to the knowledge and conservation management of Alabama's marine mammal populations. The ALMMSN program and the TIG's previous enhancement and expansion of the program with the original ALMMSN Project is already operating successfully. Funding of this extension effort would ensure its continued operation at current levels. The current program under its existing manager, DISL, is a success because DISL staff have the expertise and experience to implement the activities proposed under the program—including sample collection, necropsies, sample analysis, and data		

Resource Area	OPA Analysis for the Enhancing Capacity for the Marine Mammal Stranding Network Project Extension		
	management. This success is expected to continue with the proposed project extension.		
Avoids Collateral Injury	The proposed project extension is not expected to cause any collateral damage to other natural resources because it would primarily be a data collection and analysis initiative. Any interactions with marine mammals (e.g., bottlenose dolphins injured through human interactions) would be governed by the existing agreement for the stranding program between DISL and NOAA's Southeast Region (valid through 9/30/25) or by a renewal of the agreement after expiration of the current one. The reasons why this project avoids collateral injury are discussed more fully in Chapter 11 of the RP II/EA.		
Benefits More Than One Natural Resource or Service	This alternative is only expected to benefit marine mammals.		
Effects on Public Health and Safety	The proposed project extension is not expected to affect public health and safety. The restoration effort would primarily involve data collection and management by ALMMSN staff. These activities are not expected to result in any health or safety issues for the public, who would not be involved in the project.		
Summary OPA Evaluation: Enhancing Capacity for the Marine Mammal Stranding Network Project Extension	The OPA evaluation indicates that implementation of this alternative addresses the TIG's Marine Mammals restoration goals by continuing efforts to strengthen and grow the understanding of threats to marine mammal populations in Alabama waters and to contribute towards the development of infrastructure to address those threats. The proposed approach has already been successfully implemented as the original ALMMSN Project, and the proposal to provide for continued operation of these efforts is well documented. The costs are based on historical experience and are well documented and reasonable. The project only benefits marine mammals. It is not expected to cause any collateral damage to natural resources. Public health and safety issues are not expected to be a concern. Thus, this project extension is a high priority for implementation.		

Alternative 2: Reducing Illegal Feeding of Bottlenose Dolphins

An analysis of the OPA evaluation for the Reducing Illegal Feeding Project is provided in Table 3.

Resource Area	OPA Analysis for the Reducing Illegal Feeding of Bottlenose Dolphins Project	
Trustee Goals and Objectives	This project would meet the TIG's Marine Mammals restoration goals because it is intended to reduce lethal and harmful impacts on dolphins from illegal feeding activities by working to change human	

Table 3: Reducing Illegal Feeding of Bottlenose Dolphins Project OPA Analysis

Resource Area	OPA Analysis for the Reducing Illegal Feeding of Bottlenose Dolphins Project		
	behavior. Consistent with both the Final PDARP/PEIS and the Strategic Framework for Marine Mammal Restoration Activities (Module 4, section 2.4, page 11), the project aims to do this by reducing the occurrence of people illegally feeding dolphins, thus preventing associated injury and mortality of dolphins.		
Cost to Carry Out the Alternative	The proposed cost of the project is \$2,400,000. These costs are based on the costs of conducting similar social science studies and outreach efforts. The AL TIG reviewed these costs and found them to be reasonable estimates of the levels of effort required for the proposed activities. The AL TIG also reviewed the estimated project oversight, supervision, and contingency costs. Based on similar past projects, the AL TIG found these costs to be reasonable. In summary, based on this review, the AL TIG finds the total estimate of the proposed costs for this project reasonable and appropriate. There are not enough funds remaining in the marine mammal allocation to fund this entire project; however, this project is scalable.		
Likelihood of Success	This alternative has a high likelihood of success, as similar education and outreach programs have been successfully implemented. Additionally, similar education and outreach programs have demonstrated the ability to change human behaviors towards particular species.		
Avoids Collateral Injury	The proposed project is not expected to cause any collateral damage to other natural resources because it would primarily be a data collection and education initiative.		
Benefits More Than One Natural Resource or Service	This alternative is only expected to benefit marine mammals.		
Effects on Public Health and Safety	The proposed project is not expected to affect public health and safety. The project would primarily involve data collection and outreach activities. These activities are not expected to result in any health or safety issues for the public.		
Summary OPA Evaluation: Reducing Illegal Feeding of Bottlenose Dolphins Project	The OPA evaluation indicates that implementation of this alternative is intended to address one of the TIG's Marine Mammals restoration goals by developing information and outreach aimed at reducing illegal dolphin feedings. The proposed project activities are likely to succeed based on past, similar projects. The costs are based on historical experience and are well documented and reasonable; and the project is scalable. The project only benefits marine mammals. It is not expected to cause any collateral damage to natural resources. Public health and safety issues are not expected to be a concern.		

Summary of OPA Analysis

The evaluations for both the ALMMSN Project Extension and Reducing Illegal Feeding Project are similar under all OPA categories. However, while the "Cost to Carry Out the Alternative" is scalable for the Reducing Illegal Feeding Project, full restoration benefits for that project would be accomplished using the stated project budget, which is more than the funds remaining allocated for the Marine Mammals Restoration Type in the Alabama Restoration Area. In addition, while both projects have a high likelihood of success, the ALMMSN Project is already in progress, demonstrating successful implementation. Moreover, without funding for the extension, the ALMMSN would be underfunded and not able to continue to maintain the level of restoration benefits it currently provides.

4.0 NEPA ANALYSIS

This chapter incorporates by reference and summarizes all relevant NEPA analysis of the RP II/EA. This chapter describes the affected environment and environmental impacts of both action alternatives. The NEPA analysis below tiers from the PDARP/PEIS. Impact definitions (minor, moderate, major) are consistent with those used in the RP II/EA and PDARP/PEIS.

To determine whether an action has the potential to result in significant impacts, the context and intensity of the proposed action must be considered. Context refers to area of impacts (local, state-wide, etc.) and duration (i.e., whether they are short-term or long-term). Intensity refers to the severity of impact and could include the timing of the action (e.g., more intense impacts would occur during critical periods like high visitation or wildlife breeding/rearing). Intensity is also described in terms of whether the impact would be beneficial or adverse. The analysis of beneficial impacts focuses on the duration (short term or long term) and does not attempt to specify the intensity of the benefit.

"Adverse" is used in this document only to describe the Trustees' evaluation under NEPA. That term is defined and applied differently in consultations conducted pursuant to the Endangered Species Act (ESA) and other protected resource statutes. Accordingly, there may be adverse impacts identified under NEPA; however, this does not necessarily mean that an action would be likely to "adversely affect" the same species because that term is defined and applied under protected resources statutes. The results of any completed protected resource consultations are included in the DWH AR.

This chapter addresses direct, indirect, and cumulative impacts of the proposed alternatives. Section 6.6 and Appendix 6.B of the PDARP/PEIS (Cumulative Impacts) are incorporated by reference into the cumulative impacts analysis, including the methodologies for assessing cumulative impacts, identification of affected resources, and the cumulative impacts scenario.

The NEPA analysis in this Supplemental RPII/EA tiers from the PDARP/PEIS, where applicable. To ensure compliance with the FRA (42 USC § 4336(b)), in the preparation of this Supplemental RPII/EA, the Alabama TIG reevaluated the PDARP/PEIS analysis and its underlying assumptions and confirms its continued validity. Specifically, the Alabama TIG compared their assessment of each project's anticipated impacts on each resource analyzed with the impact intensity definitions (short or long term, minor, moderate, or major) found in Table 6.3-2 of the PDARP/PEIS (and in this Supplemental RPII/EA Appendix X) and with the impacts the PEIS forecasted to marine mammals from the two approaches proposed in this plan.

4.1 Summary of Programmatic Environmental Consequences per the PDARP/PEIS

The PDARP/PEIS found that, in the case of "increasing marine mammal survival through better understanding of the causes of illness and death, as well as early detection and intervention for

anthropogenic and natural threats" (PDARP/PEIS 6.4.9.3), the following environmental impacts were expected:

Physical resources: There may be short-term, minor adverse effects on geology, substrates, and water quality during stranding responses due to use of temporary pools for rehabilitation of stranded mammals, contamination (e.g., from wastes or pathogens), and carcass burial on site.

Biological resources: There may be short-term, minor adverse impacts to marine mammals and/or other species incidental to response activities. For example, rescue attempts and associated increases in travel and activity may result in habitat disturbance or accidental injury to another animal during the response. However, improved response would likely increase the success of rescue, rehabilitation, and release of live marine mammals.

Socioeconomic resources: An expanded MMSN would increase the ability for personnel to respond to marine mammal stranding events and/or emergencies on water or land. A slight increase in the use of vessels and/or vehicles to respond to marine-based stranding events (e.g., entanglements or entrapments) or land-based strandings may result from implementation of this approach. Long-term, minor adverse effects could be created by increasing human and vehicular traffic during strandings responses, which could negatively affect boater or beachgoer experiences.

In the case of the "reduce injury, harm, and mortality to bottlenose dolphins by reducing illegal feeding and harassment activities" approach (PDARP/PEIS 6.4.9.5) there would be no anticipated adverse impacts to physical, biological, or socioeconomic resources as the activity is limited to studies, outreach, and education.

The Alabama TIG finds that the resource impacts as forecasted in the PDARP/PEIS are consistent with the impacts anticipated from the projects analyzed in this Supplemental RPII/EA, and thus the Alabama TIG affirms the applicability of the PDARP/PEIS' NEPA analysis to this Supplemental RPII/EA. Additional analysis regarding the specific activities proposed in this Supplemental RP/EA is found below.

As evaluated in the RP II/EA, where the original ALMMSN Project and Dolphin Education Project were analyzed, many resource areas have been determined to be either unaffected or minimally affected by the action alternatives. Those minimally affected resources, as noted in Chapter 11.0 of the RP II/EA, are as follows; Geology and Substrates; Hydrology and Water Quality; Noise; Federally Managed Fisheries; Socioeconomics and Environmental Justice; Infrastructure and Transportation; Land and Marine Management; Aesthetics and Visual Resources; Public Health and Safety; Fisheries and Aquaculture; and Marine Transportation. In addition, neither Alternatives 1 and 2 would result in noticeable emissions that would result in minor or greater adverse impacts. Alternative 1 would have minimal vehicle use, but this use would result in negligible emissions in the region. Alternative 2 would utilize funding primarily for research, education, and outreach. Because there would be negligible or less impacts to air quality or air emissions, Air Resources are not carried forward for detailed analysis in this Supplemental RP II/EA. Further, environmental justice was also considered, but there is no potential for adverse environmental, economic, social, or health impacts to communities and groups that meet environmental justice criteria under Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority and Low-Income Populations" (1994). Therefore, environmental justice was not carried forward for detailed analysis. Only those resources with potential for at least minor impacts have been carried forward for detailed analysis below (e.g., biological resources).

4.2 Affected Environment

4.2.1 Marine and Estuarine Resources

Habitat

The primary affected environment related to the restoration activities that would occur under either project includes tidal, coastal, and nearshore waters of the state of Alabama, largely within the Mobile Bay and Perdido watersheds. Additional information on coastal and nearshore habitats where restoration activities would typically occur is listed below.

Intertidal Marshes and Flats. Intertidal marshes and flats occur in shallow depositional areas of estuaries. They are generally shallow water areas that support a great diversity of fishes and other aquatic and terrestrial wildlife. These habitats are most commonly associated with mud-bottomed bays behind barrier bottoms (ADCNR 2015). Fresh and saltwater marshes provide valuable ecosystem services, including filtration of nutrients and pollutants, shoreline and sediment stabilization, and flood protection. Marshes include plants whose root systems are suited to withstand more frequent and longer durations of inundation than plants in low wetlands. Salt marshes in Alabama are primarily dominated by black needlerush (*Juncus roemerianus*) and saltmeadow cordgrass (*Spartina patens*). Common freshwater marsh plants include common reed (*Phragmites australis*), cattail (*Typha sp.*), bulrushes (*Scirpus sp.*), sawgrass (*Cladium jamaicense*) and water lily (*Nymphaea odorata*) (Alabama State Parks 2013).

<u>Beaches and Dunes</u>. Beaches are landforms that consist of coastal accumulations of sandy sediment deposits that are shaped by wave and tidal activity. Because of the constant wave action, vegetation is typically restricted to above the high-tide elevation where dunes are formed. Beaches provide habitat for a number of species, including nesting female sea turtles, beach mice, birds, and shellfish. Dunes are hills of sand formed by wind or the flow of water. Dunes require a healthy plant community to hold substrate in place. The plant root structure prevents shifting of the sand from wind or water erosion, causing dune decay. Dune habitats are separated into four different sections: primary dunes that reside closest to the water, secondary dunes, tertiary dunes, and scrubland. Common dune vegetation in coastal Alabama includes sea oats (*Uniola paniculata*), panic grasses (*Panicum spp.*), coastal bluestem (*Schizachyrium maritimum*), and beach sunflower (*Helianthus debilis*). Many shorebirds and waterbirds use these areas for resting and feeding.

<u>Submerged Aquatic Vegetation (SAV)</u>. SAV includes seagrass beds, which are extremely productive habitats within the marine and estuarine waters of coastal Alabama. SAV consists of rooted vascular plants that grow in fresh, brackish, and salt water. SAV beds provide important foraging grounds and nursery habitat for many marine and estuarine species in the Gulf of Mexico, including nearly all managed fisheries. Seagrass communities also support many threatened and endangered species, including sea turtles and manatees. These submerged habitats have a patchy distribution behind protective barrier islands and other nearshore areas where sediment accumulates, with extensive occurrences in Perdido Bay, Wolf Bay, and Mississippi Sound, and the Mobile-Tensaw Delta. Common SAV species that occur within Baldwin and Mobile Counties include widgeon grass (*Ruppia maritime*), American wild celery (*Vallisneria americana*), shoal grass (*Halodule wrightii*), southern naiad (*Najas guadalupenis*), and slender pondweed (*Potamogeton pusillus*) (ADCNR 2015).

<u>Oyster Reefs</u>. Oysters are important as both organisms and habitat with an integral role in the functioning of the ecosystem. The aggregations of oysters that comprise an oyster reef result in a complex and hard substrate that provides habitat for multiple benthic organisms and fish, increasing biodiversity in estuaries. Within an oyster reef community, oysters (*Crassostrea virginica*) are the dominant species, although more than 300 other macrofauna species may be living on an oyster reef.

Oysters are an ecological keystone species in most estuaries along the Atlantic and Gulf Coasts, and oyster populations contribute to the integrity and functionality of estuarine ecosystems. Oyster reefs also provide a number of ecosystem services, including improved water clarity, sediment stabilization, and nutrient sequestration. Oyster reefs along the Gulf Coast also provide nursery and foraging habitat for other economically and ecologically important species, including blue crab (*Callinectes sapidus*), shrimp, and various fish species. Currently, threats to oyster populations include loss of hard bottom habitat, degradation of water quality, predation (primarily by the Atlantic oyster drill [*Urosalpinx cinerea*]), and disease (primarily dermo). The total area of public reefs in Alabama, including historically harvested reef footprints, cover approximately 5,300 acres, which includes reefs in Mississippi Sound and Portersville Bay. In Alabama, private oyster beds adjacent to riparian and leased areas are harvested commercially. The area of the riparian and leased water bottoms in which these private, commercially harvested oyster beds are found currently totals approximately 870 acres. The largest areas of oyster reef habitat in Alabama currently include the Cedar Point Reef in Portersville Bay and several small patches of oyster reef in Bon Secour Bay.

Maritime Forest and Coastal Scrub. Maritime forest habitat consists of sandy soils that support a mosaic of woody vegetation, often dominated by oaks (*Quercus sp.*) and pines (*Pinus sp.*). Maritime forest habitat occurs on barrier islands and near-coastal areas that are influenced by salt spray, coastal winds, and extreme disturbance such as hurricanes (ADCNR 2015). Maritime forests also contain species such as pignut hickory (*Carya glabra*), southern magnolia (*Magnolia grandifolia*), and red maple (*Acer rubrum*). Beneath the trees and in recently disturbed areas, an understory of shrubs and herbaceous species occurs, including dwarf huckleberry (*Gaylussacia dumosa*), wax myrtle (*Myrica cerifera*), hollies (*Ilex sp.*), and coreopsis (*Coreopsis tinctoria*). Coastal scrub habitat occurs on areas of deep, well-washed, sterile sands in temperate or subtropical environments. This habitat consists of dense hardwood patches of low-growing oaks interspersed with bare areas of white sand and are dominated by myrtle oak (*Quercus myrtifolia*), Chapman's oak (*Quercus chapmanii*), sand live oak (*Quercus geminata*), scrub holly (*Ilex cumulicola*), scrub plum (*Prunus geniculate*), scrub hickory (*Carya floridana*), gray false rosemary (*Conradina canescens*), and saw palmetto (*Serenoa repens*) (Alabama State Parks 2013).

Wildlife

Both action alternatives would include restoration activities that could impact coastal and marine wildlife. These species are discussed below.

<u>Mammals</u>. The most common mammals on beaches or other coastal habitats where this program would be implemented include coyotes, eastern cottontail, raccoon, red fox, white-tailed deer, nutria, bats, and opossum. Bottlenose dolphin and West Indian manatee could occur in any waters in the project areas. Bottlenose dolphin (*Tursiops truncatus*) is the only marine mammal in Alabama's coastal waters that was documented to be affected by the DWH oil spill.

<u>Reptiles</u>. Sea turtles that could occur within the project area primarily include loggerhead sea turtle and small numbers of Kemp's ridley sea turtle. Although unlikely to be encountered, green, hawksbill, and leatherback sea turtle species could also occur in Alabama waters.

Rare and Protected Species

Coastal Alabama's marine and terrestrial habitats support a diversity of species that are designated as endangered or threatened under the ESA. Rare species of highest conservation concern (SGCN P1) that occur in coastal Alabama include Mississippi diamondback terrapin, snowy plover, and Wilson's plover. Rare species of high conservation concern (SGCN P2) that could occur near the project areas include rainbow snake, least bittern, reddish egret, northern harrier, American kestrel, yellow rail, American oystercatcher, Nelson's sharp-tailed sparrow, and seaside sparrow. All marine mammals are federally protected under the Marine Mammal Protection Act.

Alabama does not implement state-level regulatory protection for endangered and threatened species, except for those species that are protected under the Alabama Regulations on Game and Fish and Fur Bearing Animals, which is updated annually (Alabama Administrative Code r. 220-1-1 et seq.) (ALNHP n.d.). These regulations afford protections for some species in Alabama and are administered by ADCNR. The Alabama Natural Heritage Program maintains species inventory lists to help promote state-level conservation efforts (ALNHP 2022). Table 4 lists the rare species that have the potential to occur in Baldwin and Mobile Counties. Listed are higher-level organisms, including amphibians, birds, mammals, reptiles, fishes, crayfish, and freshwater mussels. The list is not inclusive of all species that are tracked by the Alabama Natural Heritage Program because a diversity of rare invertebrate taxa could also occur within the project areas (ALNHP 2022).

ESA Listed Species	Protected Status
Loggerhead sea turtle	Threatened
Kemp's ridley sea turtle	Endangered
Green sea turtle	Threatened
Hawksbill sea turtle	Endangered
Leatherback sea turtle	Endangered
Gulf sturgeon	Threatened
West Indian manatee	Threatened
Alabama Beach Mouse	Endangered
Perdido Key Beach Mouse	Endangered
Tricolored Bat	Proposed Endangered
Gopher tortoise	Threatened
Alabama Red Bellied Turtle	Endangered
Alligator Snapping Turtle	Proposed Threatened
Black Pinesnake	Threatened
Eastern Indigo Snake	Threatened
Dusky Gopher Frog	Endangered
Piping Plover	Threatened
Red Knot	Threatened
Eastern Black Rail	Threatened
Monarch Butterfly	Candidate

 Table 4:
 Endangered Species Act-listed species that could occur in coastal Alabama

On beaches where the ALMMSN could potentially respond to strandings, critical habitat is designated for loggerhead sea turtle nesting (LOGG-T-AL-01, LOGG-T-AL-01, and LOGG-T-AL-03), as well as Alabama beach mouse (Units 1, 2, 3, 4, and 5) and wintering piping plover (Units AL-1, AL-2, and AL-3). Protected marine mammals that could occur near the project areas include both West Indian manatee and

bottlenose dolphin. Other marine mammal species that have stranded in the past and have the potential to strand in the future include the melon-headed whale, pygmy killer whale, rough-toothed dolphin, Risso's dolphin, and Atlantic spotted dolphin.

4.2.2 Cultural Resources

Cultural Resources

Cultural resources are evidence of past human activity and can include pioneer homes, buildings, old roads, structures with unique architecture, prehistoric village sites, historic or prehistoric artifacts or objects, rock inscription, human burial sites, battlefield entrenchments, prehistoric canals, or mounds. The Alabama Gulf Coast is one of the most historically significant regions in the southeastern United States, with culturally significant resources throughout the area. It was popular with prehistoric Native Americans for fishing and food gathering long before the first European explorers arrived on the coast (Cox 2012). Project activities for both alternatives would occur throughout coastal Alabama.

4.3 Environmental Consequences – Alternative 1: Enhancing Capacity for the Marine Mammal Stranding Network Project Extension

4.3.1 Marine and Estuarine Resources

Habitat

The continuation of the ALMMSN Project and increased funding to support the ALMMSN's response to stranded animals could result in short-term, minor adverse impacts on beaches and dunes, intertidal marshes and flats, or other coastal habitats where marine mammal strandings and associated response activities typically occur. All potential impacts would be temporary, resulting from boat traffic, noise, and human presence during stranding response, and conditions would be expected to quickly return to baseline upon completion of stranding response activities.

Wildlife

Continuation of the ALMMSN Project could result in short-term, minor adverse impacts on terrestrial and aquatic wildlife. These impacts could result from disturbance by boat traffic, noise, and human presence during stranding response activities. However, the vast majority of affected species are highly mobile and would be expected to easily move to adjacent suitable habitat. In addition, the activities would be limited in duration and should not produce any noticeable increase in the overall high level of human activity in the project area. Thus, there would be no noticeable long-term adverse impacts on wildlife.

Over the long term, the project would continue to provide restoration benefits to marine mammals by enhancing the capacity of the ALMMSN to understand threats to bottlenose dolphins in Alabama waters and respond to stranded marine mammals. It would continue efforts intended to increase marine mammal survival by working to improve the understanding of causes of dolphin illness/mortality, as well as facilitate early detection and intervention to address anthropogenic and natural threats.

Rare and Protected Species

Short-term, minor adverse impacts on sea turtles and other terrestrial ESA-listed species that use coastal and nearshore habitats could occur because of disturbance from ALMMSN staff responding to stranded marine mammals. Boat traffic, noise, and human presence during stranding response could result in temporary disturbance or displacement of some ESA-listed species if individuals are present near the marine mammal stranding locations. However, adverse impacts on any protected species would be unlikely because these activities would not create substantially greater human presence in project lands

and waters. Thus, potential impacts on ESA-listed species, state-protected species, or other species of conservation concern are anticipated to be minimal. Potential impacts on sea turtle species, West Indian manatee, and other ESA-listed species would be negligible with the implementation of appropriate conservation measures. Sea turtle species that potentially occur in Alabama waters but do not nest on Alabama beaches (e.g., green, hawksbill, and leatherback) would not be affected because they would be extremely unlikely to occur near marine mammal stranding locations.

There would be no long-term, adverse impacts on protected marine mammals. Impacts to protected marine mammals within the project area would be limited to short-term, minor adverse impact from temporary disturbance caused by boat traffic, noise, and human presence as project staff respond to marine mammal strandings. The project's purpose is to contribute to the understanding and recovery of Alabama's bottlenose dolphin by improving the state's Marine Mammal Stranding Network and other conservation programs. Over the long term, the project would be anticipated to benefit bottlenose dolphins through increased effectiveness of treating and/or collecting data on stranded marine mammals. The West Indian manatee would not likely be adversely affected by the project activities because the increase in boat traffic would be minimal, and no project activities would contribute threats to the species. Impacts to critical habitat within the project area would be limited to short-term, minor adverse impact from temporary disturbance caused by boat traffic, noise, and human presence as project staff respond to marine mammal strandings. The project would result in no damage or adverse modification to critical habitat for nesting loggerhead sea turtles, Alabama beach mice, or wintering piping plovers because any disturbance from marine mammal stranding response would be expected to be temporary. The project would not alter the physical or biological primary constituent elements that are essential for loggerhead sea turtle survival, reproduction, and ultimately, recovery. Activities would also occur during daylight hours, when nesting loggerhead sea turtles usually do not emerge from water. Impacts to the Alabama red-bellied turtle are expected to be negligible as any disturbance due to marine mammal stranding responses would be temporary and there are no physical or biological alterations taking place within any freshwater streams, rivers, bays, or bayous. Stranding activities will not affect primary elements of the eastern black rail habitat within marshes or meadows; therefore, impacts to the eastern black rail are expected to be minor. The project's effects on Alabama beach mouse critical habitat would be negligible because stranding activities would not affect the primary constituent elements of their dune habitat. Piping plover habitat on beaches in the project would be anticipated to be unaltered. The project would continue to provide restoration benefits to bottlenose dolphin and other cetaceans by enhancing the capacity of the ALMMSN to understand and respond to stranded marine mammals. It would continue efforts aimed to increase marine mammal survival by providing improved understanding of causes of illness/mortality, as well as early detection and intervention to address anthropogenic and natural threats.

4.4 Environmental Consequences – Alternative 2: Reducing Illegal Feeding of Bottlenose Dolphins

4.4.1 Marine and Estuarine Resources

Habitat

Education and public outreach activities would have no effect on local habitats as conservation efforts would be conducted in already-developed areas in a noninvasive manner. There would be no construction or other alteration of habitats relating to the project area; therefore, there would be no impacts on habitats.

Wildlife

Education and public outreach activities would have no effect on wildlife as conservation efforts would be conducted in already-developed areas in a noninvasive manner. There would be no construction or other alteration of habitats relating to the project area; therefore, there would be no impacts on wildlife. There would be long-term, beneficial impacts on bottlenose dolphins from education and outreach activities aimed at reducing illegal feeding.

Rare and Protected Species

Over the long term, the project would seek to benefit bottlenose dolphins by reducing illegal feeding through public education and outreach and changed human behaviors. The project has the potential to benefit bottlenose dolphins in all areas of Alabama where illegal feeding activities could occur. The project would not affect any other rare or protected species or critical habitat.

4.4.2 Cultural Resources

Cultural Resources

The proposed actions associated with this project would have no potential to impact cultural resources. Project activities are limited to public education and outreach.

4.5 No Action Alternative

Pursuant to NEPA, a no action alternative was considered as "a benchmark, enabling decision-makers to compare the magnitude of environmental effects of the action alternatives (40 C.F.R. § 1502.14(d))." Under the no action alternative, marine mammal restoration projects would not occur. If marine mammal projects were not implemented, potential adverse impacts on rare and protected species could occur for bottlenose dolphins and other cetaceans, the protected marine mammals for which the projects are targeted to benefit. The adverse impacts could be long term and of moderate intensity since some cetaceans, including bottlenose dolphins, could suffer injury or mortality that could potentially be mitigated by the proposed projects. No short- or long-term impacts would occur to other resources. More details on the no action alternative analysis can be found in the RP II/EA.

4.6 Comparison of Alternatives

Table 5 provides a summary of the environmental consequences of the evaluated action alternatives.

Resource Area	Impact S		
	Enhancing Capacity for	Reducing Illegal	No Action
	the Alabama MMSN	Feeding of Bottlenose	
		Dolphins	
Habitat	Short-term, minor	No impacts on habitats.	No impact on habitats.
	impacts on beaches and		
	dunes, intertidal marshes		
	and flats, or other coastal		
	habitats from		
	disturbances during		
	stranding response.		
Wildlife	Short-term minor adverse	Long-term, beneficial	Long-term, beneficial
	impacts from	impacts on bottlenose	impacts on bottlenose
	disturbances during	dolphins from education	dolphins from education
	stranding response. Long-	and outreach activities	and outreach activities

Table 5: Summary of Environmental Consequences

Resource Area	Impact Summary		
	Enhancing Capacity for the Alabama MMSN	Reducing Illegal Feeding of Bottlenose Dolphins	No Action
	term beneficial impacts on marine mammals from response and understanding enhancement.	aimed at reducing illegal feeding.	aimed at reducing illegal feeding.
Rare and Protected Species	Short-term, minor adverse impacts from disturbances during stranding response. Long- term beneficial impacts on marine mammals from response and understanding enhancement	Long-term, beneficial impacts on bottlenose dolphins from education and outreach activities aimed at reducing illegal feeding. No impacts on any other rare or protected species.	Long-term, adverse, moderate impacts as some cetaceans suffer injury or mortality that could otherwise potentially be mitigated by the proposed projects.
Cultural Resources	No impacts on cultural resources.	No impacts on cultural resources.	No impacts on cultural resources.

4.7 Cumulative Impacts

No cumulative impacts are expected as a result of the proposed action alternatives. The RP II/EA detailed the expected cumulative impacts of the included projects, including the ALMMSN Project and the Dolphin Education Project. The alternatives evaluated in this Supplemental RP II/EA are a continuation of these projects or elements thereof. Therefore, implementation of one or both of the alternatives evaluated in this Supplemental RP II/EA would not change the cumulative impact findings found in the RP II/EA (see Section 14). The alternatives evaluated in this document would not contribute substantially to short-term or long-term adverse cumulative impacts on physical, biological, or socioeconomic resources when analyzed in combination with other past, present, and reasonably foreseeable future actions.

5.0 COMPLIANCE WITH OTHER LAWS AND REGULATIONS

Additional federal and state laws may apply to the proposed projects considered in this Supplemental RP II/EA. The legal authority applicable to restoration project development was fully described in the context of the DWH restoration planning in the PDARP/PEIS, Section 6.9, Compliance with Other Applicable Authorities and Appendix 6.D, Other Laws and Executive Orders, and RP II/EA. Federal environmental compliance responsibilities and procedures will follow the Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the Deepwater Horizon (DWH) Oil Spill, provided in Section 9.4.6 of that document. Following these standard operating procedures, the AL TIG, through its Implementing Trustee(s) for the preferred alternative, would ensure that the status of environmental compliance (e.g., completed versus in progress) is tracked through the Restoration Portal. The Implementing Trustee(s) will keep a record of compliance documents (e.g., ESA biological opinions) and ensure that they are submitted for inclusion to the Administrative Record. The Implementing Trustee(s) will applicable laws and regulations. A biological evaluation form has been submitted and technical assistance with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service are complete. Alternative 1 May Affect, but is Not Likely to Adversely Affect the following NOAA and U.S. Fish and Wildlife Service ESA-listed species: loggerhead

sea turtle, Kemp's ridley sea turtle, green sea turtle, hawksbill sea turtle, leatherback sea turtle, West Indian manatee, Gulf sturgeon, Alabama red-bellied turtle, Alabama beach mouse, piping plover, red knot, and Eastern black rail. Table 6 below lists the status of compliance activities.

5.1 Additional Federal Laws

Potentially applicable federal laws, regulations, and executive orders may include but are not limited to:

- ESA
- Magnuson-Stevens Fishery Conservation and Management Act
- Marine Mammal Protection Act
- Coastal Zone Management Act
- National Historic Preservation Act
- Coastal Barrier Resources Act
- Migratory Bird Treaty Act
- Bald and Golden Eagle Protection Act
- Clean Air Act
- Clean Water Act
- Rivers and Harbors Act
- Marine Protection, Research and Sanctuaries Act
- Estuary Protection Act
- Archaeological Resource Protection Act
- National Marine Sanctuaries Act
- Farmland Protection Policy Act
- Private Aids to Navigation (C.F.R. Title 33, Chapter 1, Part 66)
- Federal Water Pollution Control Act
- Executive Orders (EOs) EO 11988, Floodplain Management; EO 11990, Protection of Wetlands; EOs 12898 and 14096, Environmental Justice; EO 12962, Recreational Fisheries; EO 13112, Invasive Species; EO 13175, Consultation and Coordination with Indian Tribal Governments; EO 13186, Responsibilities of Federal Agencies to Protect Migratory Birds; EO 13693, Planning for Federal Sustainability in the Next Decade.

5.2 Additional State Laws

Additional state laws may apply to the proposed preferred alternatives considered in this Supplemental RP II/EA.

Potentially applicable state laws may include but may not be limited to:

• ADEM Division 8 Coastal Program Rules

Table 6: Status of Environmental Compliance Reviews for Preferred Alternati

Statute	RP II/EA (2018) Status	New / Updated Status for Project Extension
Bald and Golden Eagle Protection Act	Complete	In Progress
Migratory Bird Treaty Act	Complete	In Progress
Coastal Barrier Resources Act		Complete
Coastal Zone Management Act	Complete	Complete, relying on existing determination; no changes to project
Endangered Species Act, Section 7 (U.S. Fish and Wildlife Service)	Complete	In Progress

Statute	RP II/EA (2018) Status	New / Updated Status for Project Extension
Endangered Species Act, Section 7	Complete	Complete, relying on existing consultation
(National Marine Fisheries Service)		
Magnuson-Stevens Fishery	Complete	Complete, relying on existing compliance
Conservation and Management Act /		
Essential Fish Habitat		
Marine Mammal Protection Act (U.S.	Complete	Complete
Fish and Wildlife Service)		
Marine Mammal Protection Act	Complete	Complete, relying on existing compliance
(National Marine Fisheries Service		
MFS)		
National Historic Preservation Act	Complete	In Progress
Rivers and Harbors Act / Clean Water	N/A	N/A
Act (U.S. Army Corps of Engineers		
permit)		

6.0 REFERENCES

Alabama Department of Conservation and Natural Resources (ADCNR)

2015 Alabama Wildlife Action Plan 2005–2015. Prepared by Terwilliger Consulting, Inc. and Conservation Southeast, Inc. for ADCNR Division of Wildlife and Fisheries Conservation. Available at: <u>http://www.outdooralabama.com/sites/default/files/AL-SWAP-DRAFT-</u><u>30JULY_0.pdf</u>.

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- n.d. Alabama Department of Conservation and Natural Resources Administrative Code, Chapter 220-2, Game and Fish Division. Available at: <u>http://www.alabamaadministrativecode.state.al.us/docs/con_/220-2.pdf</u>. Accessed February 13, 2024.
- 2022 Tracking List of Rare Species in Alabama. Auburn University. Available at: <u>https://www.auburn.edu/cosam/natural_history_museum/alnhp/data/2022_trackinglis</u> <u>t.pdf</u>. Accessed November 7, 2023.

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Cox, D.

2012 Gulf Shores, Alabama: Historic Sites & Points of Interest. Available at: <u>https://www.exploresouthernhistory.com/gulfshores.html</u>. Accessed November 30, 2023. APPENDIX A - MONITORING AND ADAPTIVE MANAGEMENT PLAN FOR DEEPWATER HORIZON NRDA PROJECT: ENHANCING CAPACITY FOR THE ALABAMA MARINE MAMMAL STRANDING NETWORK

7.0 MONITORING AND ADAPTIVE MANAGEMENT PLAN FOR DEEPWATER HORIZON NRDA PROJECT:

ENHANCING CAPACITY FOR THE ALABAMA MARINE MAMMAL STRANDING NETWORK

7.1 **PROJECT OVERVIEW**

The Enhancing Capacity for the Alabama Marine Mammal Stranding Network (ALMMSN) project would enhance the capacity of the ALMMSN by providing funding for staff time, equipment and supplies, and sample analyses and would address the ending of the current funding source through NFWF-GEBF. ALMMSN is operated out of the Dauphin Island Sea Lab (DISL) on Dauphin Island, Alabama. This project would allow ALMMSN to use and expand on its existing infrastructure for cetacean stranding response, and communications and data management in order to enhance the ALMMSN's operations. The project would allow ALMMSN to better respond to live or dead stranded cetaceans, to necropsy animals, and to analyze samples collected from cetaceans stranded in Alabama waters in order to better understand the causes of marine mammal illness and death. It would also support increased data consistency for information collected from stranded marine mammals by supporting ALMMSN to enter its data into a regional marine mammal health database (currently known as GulfMAP, hosted by NOAA). The project is expected to support efforts to increase survival of rescued animals and recovery of populations affected by the DWH oil spill by improving marine mammal stranding response, data collection, data analyses, and reporting for Alabama waters, through better understanding of the causes of illness/mortality and through the early detection and intervention of anthropogenic and natural threats.

7.2 RESTORATION TYPE GOALS AND PROJECT RESTORATION OBJECTIVES

- Project Type: Marine Mammals
- Programmatic Goal: Replenish and Protect Living Coastal and Marine Resources
- Restoration Type Goal: Identify and implement actions that support ecological needs of the stocks; improve resilience to natural stressors; and address direct human-caused threats such as bycatch in commercial fisheries, vessel collisions, noise, industrial activities, illegal feeding and harassment, and hook-and-line fishery interactions
- Restoration Approach: Increase likelihood of marine mammal survival through better understanding of the causes of illness and death, as well as early detection and intervention for anthropogenic and natural threats

Objective 1: Increase trained staff capacity of ALMMSN.

Objective 2: Maintain and/or decrease average reporting time and/or response time.

Objective 3: Collect and analyze additional data to increase understanding of marine mammal population.

7.3 CONCEPTUAL SETTING AND ANTICIPATED OUTCOMES

Funding the ALMMSN will better fill gaps in stranding coverage, reduce stranding response time, improve quantity, quality and consistency of reporting Level A, B, and C data for marine mammals, increase the number of personnel trained for stranding response in the region, increase the number of biological samples analyzed to determine causes of death and population status, expand

community awareness, and provide long-term data sharing, storage and retrieval capacity. These efforts will work towards reducing marine mammal mortality in Alabama waters, better defining the specific causes of serious injury and death among stranded marine mammals, and establishing baseline conditions or shifts from previous conditions for comparison to immediate and longer-term threats to marine mammals. This project will meet the immediate need to provide data to assess the DWH Oil Spill as well as build capacity for collecting scientifically rigorous data for other sources of serious injury and mortality to marine mammals in the future.

In the longer term, this project will support efforts to increase the abundance and stability of marine mammal populations in the region, identify larger patterns in stranding data that will inform managers and policy makers to define and focus management and conservation efforts, provide reliable stranding datasets that can be compared to environmental data to identify and define boundaries for essential habitat, improve knowledge of and response to future environmental emergencies like the DWH Oil Spill or longer term effects such as climate change and habitat loss, and potentially reduce the likelihood of future unusual or mass mortality events. These benefits are possible because the ability to predict, prepare for, respond to, and prevent strandings depends on quality data. These outcomes will necessarily feedback to further support the health and stability of marine mammal populations and achieve optimum sustainable populations within the carrying capacity of the system. The enhanced collaborations with network responders and local researchers will, in turn, foster development of future collaborative work, and provide opportunities for synergistic research, training, and educational activities.

7.3.1 Sources of Uncertainty

The sources of uncertainty that could influence the success of this project include the number of strandings and their state of decomposition (limiting samples collected), emerging threats and diseases, the ability to hire qualified personnel, and the incorporation of data collected into marine mammal management activities. This project has a high likelihood of successfully enhancing the ALMMSN and supporting its efforts to strengthen and grow Alabama's marine mammal populations. The program is already operating successfully and funding of this effort would ensure its continued operation, which otherwise cannot be guaranteed, and its enhancement and expansion. The proposed expansion and enhancement of the program under its existing manager, DISL, is expected to be a success. DISL staff have the expertise and experience to implement the activities proposed under the program—including sample collection, necropsies, sample analysis, and data management.

7.4 PROJECT MONITORING, PERFORMANCE CRITERIA, POTENTIAL CORRECTIVE ACTIONS AND MONITORING SCHEDULE

The proposed monitoring plan for this restoration project was developed to evaluate project performance, key uncertainties, and identify potential corrective actions, if needed. For each of the monitoring parameters identified below, information is provided on the intended purpose of each monitoring parameter (e.g., monitor progress toward meeting one or more of the restoration objectives, regulatory compliance, support adaptive management of the project), monitoring methods, timing and frequency, duration, sample size, and sites. This section also describes applicable performance criteria and potential corrective actions for project parameters associated with project objectives.

The decision-making process requires a structured approach for incorporating new information gained from monitoring and evaluation. As specified in the NRDA regulations, performance criteria are used to determine restoration success or the need for corrective action (15 CFR 990.55(b)(1)(vii)). However, unanticipated consequences, previously unknown conditions or unanticipated environmental drivers

uncovered during the evaluation step may also determine the need for corrective actions. The decision to implement a corrective action will holistically consider the overall outcomes of the restoration project by assessing the results of all monitoring parameters compiled in the evaluation step.

7.4.1 Parameter: Increase Staff Capacity

- a. Purpose: Increase capacity of network to respond tostrandings
- b. Method: Hire qualified staff
- c. Timing and Frequency: Year 1
- d. Sample Size: NA
- e. Sites: NA
- f. Performance Criteria: number of staff hired
- g. Corrective Action(s): Advertise position more broadly if qualified staff cannot be found

7.4.2 Parameter: Average Response Time

- a. Purpose: Understand if increased staff capacity reduces stranding response time
- b. Method: Provide summary of response actions and average response time
- c. Timing and Frequency: Report annually
- d. Sample Size: All responses during a given year
- e. Sites: NA
- f. Performance Criteria: Average response time is maintained or reduced
- g. Corrective Action(s): Update response protocols as needed

7.4.3 Parameter: Percent of Successful Responses to Reported Strandings

- a. Purpose: To understand the number of reported strandings annually as well as increasing understanding of the potential causes of strandings and hot spotareas
- b. Method: Count and provide summary of response action
- c. Timing and Frequency: Report annually
- d. Sample Size: All responses
- e. Sites: Note location of stranding
- f. Performance Criteria: 100% of calls received are responded to
- g. Corrective Action(s): Update response protocols as needed

7.4.4 Parameter: Collection of Stranding Data to Increase Understanding of Population

- a. Purpose: Increase survival of rescued animals and recovery of population by improving understanding of marine mammal population and threats.
- b. Method: Provide stranding information collected and diagnostic results to help managers identify and mitigate impacts on marine mammals from natural and anthropogenic threats.
- c. Timing and Frequency: Data will be collected during each response event, analyzed, and uploaded consistent with the *Data Management* and *Reporting* sections, below.
- d. Sample Size: NA
- e. Sites: NA
- f. Performance Criteria: Summary report provided to ALTIG should provide detail on potential causes of strandings and identify potential actions to reduce threats as well as identification of any hot spot areas for strandings. Data will also be uploaded consistent with the Data Management and Reporting sections, below.
- g. Corrective Action(s): Revise if needed

7.4.5 Parameter: Percent of Biological Samples Collected that are Analyzed

- a. Purpose: Understand if funding is resulting in increased analysis and subsequent increased understanding of marine mammal populations
- b. Method: Count and provide data in GulfMAP and summary of sample results in annual report per protocols
- c. Timing and Frequency: Data will be collected during each response event, analyzed, and uploaded consistent with the Data Management and Reporting sections, below
- d. Sample Size: All samples collected within a given year
- e. Sites: NA
- f. Performance Criteria: 100%
- g. Corrective Action(s): NA

7.4.6 Parameter: Percent of Stranded Animals Reported that are Necropsied

- a. Purpose: Understand if funding is resulting in increased analysis and subsequent increased understanding of marine mammal populations
- b. Method: Count, upload necropsy reports to GulfMAP, and provide summary in annual report
- c. Timing and Frequency: Report annually
- d. Sample Size: All necropsies performed
- e. Sites: NA
- f. Performance Criteria: 100% of Code 2 animals for which a necropsy is feasible
- g. Corrective Action(s): NA

The schedule for project monitoring is shown in Table 1, separated by monitoring activity. Preexecution monitoring will occur before project execution. Execution monitoring occurs when project has been fully executed as planned. Performance monitoring will occur in the year following initial project execution.

Monitoring Parameter	Objective	Pre-Execution Monitoring	As-Built (Year 0)	Project Monitoring (Years 1-4)
Increase staff capacity	1, 2	х		X
Percent of stranded animals that are necropsied	3	Х		x
Collection of stranding data to increase understanding of population	3			X
Average Response Time	2	х		х
Percent of biological samples collected that are analyzed	3	Х		х

Table 1: Monitoring Schedule

Monitoring	Objective	Pre-Execution	As-Built	Project Monitoring
Parameter		Monitoring	(Year 0)	(Years 1-4)
Percent of successful responses to reported strandings	2	Х		Х

7.5 ADAPTIVE MANAGEMENT

As discussed in the PDARP/PEIS, adaptive management is a form of structured decision-making applied to the management of natural resources in the face of uncertainty (Pastorok et al. 1997; Williams 2011). It is an iterative process that integrates monitoring and evaluation of management actions with flexible decision-making, where adjustments are made to management approaches based on observed outcomes (NRC 2004). Within the context of ecological restoration, adaptive management addresses key uncertainties by linking science to restoration decision-making (Steyer & Llewellyn 2000). Although adaptive management is a critical component of the restoration plan as a whole, the need for adaptive management may vary on a project-by-project basis. Some projects may be well understood and not have uncertainties which warrant adaptive management. The monitoring and adaptive management framework may be more robust for elements of the restoration plan with high degrees of uncertainty or where numerous restoration projects are planned within a given geographic area and/or for the benefit of a particular resource (Appendix 5.E.1, PDARP/PEIS). Under OPA NRDA regulations, restoration projects clearly identify performance criteria that would be used to determine project success or the need for corrective action.

The activities proposed in this project are well-established and known to be effective and the program activities have been underway at DISL for several years. The information collected by ALMMSN from stranded cetaceans should enable managers to mitigate impacts to marine mammals from natural and anthropogenic threats and to monitor population recovery post-DWH. Although extensive adaptive management activities are not expected to be necessary for this project, information gained will be useful in planning future restoration efforts for marine mammals.

7.6 EVALUATION

Evaluation of monitoring data is needed to assess the performance of the project in meeting its restoration objectives, resolving uncertainties to increase understanding, and determine whether corrective actions are needed.

As part of the larger decision-making context beyond the project scale, the evaluation of monitoring data from the individual projects would be compiled and assessed at the Restoration Type and TIG level, and the results would be used to update the knowledge base to inform decisions such as future TIG project prioritization and selection, implementation techniques, and the identification of critical uncertainties. The results of the analysis would be used to answer the following questions:

- Were the project objectives achieved? If not, is there a reason why they were not met?
- Did the project produce unanticipated effects?
- Were there unanticipated events unrelated to the project that potentially affected the monitoring results (e.g., hurricanes)?
- Were any of the uncertainties identified prior to project implementation resolved?
- Were any new uncertainties identified?

- Have data been summarized and characterized in a way that allows for a clear understanding of results?
- Have any trends or patterns been identified, and if so, how can they be characterized?
- What broader insights might be gained from implementation/monitoring of this project?

These questions will be answered and compiled in annual monitoring reports for the project and revisions to the MAM plan be made if needed.

7.7 DATA MANAGEMENT

7.7.1 Data Description

All data collected will follow the data standards as per the MAM Manual 1.0 (DWH NRDA Trustees 2017a). To the extent practicable, all environmental and biological data generated during monitoring activities will be documented using standardized field datasheets. If standardized datasheets are unavailable or not readily amendable to record project-specific data, then Project-specific datasheets will be drafted prior to conducting any project monitoring activities. Original hardcopy datasheets and notebooks and photographs will be retained by the Implementing Trustee. Relevant project data that are handwritten on hardcopy datasheets or notebooks will be transcribed (entered) into standard digital format. All field datasheets and notebook entries will be scanned to PDF files All data will have properly documented FGDC/ISO metadata or a data dictionary (defining codes and fields used in the dataset) and a Readme file (describing how data was collected, QA/QC procedures, other information about data such as meaning, relationships to other data, origin, usage, and format – this can reference different documents). Electronic data files will be in a machine-readable format (e.g., comma-separated text values, spreadsheet, or database) named with the date on which the file was created. If a data file is revised, a new version will be uploaded and the original will be preserved.

7.7.2 Data Review and Clearance

After transcription of the data, a second person not associated with data transcription will perform a verification of the data in the electronic data sheets against the original hardcopy datasheets and/or notebooks, and would make any corrections to transcription errors as appropriate before data are used for any analyses or distributed outside of the agency. Implementing Trustees will verify and validate monitoring data and information and ensure that all data are entered or converted into agreed upon/commonly used digital format labeled with metadata. All data will undergo proper QA/QC protocols, be reviewed and verified following the process outlined in Section 3 of the MAM Manual Version 1.0. The TIG will be provided with a 10-day opportunity to review any data that are intended to be made public.

7.7.3 Data Storage and Accessibility

All stranding data and results, including diagnostic results, human interaction, and any information that is not captured on the forms listed under Level A data, will be submitted to the regional and/or national marine mammal stranding database hosted by NOAA (currently GulfMAP, soon to be "Ceto") within 60 days of collection or receipt of results (per GulfMAP current guidelines), or per the requirements in the Marine Mammal Research and Response Act implementing guidelines, whichever is applicable. Summary data will be uploaded to the NOAA DIVER application within one year of collection and analysis.

7.7.4 Data Sharing

Data will be made publicly available, in accordance with the Federal Open Data Policy (Section 10.6.6 of SOP; DWH NRDA Trustees 2016b), through the DIVER Explorer Interface within a year of when the data collection occurred. Some data collected may be protected from public disclosure under federal and state law (e.g., personally identifiable information under the Privacy Act or observer information collected under Magnuson–Stevens Fishery Conservation and Management Act (MSFCMA), etc.) and therefore will not be publicly distributed.

Stranding data submitted to GulfMAP/Ceto will be available in accordance with Marine Mammal Research and Response Act regulations and existing data sharing agreements.

Data submitted to GulfMAP will also be provided to the Gulf of Mexico Dolphin Identification System (GoMDIS) to ensure data sharing and collaboration among neighboring GOM networks. Additionally, data associated with strandings showing evidence of human interaction will be immediately forwarded to the NMFS Office of Protected Resources Bottlenose Dolphin Conservation Coordinator. All data sharing will be consistent with the protocols set forth in the "Marine Mammal Conservation and Recovery in the Gulf of Mexico through support of the Alabama Marine Mammal Stranding Network, AL" project through the NFWF Gulf Environmental Benefit Fund.

7.8 REPORTING

Annual MAM reports describing results of project monitoring and evaluation will be made publicly available, in accordance with the Federal Open Data Policy (Section 10.6.6 of SOP; DWH NRDA Trustees 2016b), through the DIVER Explorer Interface and in accordance with the MAM Manual MAM Report Template.

A final MAM report for the project will be developed prior to project closeout and submitted to the DIVER Restoration Portal.

ALMMSN would maintain ADCNR reporting, metadata publications, MMHSRP reporting, and necropsy reports, but also increase the number of metadata records relative to the samples processed for cetaceans (~10; estimated at 1-2 additional metadata records per year), increase necropsy reporting consistent with a greater number of animals sampled, and increase the number of publications (~3 total due to increased research capacity), plus share up to 2 newsletter articles per year (~10 total).

7.9 ROLES AND RESPONSIBILITIES

ADCNR is the implementing Trustee for this project, and will ensure that the project is

completed. The DISL ALMMSN is the project partner and will be responsible for data

management and data sharing.

The Trustee Council facilitates consistency in monitoring and data management procedures to evaluate and report on progress towards meeting restoration goals articulated in the PDARP/PEIS.

7.10 REFERENCES

DWH NRDA Trustees. 2016. Deepwater Horizon oil spill: final programmatic damage assessment and restoration plan (PDARP) and final programmatic environmental impact statement (PEIS).
- DWH NRDA Trustees. 2016b. Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the *Deepwater Horizon* Oil Spill. Originally approved May 4, 2016; revised November 15, 2016.
- DWH NRDA Trustees. 2017a. Monitoring and Adaptive Management Procedures and Guidelines Manual Version 1.0. Appendix to the Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the DWH Oil Spill. December.
- DWH NRDA Trustees. 2017b. Deepwater Horizon Oil Spill Natural Resource Damage Assessment: Strategic Framework for Marine Mammal Restoration Activities. June. Available: http://www.gulfspillrestoration.noaa.gov/restoration-planning/gulf-plan.
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- Steyer, G.D. & Llewellyn, D.W. 2000. Coastal Wetlands Planning, Protection and Restoration Act: A programmatic application of adaptive management. Ecological Engineering, 26, 27-39.
- Williams, B.K. 2011. Adaptive management of natural resources Framework and issues. Journal of Environmental Management, 92, 1346-1353.

7.11 MAM PLAN REVISION HISTORY

Old File Name	Revision Date	Changes Made	Reason for Change	New File Name
AL TIG RP II/EA				
version				
	6/1/2018	Draft to final version; Added detail to parameters	Draft to final	MAM_Plan_Enhancing _Capacity_ALMMSN_6.1.18

5/31/2024	Updated to reflect additional funding	Additional funding	
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APPENDIX B – LIST OF PREPARERS

Agency/Firm	Name	Position
Alabama Department of Conservation and Natural Resources	Jaime Miller	Coastal Restoration Specialist
State of Alabama/Rosen Harwood	Jane Calamusa	Attorney
State of Alabama/WSP	Lori Fox	NEPA Specialist
State of Alabama/WSP	Joe Dalrymple	Environmental Planner
State of Alabama/WSP	Madison Reckman	Environmental Scientist
State of Alabama/Volkert	Michele Finn	Senior Scientist
USDA	Ronald Howard	Program Specialist
USDA	Ben Battle	
USEPA	Tim Landers	
NOAA	Stella Wilson	Marine Habitat Restoration Specialist
NOAA	Ramona Schreiber	Marine Habitat Restoration Specialist
NOAA	Jared Piaggione	Attorney Advisor
USDOI	Sarah Shattuck	Attorney-Advisor
USDOI	Amy Mathis	Restoration Planner

Finding of No Significant Impact (FONSI) of the Alabama Trustee Implementation Group for the Final Supplemental Restoration Plan II and Environmental Assessment: Marine Mammals

9.1 Overview and Background

The Deepwater Horizon Oil Spill Alabama Trustee Implementation Group Final Supplemental Restoration Plan II and Environmental Assessment: Marine Mammals (Supplemental RP II/EA) is a supplement to the Deepwater Horizon Oil Spill Alabama Trustee Implementation Group Final Restoration Plan II and Environmental Assessment: Restoration of Wetlands, Coastal, and Nearshore Habitats; Habitat Projects on Federally Managed Lands; Nutrient Reduction (Nonpoint Source); Supplemental RPII/EA Turtles; Marine Mammals; Birds; and Oysters (RP II/EA). In this supplemental evaluation the Alabama TIG proposes to use the remaining funds under the Marine Mammals restoration type allocation to continue the restoration of Marine Mammals in the Alabama Restoration area by extending the implementation of one or more projects previously selected in RP II/EA. In selecting one or more projects in RP II/EA, the AL TIG has determined that using additional funds under the Marine Mammals restoration type requires evaluation under the Oil Pollution Act (OPA), the OPA Natural Resource Damage Assessment (NRDA) regulations (15 C.F.R. 990), and the implementing regulations of the National Environmental Policy Act of 1969 (NEPA). The RP II/EA was prepared to partially address injuries to natural resources and their services caused by the Deepwater Horizon oil spill; the Supplemental RP II/EA furthers those same efforts. The Supplemental RPII/EA supplements the previous NEPA analyses prepared in the RPII/EA and is prepared in accordance with the Council on Environmental Quality NEPA regulations, and all applicable federal agency NEPA procedures. The AL TIG is comprised of the following state and federal Natural Resource Trustee Agencies:

- Alabama Department of Conservation and Natural Resources (ADCNR);
- Geological Survey of Alabama;
- United States Department of the Interior (DOI), represented by the National Park Service, United States Fish and Wildlife Service (FWS), and Bureau of Land Management;
- the National Oceanic and Atmospheric Administration (NOAA), on behalf of the United States Department of Commerce;
- United States Department of Agriculture (USDA); and
- United States Environmental Protection Agency (EPA).

C.1.1 Lead and Cooperating Agencies

Pursuant to NEPA, the AL TIG designated NOAA as the lead agency to supervise the preparation of the NEPA analysis for the Supplemental RPII/EA (40 CFR § 1501.7). Each of the other federal and state co-Trustees participated as a cooperating agency pursuant to NEPA (40 CFR § 1501.8) and the Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the Deepwater Horizon Oil Spill (SOP, DWH Trustees 2021).

C.1.2 Adoption of the Supplemental RPII/EA NEPA analysis by Federal Agency members of AL TIG

Each federal agency member of the AL TIG must make its own independent evaluation of the NEPA analysis in support of its AL TIG decision-making responsibilities. In accordance with 40 CFR § 1506.3(a), each of the three federal cooperating agencies participating on the AL TIG has reviewed the Supplemental RPII/EA, found it meets the standards set forth in its own NEPA implementing procedures, and accordingly adopts the Supplemental RP II/EA NEPA analysis.

C.1.3 Public Participation

The Alabama TIG noticed the availability of the Draft Supplemental RP II/EA in the Federal Register on March 19, 2024 (FR 22937). A notice of availability was also posted on the DWH Trustees' website at https://gulfspillrestoration.gov/Alabama. The TIG provided a 30-day public comment period that ran through April 18, 2024.

The public could make comments on the Draft Supplemental RPII/EA through U.S. mail and via a webbased comment submission site. No public comments were received during the public comment period. The only change made in preparing the Final Supplemental RPII/EA was the addition of a more detailed summary of the "no action" alternative analysis under NEPA.

C.1.4 Purpose and Need

The purpose of the potential restoration actions evaluated in this Supplemental RP II/EA is to provide for additional restoration benefits for marine mammals in the Alabama Restoration Area. Additional marine mammal restoration is needed to provide for continued compensation for and restoration of natural resources and resource services injured in the Alabama Restoration Area as a result of the DWH oil spill. This purpose and need falls within the general scope of the purpose and need identified in the RP II/EA and is consistent with the Final PDARP/PEIS, as it focuses on the restoration of injuries to Alabama's natural resources and services arising from the DWH oil spill—specifically, the restoration of "Marine Mammals," using funds made available through the DWH consent decree (see Final PDARP/PEIS [DWH Trustees 2016: Chapter 10]).

9.2 Summary of the Proposed Action and Alternatives

9.2.1 Proposed Action and No Action Alternative

In the Supplemental RPII/EA, the AL TIG fully analyzed two alternatives, summarized below, and the no action alternative. Based on the analysis, the AL TIG determined that implementation of the preferred alternative best meets the purpose and need for continued restoration over the non-preferred alternative and the no action alternative. Accordingly, the TIG selects the preferred alternative for funding and implementation at this time. Pursuant to the Consent Decree, the estimated budget to implement the preferred alternative will be disbursed from the AL TIG's settlement allocation under the Marine Mammals Restoration Type.

Alternative 1: Enhancing Capacity for the Alabama Marine Mammal Stranding Network (ALMMSN) Project Extension (Preferred)

Project Summary/Background. The ALMMSN Project Extension would continue the restoration activities of the ALMMSN Project, which was originally approved in the RP II/EA. The AL TIG approved a no-cost extension for the ALMMSN Project in early 2023, allowing it to operate through the end of 2024. The ALMMSN Project Extension evaluated in this Draft Supplemental RP II/EA would allow work under the original project to continue through at least 2027. An extension of the ALMMSN Project would continue to enhance the capacity of the ALMMSN by providing funding for staff time, equipment and supplies, and sample analyses. The ALMMSN is operated out of the Dauphin Island Sea Lab (DISL) on Dauphin Island, Alabama. This Project Extension would allow ALMMSN to continue to use and expand on its existing infrastructure for cetacean stranding response and communications and data management to enhance the ALMMSN's operations. Information on dead or stranded cetaceans is usually obtained by collecting basic stranding data (Level A) and performing necropsies; however, without the enhanced financial assistance that comes from the ALMMSN Project, the ALMMSN has limited capacity for live cetacean stranding response. In addition, ALMMSN's resources to conduct indepth analysis of causes of illness and mortality in stranded cetaceans have been limited. The ALMMSN Project Extension would allow ALMMSN to continue to better respond to live or dead stranded cetaceans, to necropsy animals, and to analyze samples collected from cetaceans stranded in Alabama waters to better understand the causes of marine mammal illness and death. It would also continue to support increased data consistency for information collected from stranded marine mammals by supporting ALMMSN to enter its data into regional or national marine mammal databases (e.g., GulfMAP or its online successor, supported by NOAA, or the National Stranding database). The information collected by ALMMSN from stranded cetaceans should enable managers to better mitigate impacts on marine mammals from natural and anthropogenic threats and to monitor population recovery post-DWH oil spill. Accordingly, the ALMMSN Project Extension is expected to support continued work toward a better understanding of the causes of illness/mortality in dolphins and the early detection and intervention of anthropogenic and natural threats. The ALMMSN Project Extension is also expected to contribute to the increased survival of rescued animals by continuing to improve marine mammal stranding response, data collection, data analyses, and reporting for Alabama waters. ADCNR would be the Implementing Trustee for this project.

Alternative 2: Reducing Illegal Feeding of Bottlenose Dolphins Project (non-preferred)

Project Summary/Background. The Reducing Illegal Feeding of Bottlenose Dolphins Project (Reducing Illegal Feeding Project) would build upon the work conducted in the RP II/EA under the Dolphin Education Project. The overall goal of the Reducing Illegal Feeding Project would be to provide restoration benefits to Gulf bottlenose dolphins by supporting on-going work to reduce the number of dolphin injuries and mortalities due to illegal feeding. This Project would aim to reduce lethal impacts to dolphins from illegal feeding activities by changing human behaviors through a targeted outreach and education strategy. Specifically, the Reducing Illegal Feeding Project would:

- Review and build on outcomes from social science studies previously conducted for dolphin human interactions and evaluate additional needs;
- Conduct additional social science studies (e.g., focus groups, interviews) in a portion of user groups (e.g., ecotour businesses, residents, tourists);
- Build on the comprehensive, targeted outreach strategy and study results developed in the RP II/EA Dolphin Education Project and implement the resulting recommendations;
- Design and produce outreach materials based on the outreach strategy and results;
- Distribute and communicate education tools and messages, through partnerships with ADCNR and other stakeholders to reach targeted user groups; and
- Repeat social science studies to evaluate the use of informed and targeted outreach to effectively change human behaviors.

9.3 Summary of the Supplemental Environmental Assessment

- Chapter 4 of the Supplemental RPII/EA provides the analysis needed to assess the significance of the impacts of the alternatives. The NEPA analysis concluded that the projects are anticipated to result in both beneficial and adverse effects. Potential adverse impacts do not rise above short-term, minor adverse impacts occurring only during stranding response activities for the proposed action. These adverse effects are determined not significant considering the context and intensity of the projects' scopes and effects on the resources. The following significance factors are considered.
- The Proposed Action would not result in significant adverse effects on public health or safety. Stranding response activities are not expected to result in any health or safety concerns for the public.
- The Proposed Action would have no significant adverse impacts to unique characteristics of the geographic area, and would have no significant adverse effects on wetlands, floodplains, municipal water sources, ecologically critical areas, wild and scenic river corridors, park lands, wilderness, wilderness research areas, research natural areas, inventoried roadless areas, national recreation areas, or prime farmlands, particularly on a regional basis. The proposed action is expected to have no effects on these resources.
- The effects of the Proposed Action on the quality of the human environment are not controversial. The proposed activities rely on techniques that are regularly used in

implementing marine mammal stranding activities with no controversy regarding their impacts to the human environment. No comments were received from the public raising concerns regarding the proposed action or in opposition of the proposed action.

- There are no highly uncertain, unique, or unknown risks associated with the Proposed Action. The proposed action relies on techniques that are regularly used in marine mammal stranding response activities.
- The Proposed Action neither establishes a precedent for future AL TIG actions with significant effects nor represents a decision in principle about a future consideration. Future AL TIG actions will be determined through separate planning processes.
- The Proposed Action is not expected to have any cumulative impacts beyond those disclosed and evaluated in the Final PDARP/PEIS or the evaluation of the original project per RP II/EA. In combination with other actions, the Proposed Action would not contribute substantially to short-term or long-term adverse cumulative impacts on physical, biological, or socioeconomic resources when analyzed in combination with other past, present, and reasonably foreseeable future actions.
- The Proposed Action would not threaten a violation of Federal, state, or local laws, or requirements imposed for environmental protection. The Proposed Action is expected to be in compliance with all applicable federal laws and regulations. A summary of the federal regulatory compliance review and approvals as of signature on this document are provided in Table H-3 of the Supplemental RP II/EA.
- The Proposed Action would not significantly adversely affect vulnerable marine or coastal ecosystems. The proposed action of responding to stranded animals could result in short-term, minor adverse impacts on beaches and dunes, intertidal marshes and flats, or other coastal habitats where marine mammal strandings and associated response activities typically occur. All potential impacts would be temporary, resulting from boat traffic, noise, and human presence during stranding response, and conditions would be expected to quickly return to baseline upon completion of stranding response activities.
- The Proposed Action would not significantly adversely affect biodiversity or ecosystem functioning (e.g., benthic productivity, predator-prey relationships, etc.). The proposed action may result in short-term, minor adverse impacts from boat traffic, noise, and human presence during stranding response; however, there is sufficient habitat beyond the affected area so there would be no expected interference to populations or ecosystems from disturbance to the habitat area.
- The Proposed Action is not expected to result in the introduction or spread of a nonindigenous species. Proposed stranding response activities are not likely to cause movement of any non-indigenous species.
- The Proposed Action would have no adverse impacts to Essential Fish Habitat (EFH), managed fish species, or resources protected by the Magnuson-Stevenson Fishery and Conservation Management Act (MSFCMA) since stranding response activities are not

expected to have any impacts to these resources. Through a technical assistance memo on April 5, 2018, NMFS concurred that the proposed action would not adversely affect EFH.

- The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources. The AL TIG concludes that no adverse effects to cultural resources are expected as a result of the proposed action.
- The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973 (ESA). The proposed action may result in minor, short term adverse impacts (as defined under NEPA but not ESA or MMPA) to some sea turtles and other terrestrial ESA-listed species that use coastal and nearshore habitats because of disturbance from ALMMSN staff responding to stranded marine mammals. Boat traffic, noise, and human presence during stranding response could result in temporary disturbance or displacement of some ESA-listed species if individuals are present near the marine mammal stranding locations. However, adverse impacts on any protected species are unlikely because these activities would not create substantially greater human presence in project lands and waters. Thus, potential impacts on ESA-listed species are anticipated to be minimal. Potential impacts on sea turtle species, West Indian manatee, and other ESA-listed species would be negligible with the implementation of appropriate conservation measures.
- Impacts to marine mammal stocks. There would be no long-term, adverse impacts on
 protected marine mammals. Impacts to protected marine mammals within the project area
 would be limited to short-term, minor adverse impact from temporary disturbance caused
 by boat traffic, noise, and human presence as project staff respond to marine mammal
 strandings. The project's purpose is to contribute to the understanding and recovery of
 Alabama's bottlenose dolphin by improving the state's Marine Mammal Stranding Network
 and other conservation programs. Over the long term, the project would be anticipated to
 benefit bottlenose dolphins through increased effectiveness of treating and/or collecting
 data on stranded marine mammals. The West Indian manatee would not likely be adversely
 affected by the project activities because the increase in boat traffic would be minimal, and
 no project activities would contribute threats to the species. Impacts to critical habitat
 within the project area would be limited to short-term, minor adverse impact from
 temporary disturbance caused by boat traffic, noise, and human presence as project staff
 respond to marine mammal strandings.

Natural Recovery/No Action Alternative

Pursuant to OPA NRDA regulations and NEPA, the Natural Recovery/No Action alternative was analyzed programmatically in the PDARP/PEIS, Section 5.3.2, and was found to not meet the purpose and need for implementing alternatives that address lost natural resources and their services. Therefore, Natural Recovery was discarded from further consideration as a viable restoration alternative in subsequent tiered RP/EAs.

Pursuant to NEPA, a No Action alternative was analyzed in the Supplemental RP II/EA for the Marine Mammals restoration type as a ". . . benchmark, enabling decisionmakers to compare the magnitude of environmental effects of the action alternatives." Under the no action alternative, no additional marine mammal restoration would be implemented by the DWH Trustees or the AL TIG to accelerate the recovery of injured natural resources or to compensate for lost services. The No Action alternative could have moderate long term adverse impacts on rare and protected species such as bottlenose dolphins and other cetaceans since some cetaceans, including bottlenose dolphins, could suffer injury or mortality that could potentially be mitigated by the proposed projects. No short- or long-term impacts would occur to other resources.

9.4 Agency Coordination and Consultation Summary

Under Section 7 of the ESA, the AL TIG, after coordination with USFWS and NOAA, determined the Proposed Action "may affect, but is not likely to adversely affect" threatened, endangered, or candidate species and no critical habitat would be adversely affected as a result of implementing the Proposed Action. Alternative 1 May Affect, but is Not Likely to Adversely Affect the following NOAA and U.S. Fish and Wildlife Service ESA listed species: loggerhead sea turtle, Kemp's ridley sea turtle, green sea turtle, hawksbill sea turtle, leatherback sea turtle, West Indian manatee, Gulf sturgeon, Alabama red-bellied turtle, Alabama beach mouse, piping plover, red knot, and Eastern black rail.

NOAA has reviewed the Proposed Action for compliance with the Magnuson-Stevens Fishery Conservation and Management Act, and determined the project would have no effect on any species or critical habitats under NOAA's jurisdiction.

Pursuant to the Coastal Zone Management Act, on behalf of the AL TIG federal trustees, NOAA determined that the project changes presented herein do not alter the original determinations under CZMA for the Enhancing Capacity for the Alabama Marine Mammal Stranding Network Project.

The status of DWH federal regulatory permits/approvals is maintained online and updated as regulatory compliance information changes at (<u>https://www.gulfspillrestoration.noaa.gov/environmental-</u>compliance/).

9.5 Determination

The proposed action is not expected to have any cumulative effects beyond those disclosed and evaluated in the Final PDARP/PEIS and the RPII/EA. Adverse impacts are generally minor and short term, such as disturbances associated with temporary disturbance caused by boat traffic, noise, and human presence as project staff respond to marine mammal strandings. The cumulative effects from the proposed action were evaluated in the Supplemental EA and found to be within the scope of effects evaluated in the Final PDARP/PEIS and the RPII/EA.

Based on the information presented in this document and the analysis contained in the supporting Supplemental RPII/EA, it is hereby determined that implementation of the proposed action will not

significantly impact the quality of the human environment. Therefore, an environmental impact statement for this action is not necessary.

FOR THE U.S. DEPARTMENT OF THE INTERIOR

bie Blanchard

MARY JOSIE BLANCHARD

Department of the Interior Natural Resources Trustee Official for the Alabama Trustee Implementation Group

Date: ____7/24/2024_____

FOR THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Christopher Doley

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CHRISTOPHER D. DOLEY

Principal Representative, National Oceanic and Atmospheric Administration

Date: _____

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MICHELE JACOBI

Deputy Chief, Assessment and Restoration Division

On behalf of TONY PENN

Chief, Assessment and Restoration Division

National Ocean Service

Date:

FOR THE U.S. DEPARTMENT OF AGRICULTURE

Ronald Howard

RONALD HOWARD

Alternate to Principal Representative, U.S. Department of Agriculture

Date: ____7/24/2024_____

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY

Mang K Juch

MARY KAY LYNCH

Alternate to Principal Representative, U.S. Environmental Protection Agency

Date: ____7/22/2024_____