OPEN OCEAN RESTORATION AREA TRUSTEE IMPLEMENTATION GROUP
of the
DEEPWATER HORIZON TRUSTEE COUNCIL

In re: Oil Spill by the Oil Rig "Deepwater Horizon" in the Gulf of Mexico on April 20, 2010,
Civil Action Nos. 10-4536; 10-04182; 10-03059; 13-4677; 13-158; 13-00123 (E.D. La.)
MDL No. 2179

Resolution #OO-2026-004

Open Ocean Trustee Implementation Group Resolution to Approve Changes to the Project, Project Implementation Plan, and Authorized Budget for Reduce Impacts of Anthropogenic Noise on Cetaceans Project (ID 229)

1. In accordance with the Oil Pollution Act of 1990 (OPA), the National Environmental Policy Act (NEPA), the *Deepwater Horizon* Oil Spill Final Programmatic Damage Assessment and Restoration Plan and Programmatic Environmental Impact Statement (Final PDARP/PEIS), the Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the DWH Oil Spill, August 2, 2021 (TC SOPs), and the Consent Decree entered in United States v. BPXP et al., Civ. No. 10-4536, centralized in MDL 2179, In re: Oil Spill by the Oil Rig "Deepwater Horizon" on April 20, 2010 (E.D. La.) (Consent Decree), the undersigned representatives of the Open Ocean Trustee Implementation Group (OO TIG) hereby approve the action set forth below to support the restoration of natural resources and services injured or lost as a result of the *Deepwater Horizon (*DWH) oil spill, which occurred on or about April 20, 2010, in the Gulf of America.[1]

2. The Reduce Impacts of Anthropogenic Noise on Cetaceans project (project) was selected in the OO TIG Final Restoration Plan 2 and Environmental Assessment (OO RP2/EA) in November 2019. The project's goal is to prevent or reduce the negative effects of anthropogenic noise on cetaceans. The project is consistent with the restoration goals identified in the Final PDARP/PEIS and the Consent Decree referenced above. Through Resolutions OO-2019-025 and OO-2024-007, the OO TIG approved the commitment and disbursement of $8,992,200 in Marine Mammal restoration type funds to the National Oceanic and Atmospheric Administration (NOAA) to implement this project.

3. Through Resolution OO-2019-025, the OO TIG approved the project implementation plan and authorized a project budget for NOAA as Implementing Trustee. In 2024, NOAA provided an overview and analysis of project implementation actions in the memo: *Reduce Impacts of Anthropogenic Noise on Cetaceans Project (ID 229): National Environmental Policy Act and Environmental Compliance Review of Implementation Activities (March 2024)*. After reviewing this evaluation, the OO TIG affirmed through Resolution OO-2024-007 that (i) the implementation actions are consistent with the OPA evaluation and environmental compliance provided in OO RP2/EA, and (ii) authorized disbursement of remaining funds. Through these resolutions, the OO TIG authorized a total commitment of $8,992,200 in Marine Mammal restoration type funds.

Resolution	Authorized Project Budget	NOAA Disbursement
OO-2019-025	$8,992,200	$2,851,420
OO-2024-007	$8,992,200	$6,140,780
Total	$8,992,000	$8,992,200

[1] Per Executive Order 14172, "Restoring Names That Honor American Greatness," the area formerly known as the Gulf of Mexico has been officially renamed the Gulf of America.

4. NOAA requested changes to the project and provided a project change analysis memo: *"Evaluation of Changes to the Project: Reduce Impacts of Anthropogenic Noise on Cetaceans Project (ID 229) (January 2026),"* which is attached to this Resolution. In summary, the project duration will be extended by four years and the authorized budget increased by $4,800,000. Based on the OO TIG's review of the analysis memo, these changes are needed to meet project goals by continuing approved activities including passive acoustic monitoring data collection, pilot projects to test sound reduction, and project management, data analysis, and administrative support.

5. The OO TIG evaluated the project changes in accordance with Section 9.5.2 of the TC SOPs, as described in the attached project change analysis memo. Based on their evaluation, the Trustees conclude that the project changes are consistent with the environmental review in OO RP2/EA and its NEPA analysis; there are no significant new circumstances or information relevant to environmental concerns that were not addressed in the impact analysis; and the project changes do not affect the Trustees' selection of the project under OPA. The public comment period conducted for the OO RP 2/EA solicited public input on the project and comments were supportive of this project with no controversial issues identified. Because the extended project continues the selected activities to reduce sources of noise and the project has incorporated extensive stakeholder engagement, no additional public review is necessary. In addition, the OO TIG determined that the project changes do not require modification to the OO RP2/EA or NEPA analysis. The public will be notified of the project changes through the Trustees' website.

6. At the time this Resolution was approved, environmental compliance with federal regulations was complete for the project. The project changes do not require additional consultations or reviews for environmental compliance. The Implementing Trustee will ensure that all applicable regulatory compliance activities are complete prior to undertaking any regulated activities and the terms and conditions of all federal, state, and local permits will be complied within the course of implementation.

7. The Implementing Trustee shall implement and monitor the project according to the TC SOPs and the attached project implementation plan entitled "Implementation of the Project: Reduce Impacts of Anthropogenic Noise on Cetaceans (ID 229) (March 2026)," which has been updated to reflect the project changes and increased authorized budget. The Implementing Trustee will inform the public of the project changes through the Trustee website and an update to the DIVER project record.

8. The Implementing Trustee shall notify the OO TIG of any proposed material project changes before taking further action on the project, consistent with the TC SOPs. Any material change would be evaluated by the OO TIG based on factors identified in section 9.5.2 of the TC SOPs prior to its implementation.

9. The Implementing Trustee may modify the PIP in writing if the modifications are minor. Approval of these minor modifications by the OO TIG may be communicated verbally during an OO TIG meeting and memorialized with a memorandum to the administrative record, by email, or through other procedures agreed to by the OO TIG that result in a written record of the decision.

10. Through this Resolution, the OO TIG approves a change in authorized budget as follows:

Restoration Type	**Trustee**	**Project Name (ID)**	**Previous Authorized Budget OO-2019-025, OO-2024-007**	**Funds Authorized by this Resolution**	**New Authorized Budget**
Marine Mammals	NOAA	Reduce Impacts of Anthropogenic Noise on Cetaceans (ID 229)	$8,992,200	$4,800,000	$13,792,200

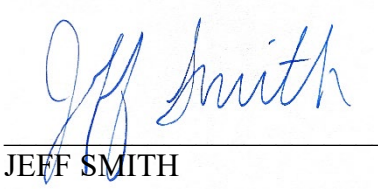
11. Funds identified in Paragraph 10 as approved for use by NOAA may only be used for the restoration activities approved by this Resolution and the PIP. Funds authorized by prior Resolutions identified in Paragraph 3 may continue to be used for their originally intended purpose. Any other use of funds disbursed pursuant to this Resolution is prohibited. Any unauthorized use of disbursed funds must be reported to the full OO TIG immediately upon discovery.

12. Through this Resolution and associated *Deepwater Horizon* Trustee Withdrawal Forms, the OO TIG authorizes the commitment and disbursement of up to $4,800,000 in Marine Mammal Restoration Type funds from the Open Ocean General Subaccount to NOAA as detailed in the table below to conduct the tasks described in the PIP. Disbursement of authorized funds will be executed through the Implementing Trustee's submission of withdrawal forms in accordance with the OO TIG's annual cash flow planning.

Restoration Type	**Implementing Trustee**	**Project Name (ID)**	**Funds Authorized for Disbursement by this Resolution**
Marine Mammal	NOAA	Reduce Impacts of Anthropogenic Noise on Cetaceans (ID 229)	$4,800,000

13. It is resolved that after a review of this Resolution and the attached project change analysis memo, the duly authorized officials for the OO TIG approve the following: 1) the changes to the Reduce Impacts of Anthropogenic Noise on Cetaceans project (ID 229) as summarized in Paragraph 4 and in the attached project change analysis memo; 2) the new authorized budget detailed in Paragraph 10; 3) revisions to the attached project implementation plan; and 4) authorization for the commitment and disbursement of funds as identified in paragraph 12. This resolution may be authorized in counterparts. The effective date of this resolution is the date of last signature below.

OPEN OCEAN RESTORATION AREA TRUSTEE IMPLEMENTATION GROUP



JEFF SMITH
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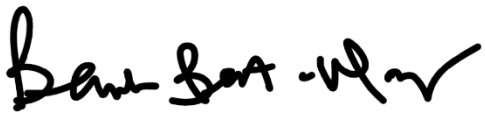

BENITA BEST-WONG
Principal Representative, U.S. Environmental Protection Agency

DATE OF LAST SIGNATURE: March 24, 2026

Evaluation of Changes to the Project: Reduce Impacts of Anthropogenic Noise on Cetaceans (ID 229)

March 2026

I. Introduction

Section 9.4.9 of the Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the Deepwater Horizon (DWH) Oil Spill (TC SOPs) provides that if changes are made to any selected project, those changes may require a re-evaluation of determinations made in existing environmental compliance documents. Section 9.5.2 of the TC SOPs provides that the Trustee Implementation Group (TIG) will conduct a project review to determine several factors. First, the TIG will determine whether any change to the project is consistent with the environmental review in the respective restoration plan/NEPA analysis, or where there are substantial changes that are relevant to environmental concerns. Second, the TIG will assess whether there are significant new circumstances or information relevant to environmental concerns not addressed in the impact analysis of the respective restoration plan/NEPA analysis. Third, the TIG will evaluate whether project changes affect their selection under OPA. This document provides information about proposed changes for the Reduce Impacts of Anthropogenic Noise on Cetaceans (ID 229) project.

The Reduce Impacts of Anthropogenic Noise on Cetaceans project (ID 229) (project) is a preferred alternative identified and selected in the Open Ocean Trustee Implementation Group (OO TIG) Final Restoration Plan 2 and Environmental Assessment (OO Final RP2/EA), approved by the OO TIG in November 2019. The OO Final RP2/EA is consistent with and tiered to the 2016 Programmatic Damage Assessment and Restoration Plan/Programmatic Environmental Impact Statement (PDARP/PEIS), which was prepared by the Trustees to programmatically plan to fund and implement restoration projects across the Gulf. The PDARP/PEIS also analyzed the environmental impacts of the reasonable range of programmatic alternatives, including considerations associated with planning, feasibility studies, design engineering, and permitting on future restoration projects.

The full project description can be found in the OO Final RP2/EA Section 3.7.3. The National Oceanic and Atmospheric Administration (NOAA) is the implementing Trustee for this project. This project was approved to be executed over a six-year timeframe at an estimated cost of $8,992,200.

II. Project Background and Scope

The project objectives include advancing existing noise reduction technologies; identifying areas for restoration; monitoring soundscape data; and developing and implementing a strategic approach to restoration to prevent and reduce noise in each high-risk area. Priority species include species with known or suspected sensitivity to noise sources, those that were injured by the DWH oil spill, and those that are found in areas of greatest human activity. In particular, the sperm whale, Rice's whale, and beaked whales are priority species for the project.

This project was developed as a long-range activity in the OO Final RP2/EA. The NEPA analysis in the OO Final RP2/EA included an evaluation of a broad range of activities that would be refined following the initial planning phase. Through Resolution OO-2019-025, the OO TIG approved the project implementation plan and the commitment and disbursement of $2,851,420 to NOAA to complete the initial planning phase.

In March 2024, NOAA provided an overview and analysis of project actions to be conducted following the planning phase in the compliance review memo: 'Reduce Impacts of Anthropogenic Noise on Cetaceans Project (#229): National Environmental Policy Act and Environmental Compliance Review of Implementation Activities' (March 2024). The memo reviewed three areas for potential noise reduction actions that could be taken throughout the course of the project:

1. Reducing Sound through Modifications in Seismic Technologies
2. Reducing Sound through Vessel Retrofit and Design
3. Investigating Willing Partners to Reduce Sound Exposure through Voluntary Speed Reduction and/or Alternate Routing

After reviewing this evaluation, the OO TIG affirmed by Resolution OO-2024-007 that the actions are consistent with the OPA evaluation and environmental compliance provided in the OO Final RP2/EA and therefore no additional NEPA analysis or public review was necessary. In addition, the OO TIG approved the commitment and disbursement of remaining funds, $6,140,780 to NOAA for project implementation.

Implementation for this project consists of four primary activities as summarized below. In some cases, there was enough existing information to proceed with moving noise reduction measures forward during the initial planning phase, but in other cases, more information was needed to identify areas and strategies for targeted restoration.

1. The first activity focuses on moving existing noise reduction technologies and prototypes towards implementation in the Gulf. The project is using existing report recommendations, literature, and technical working groups to identify measures that are ready for implementation or trial field studies. The project is also working with industries to implement outreach and voluntary programs to reduce vessel noise. Outcomes of this activity include a prioritized list of measures that are ready for implementation, outreach and/or voluntary certification programs, potential partnerships, and incentives for the implementation of each technique/prototype. The project has completed significant outreach since 2020 with the seismic industry and will continue outreach efforts in the future. Project outreach with vessel owners is also ongoing.
2. The second activity identified priority areas for implementing restoration actions that prevent or reduce noise impacts to cetaceans by establishing a working group to conduct a risk assessment based on best-available information for noise and cetacean populations in the Gulf. The project completed this activity in 2024.
3. The third activity will maintain several long-term high frequency acoustic recording packages in addition to deploying additional short-term recorders to collect long-term baseline data for marine mammal distribution and soundscape characterization. This extended Passive Acoustic Monitoring (PAM) array at short-term sites monitors noise in

high-risk areas, priority areas that have significant data gaps, or in specific locations chosen for pilot project implementation. The data and analyses from the passive acoustic arrays help in the selection and development of appropriate restoration activities, validating and improving future iterations of the risk assessment, and would help in project-level (e.g., the change in noise patterns in key areas) and resource-level (e.g., establishing baseline levels of cetacean species abundance/density) monitoring and adaptive management efforts. Annual data analysis as well as several multiyear reports have been completed on the passive acoustic data collected since 2020, and this work is ongoing.

4. The fourth activity will build on what is learned from the initial efforts in order to develop and implement a specific restoration implementation plan for preventing and/or reducing noise based on the information and knowledge gained from the project. This activity will also provide incentives for testing and/or implementing new technologies identified in the first and second activities in key areas of the Gulf. The project team is working toward setting up pilot testing of new technologies with willing industry partners for seismic surveys and vessel operations.

The project will focus on additional activities in three areas where substantial progress has been made by working with industry to reduce noise:

1. Reducing Sound through Modifications in Seismic Technologies. This focus area works with the seismic survey industry to understand barriers and identify ways to reduce noise produced from seismic airgun surveys, for example testing hyperclustering of airguns or other alternative technologies to determine which can reduce the noise emitted while providing sufficient seismic survey data for industry. A meeting with industry representatives was held in September 2025 to explore potential barriers to using alternatives to traditional seismic airgun technologies and to identify willing partners for future pilot-level field testing.
2. Reducing Sound through Vessel Retrofit and Designs. This focus area is working through our partner, the National Fish and Wildlife Foundation (NFWF), to provide sub-awards to industry applicants for testing vessel retrofits and measuring the sound levels to show noise reduction. After a competition in Summer 2025, a sub-awardee has been selected and project work is expected to begin in 2026.
3. Investigating Willing Partners to Reduce Sound Exposure through Voluntary Speed Reduction and/or Alternate Routing. This focus area could include pilot testing voluntary speed reductions or alternative routing in the Gulf to reduce the impact of vessel noise on cetaceans. The project is just starting to engage industry to understand willingness to participate and to identify potential barriers in doing so.

III. Description of Project Change

The proposed project changes include extending the project duration by an additional four years and increasing the authorized budget to ensure funding for industry collaboration, voluntary pilot projects and building on the progress and ideas consistent with options recommendations from earlier project activities. There are no proposed changes to the actions that would occur, only to

the timeframes in which they would be carried out and budget necessary. This project relies on sustained field operations for passive acoustic data and extensive industry engagement in the seismic and vessel sectors to implement voluntary changes, pilot projects, and equipment testing to demonstrate noise reduction.

At the time this project was started in 2020, there were numerous unknowns making it difficult to understand potential pilot projects, costs to implement them, and willingness of industry to participate. This is novel work in the Gulf, and the industry had not previously been engaged directly in voluntary partnerships to discuss options to reduce sound. The first phase of data gathering and a recommended options paper took longer than anticipated due to contractor selection and industry engagement scheduling.

Since that time, the work has progressed; however exploring novel, voluntary ideas with industry takes a significant amount of coordination and scheduling any on-water, pilot work in the Gulf is expected to need a 1-2 year planning horizon due to logistics (e.g., needing a certain piece of equipment to be in a specific location in the Gulf for sound source testing). The increased budget and timeline will allow the following work to continue in the three focus areas:

1. Reducing Sound through Modifications in Seismic Technologies. Collaboration with industry is expected to continue through 2030. Additional project funding will support efforts to continue engaging with industry partners and moving into testing additional equipment during field surveys or other pilot projects to gather data with willing industry partners.
2. Reducing Sound through Vessel Retrofit and Designs. Additional funds will support an additional 3-5 awards focused on testing and measuring additional vessel retrofits to understand the noise reduction benefits.
3. Investigating Willing Partners to Reduce Sound Exposure through Voluntary Speed Reduction and/or Alternate Routing. Advancing this concept will be informed by industry engagement outcomes. Industry engagement is expected to expand in 2026 and will be leveraged with the OO TIG Marine Mammal Vessel Strike Reduction Project (Project ID 228) to meet shared goals and engage overlapping partners. Initial work engaging with industry partners will proceed in 2026 using current project funding. NOAA anticipates this engagement will create synergies for the OO TIG Marine Mammal Vessel Strike Reduction Project and that implementation of any pilot scale projects would be funded from that project during its implementation between 2026-2029.

Based on this ongoing work and the associated timelines, the project team anticipates needing four additional years for this project to achieve the objectives. Collaborating with industry requires long-term, sustained engagement; necessary field work, including sound measurements, requires extensive planning, coordination, and logistics. Additionally, any pilot projects or field work requires time to analyze the results and discuss them with project and industry partners following their completion.

Original project	Project with Changes	Proposed Change
Budget: $8,992,200	Budget: $13,792,200	The $4,800,000 budget increase will allow continuation of passive acoustic monitoring data collection for an additional 2 years (into 2028), pilot projects to test sound reduction (as technologies to test are identified) and project management, data analysis, and administrative support for an additional four years.
Timeline: 2020-2026	Timeline: 2020-2030	This overall time extension of four years, through 2030, will provide additional time to collaborate with industry and coordinate field work to test equipment and analyze results of sound reduction trials.

IV. Determination of Need for Additional NEPA Analysis

NOAA, as Implementing Trustee, conducted a review to compare the environmental impacts of the original project and associated NEPA analysis to the impacts expected from the proposed changes as described in Section III. The purpose of the comparison is to determine whether the original NEPA analysis in the OO Final RP2/EA and the subsequent March 2024 compliance review memo captured and analyzed the impacts of the project as revised.

The original analysis can be found in Section 4.4.5.2 of the OO Final RP2/EA and is hereby incorporated by reference. That analysis determined that the activities planned for this project fall within the range of impacts described in Section 6.4.9.4 of the PDARP/PEIS for impacts to physical, biological, human uses and socioeconomic resources. The environmental consequences described in OO Final RP2/EA include impacts to the biological and physical environment that are short-term, minor adverse impacts from equipment deployment and long-term benefits by reducing sound.

The 2024 compliance review memo reviewed, under NEPA, OPA and other compliance statutes, three areas for potential noise reduction actions that could be taken throughout the course of the project:

1. Reducing Sound through Modifications in Seismic Technologies
2. Reducing Sound through Vessel Retrofit and Design
3. Investigating Willing Partners to Reduce Sound Exposure through Voluntary Speed Reduction and/or Alternate Routing

Pilot projects in these three areas are unlikely to increase the environmental effects described in OO Final RP2/EA or to introduce new adverse effects that were not previously considered in OO Final RP2/EA. The OO Final RP2/EA described that work from this project would include passive acoustic monitoring, working with partners and industry, outreach, and testing technologies. In the 2024 compliance memo and Resolution OO-2024-007, the OO TIG confirmed that the effects of the pilot projects fall within the OPA and NEPA analysis completed in the OO Final RP2/EA. In addition, no additional reviews were needed for Endangered Species Act, Marine Mammal Protection Act (MMPA) or Essential Fish Habitat based on the analysis provided for the pilot projects.

The only changes proposed with this project change request are to increase the authorized budget and extend the project timeline. No new activities are proposed and the types of activities to be

undertaken were considered in the OO Final RP2/EA. Therefore, these changes to the project described in Section III above are within the scope of the original project that was defined and analyzed in the OO Final RP2/EA and the March 2024 compliance memo and would not result in additional physical or biological impacts. In addition, based on the compliance review memo completed in 2024 and subsequent reviews of project activities, the Trustees determined that there are no substantial changes and no significant circumstances or information relevant to environmental concerns not addressed in the OO Final RP2/EA.

Section VII below reviews the project's environmental compliance status and finds that no additional compliance is necessary at this time because adding additional time and funding does not require additional compliance. If any pilot projects proposed at a later date may require additional environmental compliance, NOAA will initiate technical assistance on those project elements. Therefore, the original NEPA determination of short-term, minor adverse impacts from equipment deployment and long-term benefits by reducing sound is still applicable and no moderate to major adverse impacts are anticipated to result from this project change.

V. Determination of Need for Additional OPA Restoration Planning

Section 3.7.3.3.2 of the OO Final RP 2/EA is incorporated by reference and summarized here. It states: "Implementation of this alternative would contribute to all three of the Trustees' goals for Marine Mammals listed in Table 2-3". Additionally, the project has a high likelihood of achieving the objectives and is likely to benefit multiple resources.

Application of OPA NRDA evaluation standards to project with change

- Trustee Goals and Objectives - The project with changes continues to meet the Trustee goals and objectives. Extending the project duration to build on key industry partnerships and to further implement noise reduction activities increases the restoration benefits realized. The extended project would continue to have a strong nexus to the DWH injuries by focusing on cetacean species most sensitive to noise sources.
- Cost to Carry Out the Alternative – The original project costs of $8,992,200, were found to be reasonable and appropriate due to the use of existing programs, expertise, infrastructure and partnerships. The extension will increase the project cost by $4,800,000; however, the increased cost is reasonable given the anticipated benefits to injured cetacean species in a broad area of the Gulf. In addition, the project worked with industry to identify the most cost-effective and viable technologies for implementation for an extended period to meet project goals. Therefore, the project extension is considered cost effective and reasonable. In addition, the project has streamlined acoustic monitoring resulting in a decrease over time in annual costs that will be incurred for an additional two years of passive acoustic monitoring. Alternative funding will be pursued for long term acoustic monitoring sites after 2028.
- Likelihood of Success – The original project was found to have a high likelihood of success, in part due to its science-based risk assessment and collaborative partnerships. The extended project continues to build on those elements, resulting in the continued use of technically sound methods and best available science in its implementation approach. Therefore, the extended project is likely to succeed.
- Prevents Future Injury and Avoids Collateral Injury – The original project was found to prevent future injury and avoid collateral injury through the use of comprehensive

planning, design, and BMPs. The extended project will implement noise-reduction techniques that have been developed through engagement with industry experts to minimize collateral injury and maximize noise reduction benefits. The reduction of sources of noise will help to prevent future injury to the sensitive cetacean species targeted by the project.

- Benefits More Than One Natural Resource or Service – The primary benefit of the project would be to reduce sources of noise for cetaceans, but it may also benefit other marine mammals, sea turtles and invertebrates. The project changes do not alter this conclusion.
- Effects on Public Health and Safety - Adverse impacts on public health and safety are not expected from the project with modifications.

Determination of Need for OPA evaluation of project with change

The proposed changes described above do not affect the selection of the project under OPA. The project is intended to generate critical information and form partnerships needed to reduce sources of noise in the Gulf, test new technologies in the field, and incentivize use of quieter technologies.

VII. Determination of Need for Additional Environmental Compliance

Technical assistance discussions with NOAA and USFWS and environmental compliance reviews were completed at the time of the OO Final RP 2/EA and in the compliance review memo completed in March 2024. Changing the project budget and timeline do not require additional compliance reviews. If a project element, such as testing vessel or survey equipment, requires additional compliance reviews, NOAA will initiate technical assistance when those details and methodologies are known.

VIII. Conclusions

The Trustees are required to evaluate material changes to any selected restoration project. Trustees must also determine whether additional restoration planning and environmental review—including opportunity for public comment—is necessary. The changes presented above have been evaluated by the Open Ocean TIG in accordance with Trustee Council SOPs.

Outcome of Evaluation of Project review factors:

- The change to the project is consistent with the environmental review in the OO Final RP2/EA NEPA review and there are no substantial changes that are relevant to environmental concerns.
- There are no significant new circumstances or information relevant to environmental concerns not addressed in the impact analysis of the respective restoration plan/NEPA review.
- The Open Ocean TIG evaluated whether project changes affect the selection under OPA and determined they do not.
- The Open Ocean TIG evaluated whether the project changes affect the need for additional consultations or reviews for environmental compliance. Based on review of the project changes, existing completed consultations have been reviewed and remain valid for the project change.

The project change does not impact the overall project objectives or environmental consequences. The original public comment period conducted for the OO Final RP 2/EA solicited public input on the project and comments were supportive of this project with no controversial issues identified. Because the extended project continues the selected activities to reduce sources of noise and the project has incorporated extensive stakeholder engagement, additional opportunities for public comment on the proposed changes are not necessary. The changes do not affect the selection of this project under the Oil Pollution Act and the project is consistent with the environmental review conducted for the OO Final RP 2/EA. Therefore, no further analyses under the Oil Pollution Act or the National Environmental Policy Act are necessary and modifications to the final restoration plan are not required.

Implementation of the Project: Reduce Impacts of Anthropogenic Noise on Cetaceans (ID 229)
Revised: March 2026
Approved by Resolution #OO-2026-004

This Implementation Plan outlines the tasks and activities to be undertaken to implement the Reduce Impacts of Anthropogenic Noise on Cetaceans (project), which the Open Ocean TIG selected in the Open Ocean Trustee Implementation Group Final Restoration Plan 2/ Environmental Assessment: Fish, Sea Turtles, Marine Mammals, and Mesophotic and Deep Benthic Communities, November 2019 (OO RP2/EA). Through Resolutions OO-2019-025 and OO-2024-007, The OO TIG authorized the commitment and disbursement of $8,992,000 to the National Oceanic and Atmospheric Administration (NOAA) as the Implementing Trustee for implementation of the six-year project.

This plan was revised in February 2026 to reflect a project extension of four years and a budget increase of $4,800,000. These project changes are detailed in the project change analysis memo: "Evaluation of Changes to the Project: Reduce Impacts of Anthropogenic Noise on Cetaceans Project (ID 229) (January 2026)," and were approved by the Open Ocean Trustee Implementation Group (TIG) in Resolution OO-2026-004.

A. Project Overview and Roles of Implementation Partners

The acoustic environment in the Gulf of America (Gulf) includes a spectrum of noise sources, including a variety of human-made sounds from, for example, seismic airguns, explosives, pile driving, and propeller noise. Cetaceans rely on sound for vital life functions and increased anthropogenic noise levels may mask important biological sounds, disturb or displace vital behaviors, and cause direct physiological harm. Many strategies and technologies for reducing noise impacts to cetaceans have been developed; however, further development and effective implementation are still needed. This project is leveraging existing recommendations and studies to identify activities to reduce noise levels in the Gulf ; convening experts to learn more about the status of new technologies and identify mechanisms for applying new and existing techniques in the Gulf; and working with groups to identify partnership opportunities to advance noise reducing technologies for testing and implementation. A noise risk assessment was completed that identified areas in the northern Gulf where restoration actions could most effectively prevent or reduce the negative effects of anthropogenic noise on cetaceans. In addition, the project has and will continue to use passive acoustic monitoring (PAM) arrays to continue baseline data collection to inform restoration and monitor noise reduction outcomes.

Since the project was started in 2020, a risk assessment and initial industry outreach and engagement was completed. In 2024 and 2025, the project team identified three areas for continued work with industry on the most promising noise reduction strategies in three areas: seismic survey activities, vessel engineering and vessel operations. Through Resolution OO-2026-004, this project was extended by four years for a total duration of 10 years and the project budget was increased from $8,992,200 to $13,792,200.

B. Project Tasks and Activities

The project consists of the following components, which may be implemented concurrently:

Task 1: Project Management, Monitoring, and Administration

NOAA will ensure that all elements are sequenced and implemented in accordance with the OO RP2/EA and Trustee Council Standard Operating Procedures (TC SOP) including implementation of the project's Monitoring and Adaptive Management Plan.

The purposes of this task are to:

- Provide coordination to ensure funding mechanisms are in place to execute project activities

- Ensure annual reporting to the public on the NOAA Data Integration Visualization Exploration and Reporting (DIVER) application occurs
- Ensure OO TIG review and approval, as appropriate, for (1) any necessary project changes based on the TC SOPs for project change analysis, (2) key project milestones such as completion of any outstanding environmental compliance, (3) records that need to be submitted to the Administrative Record, and (4) materials prepared during project completion and closeout
- Oversee the project's scope, schedule, and budget
- Ensure communication of project progress to the Open Ocean TIG and NOAA
- Engage stakeholders and implementation partners
- Complete monitoring as described in the project MAM plan
- Compile monitoring information and ensure MAM reports are completed

Timeline – 2020-2030
Role – NOAA
Products or Deliverables: DIVER reports, annual implementation updates to the OO TIG

Task 2: Moving existing noise reduction technologies and prototypes towards implementation in the Gulf
The project has used existing report recommendations, literature, and technical experts to identify measures that are ready for implementation or trial field studies. This project is working with industries to implement outreach and voluntary programs to reduce vessel noise. Outcomes of this activity included a prioritized list of measures that are ready for implementation. Additional outcomes may include outreach and/or voluntary certification programs, potential partnerships, and incentives for the implementation of each technique/prototype.

The project team is engaged in discussions with industry representatives to determine which noise reduction technologies for seismic survey activity and vessels are available for use in the Gulf. Further discussions will include how to get voluntary use of these technologies, as well as opportunities to collect data in the field to show how much noise reduction can be gained by using specific equipment. In years 4-9 we anticipate doing some in field measurements or other pilot projects on vessels and during seismic surveys.

Timeline – Years 1-10
Role – NOAA and Partners
Products or Deliverables: Assessment report identifying areas to work with industry to reduce sound, reports or summaries produced as part of workshops and working groups, reports from pilot projects or field studies.

Task 3: Identify priority areas for implementing restoration actions
Establish a working group to conduct a risk assessment based on best-available information for noise and cetacean populations in the Gulf. Expected outcomes of this activity include a review of best-available data, significant data gaps/needs that should be addressed, and the development of lists and descriptions of priority areas in need of restoration actions to address the effects of noise on cetaceans.

In year 5, a report including sound data analysis, modeling, stakeholder engagement, and potential pilot project was completed. This report may be updated if deemed necessary by the project team based on additional information gathered during the project.

Timeline – Years 1-5
Role – NOAA and Partners
Products or Deliverables: Reducing Impacts of Anthropogenic Noise to Cetaceans in the Gulf of Mexico: Collaborating with Industry on Noise Reduction Pilot Projects Recommended Options Paper

Task 4: Instrument maintenance and deployment
Maintain and deploy several long-term high frequency acoustic recording packages (HARPs) to collect long-term baseline data for marine mammal distribution and soundscape characterization. An extended PAM array at short-term sites will monitor noise in high-risk areas or priority areas that have significant data gaps. The data and analyses from the PAM arrays are being used to help in the development of restoration activities and help in project-level (e.g., the change in noise patterns in key areas) and resource-level (e.g., establishing baseline levels of cetacean species abundance/density) monitoring efforts.

Timeline – Years 1-8
Role – NOAA and Partners
Products or Deliverables: Multiyear PAM reports, seismic survey and vessel sound level data shared with industry, characterization of marine mammal presence near PAM sites and additional reports and scientific papers based on the collected data.

Task 5: Develop and implement a specific restoration implementation plan for preventing and/or reducing noise in each key area
Work with Gulf stakeholders with nexus to offshore activities (e.g., shipping companies, state port operators, oil and gas companies, geological and geophysical surveying companies, the Navy, BOEM) to develop and implement a specific restoration implementation plan for preventing and/or reducing noise in each key area based on the information and knowledge gained from the project. This phase will cultivate buy-in among the organizations operating equipment/vessels in each priority area by including them in the planning and tailoring of restoration options and incentives. In addition, these discussions would help to finalize, customize, and prioritize the measures to be implemented in each sector:

1. Seismic surveys
2. Vessel engineering
3. Vessel operations

For each sector, restoration is being tailored to the specific soundscape, sound produced and options available for reducing sound. Plans will include appropriate monitoring and adaptive management parameters for the specific implementation activities.

Environmental compliance, as described in the OO RP2/EA, will be completed prior to implementation activities and any necessary future compliance reviews will be documented.

In 2025, the project team hosted a facilitated workshop with seismic industry representatives to discuss data gaps and the types of voluntary actions (e.g. using quieter survey equipment or altering timing or location of operations) could be taken to reduce noise from seismic surveys in the Gulf. Several ideas came out of that workshop, and we anticipate some follow up meetings in 2026 and 2027 to further these concepts.

In 2026, NFWF will finalize a grant to test new rudder technologies and measure the noise reduction achieved on an offshore transfer boat that is commonly used to transport mooring crews, hoses, and fenders essential for tanker product transfer. This testing will happen in the western Gulf.

In 2025 and 2026, the project team will continue conversations with tanker and cargo companies who are interested in the passive acoustic data that has been gathered on vessels transiting in the Gulf. This may lead to a collaboration between the project and industry to test some vessel operational changes to determine if noise can be reduced without having major interruptions to the movement of products on large vessels.

Timeline – Years 3-10
Role – NOAA and Partners

Products or Deliverables: Workshops and outreach events with industry groups, identified pilot projects to test operations or equipment to determine if sound emission is reduced and results reports from any funded pilot projects.

Task 6: Project Wrap-up and Closeout
The purpose of this task is to complete the closeout reporting and processes described in both the Open Ocean TIG project completion and closeout guidelines and the Trustees' Monitoring and Adaptive Management Procedures and Guidelines Manual. The TIG completion and closeout reports are in addition to final MAM reporting for the individual tasks with report deliverables, and in addition to any administrative reporting for project closeout from the Trustee Council/LAT such as final DIVER progress reporting and financial reconciliation. NOAA will lead this wrap-up and closeout reporting, incorporating, as appropriate, material from final reports from partners.

Timeline – Year 9-10
Role – NOAA
Products or Deliverables – Final project completion report, Final MAM Report and data information package, financial reconciliation information for OO TIG project close-out resolution, and final annual DIVER report.

C. Project Estimated Budget and Timeline

The original project budget was $8,992,000 over 6 years. The project change added 4 years and $4,800,000 in 2026. The activities to be completed and the estimated budget, reflecting the approved project changes are provided in the table below for the new 10-year project duration. The Implementing Trustee may expend funds for its documented costs related to implementation, monitoring, and adaptive management of the Project in accordance with requirements set in the approving Open Ocean TIG Resolution OO-2026-004. Implementing Trustees can expend funds up to the total amount allocated as needed across the Budget Components identified below.

Cost Category	Estimated Budget*	NOAA Budget	Expected Timeline
Project Management and Administration	$2,307,236	$2,307,236	2020-2030
Implementation /Execution	$5,825,000	$5,825,000	2021-2030
Monitoring	$4,842,500	$4,842,500	2020-2030
Contingency	$817,464	$817,464	
Total Budget	$13,792,200	$13,792,200	

* All budget figures are best estimates based on estimates of the resources and levels of effort required to achieve project objectives, generated during initial restoration plan development. Budget estimates (allocations among cost categories) may require adjustment over the course of project implementation and such adjustments are subject to OO TIG review and approval and will be documented in future project funding resolutions.

D. Project Implementation Guidelines
This project will be implemented in a manner consistent with the OO RP2/EA, Resolution OO-2026-004, and the Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the Deepwater Horizon (DWH) Oil Spill, revised August 2, 2021 (TC SOPs).

The Implementing Trustee shall track the progress of implementation and monitoring according to the TC SOPs and provide the OO TIG with status updates at least annually or as requested.

The Implementing Trustee shall maintain an updated DIVER project record and project folder on the OO TIG Project Implementation Library SharePoint site.

The Implementing Trustee shall provide project reports, products, and other documents to the OO TIG for review prior to their submission to the DIVER project record in accordance with guidelines provided on the OO TIG Implementation Library SharePoint site.

This Implementation Plan remains in effect until project completion/closeout is completed according to requirements outlined in this plan, Resolution OO-2026-004, and in the TC SOPs.