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 ofMexico on April 20, 2010,
Civil Action Nos. 10-4536; 10-04182; 10-03059; 13-4677; 13-158; 13-00123 (ED. La.)
MDL No. 2179

Resolution #OO-2024-007

Funding for Implementation of the Open Ocean Trustee Implementation Group Final Restoration Plan 2/Environmental Assessment Project: Reduce Impacts of Anthropogenic Noise on Cetaceans (ID #229)

1. In accordance with the Oil Pollution Act of 1990 (OPA), the National Environmental Policy Act (NEPA), the *Deepwater Horizon* (DWH) 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" in the Gulf of Mexico, on April 20, 2010 (E.D. La.) (Consent Decree), the undersigned representatives of the Open Ocean Trustee Implementation Group (OO TIG) hereby approve the actions set forth below to support the restoration of natural resources and services injured or lost as a result of the DWH oil spill, which occurred on or about April 20, 2010, in the Gulf of Mexico.

2. Through Resolution OO-2019-025, the OO TIG approved the project *Reduce Impacts of Anthropogenic Noise on Cetaceans* (ID #229) (Project), the Project Implementation Plan (PIP), authorized budget of $8,992,200 and the commitment and disbursement of $2,851,420 to the National Oceanic and Atmospheric Administration (NOAA) as the Implementing Trustee. The Project was selected in the Open Ocean Trustee Implementation Group Final Restoration Plan 2/Environmental Assessment (Final RP2/EA).

3. The Project to be funded through this Resolution is consistent with the restoration goals identified in the Final PDARP/PEIS 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" in the Gulf of Mexico,* on April 20, 2010 (E.D. La.) on April 4, 2016.

4. NOAA, as the designated Implementing Trustee, is the primary entity responsible for implementation as described in Section 9.5 of the TC SOPs. NOAA shall implement and monitor the Project according to the Final RP2/EA, the TC SOPs, the PIP, and as applicable, corrective action approved by the OO TIG. All reports and other materials prepared for publication pursuant

to or related to the Project shall acknowledge the OO TIG and DWH funding as follows: *Funding for the project, Reduce Impacts of Anthropogenic Noise on Cetaceans, was provided by the Open Ocean Trustee Implementation Group to restore natural resources injured by the 2010 Deepwater Horizon oil spill in the Gulf of Mexico.* The Implementing Trustee shall provide the OO TIG notice of public reports or other publications in accordance with the OO TIG Project Publications Guidelines.

5. The Implementing Trustee shall provide the OO TIG with Project completion and closeout reports in accordance with the TC SOPs and guidelines from the OO TIG and Lead Administrative Trustee. Upon request, the Implementing Trustee shall provide the OO TIG with additional information and supporting documents.

6. 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.

7. 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.

8. Funds transferred from the Department of the Interior (DOI) Restoration Fund to NOAA as authorized by this Resolution may be used only for the tasks and activities authorized by this Resolution and the PIP. 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.

9. This Project was developed as a long-range activity in the Final RP2/EA. The NEPA analysis in the Final RP2/EA included an evaluation of a broad range of activities that would be refined following the initial project phase. NOAA has provided an overview and analysis of actions to be conducted in the attached *Reduce Impacts of Anthropogenic Noise on Cetaceans Project (#229): National Environmental Policy Act and Environmental Compliance Review of Implementation Activities (March 2024)*. After reviewing the attached evaluation, the OO TIG affirms the actions are consistent with the OPA evaluation and environmental compliance provided in the Final RP2/EA and therefore no additional NEPA analysis or public review is necessary. This review will be shared with the public via posting to the Gulf Spill Restoration website and through updates at OO TIG annual meetings.

10. Through this Resolution and the associated *Deepwater Horizon* Trustee Withdrawal Forms, the OO TIG authorizes the commitment and disbursement of up to $6,140,780 in Marine Mammals Restoration Type funding from the DOI Restoration Fund, OO TIG General Subaccount to NOAA, as summarized below. There is no change to the Authorized Budget. Disbursements of

authorized funds will be executed through the Implementing Trustee's submission of multiple withdrawal forms in accordance with the OO TIG's annual cash flow planning.

Allocation Type	Implementing Trustee	Project Name	Project ID	Authorized Budget	Funds Previously Authorized (OO-2019-025)	Funds Authorized by this Resolution
Marine Mammals	NOAA	Reduce Impacts of Anthropogenic Noise on Cetaceans	229	$8,992,200	$2,851,420	$6,140,780

11. At the time this Resolution was approved, environmental compliance with federal regulations is complete for the Project. The Implementing Trustees will ensure that all applicable regulatory compliance activities will be complete prior to undertaking any regulated activities for the Project and that the terms and conditions of all federal, state, and local permits will be complied with in the course of implementation. All compliance documents will be posted to the Administrative Record.

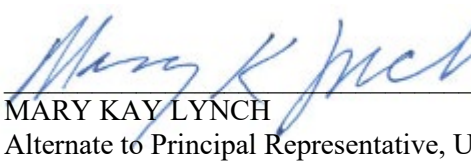
12. It is resolved that after review of this Resolution, the duly authorized officials for the OO TIG approve the commitment and disbursement of funds, as specified in Paragraph 10, to continue implementation of the Project. This Resolution may be authorized in counterparts. The effective date of this Resolution is the date of last signature below.

OPEN OCEAN RESTORATION AREA TRUSTEE IMPLEMENTATION GROUP

CHRISTOPHER D. DOLEY
Principal Representative, National Oceanic and Atmospheric Administration

MARY JOSIE BLANCHARD
Principal Representative, Department of the Interior

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



MARY KAY LYNCH
Alternate to Principal Representative, U.S. Environmental Protection Agency

DATE OF LAST SIGNATURE: March 29, 2024

Open Ocean Trustee Implementation Group

Reduce Impacts of Anthropogenic Noise on Cetaceans (ID#229):
National Environmental Policy Act
and
Environmental Compliance Review of Implementation Activities

March 2024

Selection of Project

In 2019, the Deepwater Horizon (DWH) Open Ocean Trustee Implementation Group (TIG) completed the Final Open Ocean Restoration Plan 2/Environmental Assessment: Fish, Sea Turtles, Marine Mammals, and Mesophotic and Deep Benthic Communities (OO RP2/EA) that included the selection of the Reduce Impacts of Anthropogenic Noise on Cetaceans project (Noise Project). The Open Ocean TIG selected the project from a reasonable range of alternatives suitable for addressing the injuries caused by the DWH oil spill. In developing the reasonable range, the Open Ocean TIG reviewed the Trustees' programmatic restoration goals and Restoration Type specific goals specified in the Final Programmatic Damage Assessment and Restoration Plan/Programmatic Environmental Impact Statement (PDARP/PEIS). The Open Ocean TIG also considered OPA evaluation criteria (15 CFR §990.54), the current and future availability of funds under the DWH NRDA settlement payment schedule, as well as projects already funded or proposed to be funded by the other DWH restoration funding sources.

The project duration was initially planned for six years, with work commencing in 2020. Under the original timeline, six years of work would end in 2025. In order to fully implement and monitor pilot projects described below, it is necessary to allow more time beyond the original timeline of the project. Allowing three years for pilot project implementation, instead of two, provides sufficient time to further engage with partners, conduct and monitor the pilot projects, and report results. Project closeout would occur in late 2026 or early 2027.

Initial Project Work (2020-2023)

The first several years of the project focused on budget and execution planning and entering into an agreement with National Fish and Wildlife Foundation (NFWF) to assist in project implementation. NFWF hired a contractor to gather and review marine mammal distribution and noise source data to develop a risk assessment, engage with industry members on their willingness to participate in pilot projects, and produce a recommended pilot projects options paper. Based on this initial work, three recommended pilot projects that have the potential to reduce sound impacts on cetaceans are being considered for implementation. This memo describes each of the pilots and evaluates the need for additional OPA/NEPA review and environmental compliance.

Pilot Projects (2024-2026)

After careful consideration and analysis, the project team recommends three pilot projects to test technologies related to reducing sources of anthropogenic noise that have the highest impact on marine mammals in the Gulf of Mexico. Each of these options are described below.

1. Reducing Sound through Modifications in Seismic Technologies

Seismic technologies such as traditional airgun arrays emit sound at frequencies which can be disruptive to marine mammal vital activities such as feeding and communicating. Traditional airgun arrays also are inefficient in directing the sound to the seabed where it is most useful to surveys, resulting in a large 'footprint' of sound from their use. In the Gulf of Mexico, seismic airguns are used throughout the year. Seismic airguns represent some of the loudest and longest traveling sound in the Gulf of Mexico, therefore a reduction in amount/length of use or a transition to frequencies that are less disruptive to marine mammals is likely more impactful than any spatial change in use. A broad array of new/modified seismic technologies currently exist, however many have not been tested specifically to measure and understand how they could be used and refined during operation to reduce sounds that are disruptive to marine mammals without reducing their scientific utility to industry.

The pilot project would engage with willing partners who are currently authorized for seismic surveys in the northern Gulf of Mexico to develop standardized testing in an open ocean environment to evaluate if existing alternatives to traditional seismic airguns are less impactful to marine mammals. Alternative seismic technologies to be tested would be brought to specified site(s) in the Gulf where passive acoustic monitoring (PAM) arrays (existing and temporarily brought to the site) would be set up to measure the sound and frequencies produced by each of the alternative seismic technologies. In some cases, listening arrays may also be set up at sites where alternative technologies are scheduled to be used. Sound measurements would be taken over weeks or months during the three-year pilot. The results would be used to model the benefits of these alternative technologies for reducing sound exposure for marine mammals and to understand the potential of scaling up use of the tested technologies.

2. Reducing Sound through Vessel Retrofit and Design

Supply and service class vessels are used throughout the Gulf of Mexico to provide supplies/equipment to offshore rigs and as tugs to help larger vessels navigate into port. Owners of this vessel class have been identified as target pilot project partners due to interest in retrofits and new builds brought on by the growth of offshore wind leases and industry movement toward emission reductions. These new vessel technologies that are primarily designed to help meet emission reduction targets also impact the ship's engine noise (second largest source of sound after the propeller) and have the potential to significantly reduce marine sound leading to a win-win scenario.

This pilot applies to stakeholders both engaged in applicable retrofit projects or new builds – which may include shipyards, naval architects/engineers, and ship design firms – and interested in evaluation of additional noise reduction associated with their retrofit/ship design. This may include sub-contracting additional qualified noise measurement specialists and partnering with other agencies doing similar work. These pilot efforts would use the U.S. Department of Transportation's Maritime Administration (MARAD) existing standards, guidelines, and notations for evaluating vessel source levels.

Testing would measure both sound/frequency with the various options. Results would be compared to pre-retrofit baseline measurements, as well as measurement of the distance the sound travelled for incorporation into modeling of the potential benefits of bringing to scale. Measurements would be taken by existing acoustic arrays and/or arrays brought to the site for the pilot for weeks or months during the three-year pilot. Pilots would likely be conducted in the northern Gulf of Mexico where the majority of vessels are operating. This pilot would not result in additional vessel traffic or days-at-sea but would work with partners to outfit and measure vessel trips already planned.

3. Investigating Willing Partners to Reduce Sound Exposure through Voluntary Speed Reduction and/or Alternate Routing

Consideration of voluntary speed reduction and alternate routing are dependent on building partnerships with entities (for example: shipping companies or vessel owners) willing to participate in a pilot project. This pilot project would characterize the willingness of partners in the Gulf of Mexico to test speed reduction and/or alternative routing in a specified area through data collection and industry engagement. There will be no field work that impacts the environment. In addition, this pilot would identify key incentives that are meaningful to interested participants if the field-based portion of this pilot were pursued in the future.

This pilot would include outreach and engagement such as meetings, phone calls, and workgroups to gather information needed to determine if there are willing partners to advance a speed reduction and/or alternate routing trial. The report for this initial step would include information such as:

A) Is there willingness to participate in a voluntary slowdown by specific vessels/companies? Are there preferences for which location?
B) Is there willingness to participate in a voluntary lane shift by specific vessels/companies? Are there preferences for which location?
C) If there is no willingness to participate, what are the barriers to participation?
D) Are there potential incentives that would increase participation?

The outcomes of this engagement effort would determine the timing and appropriate next steps for any pilot work to take place in the Gulf of Mexico within the Noise Project. Additionally, these outcomes are likely to inform restoration efforts for the Reduce and Mitigate Vessel Strike Mortality of Cetaceans Project implemented by the OO TIG. Future pilots could be funded by one or both of these projects.

Project Wrap Up (2026-2027)

As pilot projects are completed the results will be compiled into a report of the outcomes of each pilot. For successful pilots, the report will also evaluate the likelihood of being able to scale up the efforts for more noise reduction across the Gulf.

Consistency with OO RP2/EA

The Trustees conducted Oil Pollution Act (OPA) and National Environmental Policy Act (NEPA) evaluations for the range of Marine Mammal project alternatives as described in Chapter 3 of the OO RP2/EA. The Trustees determined that the Noise Project has a nexus to the injury, meets the Trustees' goals at reasonable and appropriate costs, has a high likelihood of success and would provide potential benefits to more than one natural resource or service. In addition, the project is not expected to have negative impacts to public health and safety and would avoid collateral injury (OO RP2/EA section 3.7.3).

All of the pilot project activities described here are consistent with the OPA findings in OO RP2/EA and fully meet OPA evaluation criteria. Industry outreach, testing technologies and utilizing passive acoustic monitoring equipment are consistent with the activities that were anticipated to be conducted for the Noise Project in OO RP2/EA. There is no proposed change in project budget. In addition, the pilot projects remain cost effective and help to meet the goals and objectives of the Noise Project. Therefore, there is no new or additional information to consider that alters the OPA evaluation of this project in the OO RP2/EA Section 3.7.3.

Additionally, as evaluated programmatically in OO RP2/EA, the Noise Project was determined to have only beneficial or short-term minor adverse effects to noise, protected species and marine transportation under NEPA. Pilot Projects 1 and 2 involve field work anticipated to occur in the northern Gulf of Mexico. Details of that Affected Environment are described in section 4.3 of the OO RP2/EA. One species of marine mammal, Rice's Whale, has been reclassified as a new species since OO RP2/EA. The description of that species' (formerly Gulf of Mexico Bryde's whale) Affected Environment is included in section 4.3.2.4.1 of OO RP2/EA. Pilot Project 3 is data-based only at this time and does not involve any field work or actions that impact the environment.

The proposed pilot options are unlikely to increase the environmental effects described in OO RP2/EA or to introduce new adverse effects that were not previously considered in OO RP2/EA. OO RP2/EA described that work from this project would include passive acoustic monitoring, working with partners and industry, outreach, and testing technologies.

Table 1. Environmental Consequences References from OO RP2/EA for Proposed Pilot Activities. This table identifies the environmental consequences of the pilot project activities that were evaluated in OO RP2/EA.

Pilot Project	Pilot Project Activity	Environmental Consequences	Reference Sections, OO RP2/EA
1	Passive acoustic monitoring of new or modified seismic technologies (working with partners who are already authorized to perform seismic surveys in the GOM)	Physical Resources Short-term, minor adverse impacts could occur due to deployment and monitoring of PAM equipment, including installation of anchors on the sea floor and mooring lines to support the equipment. The project team would implement BMPs to minimize the likelihood and severity of disturbance. Temporary, towed PAM equipment would have no impacts on physical resources. This pilot would have no effect on hydrology and water quality as there are no discharge activities planned.	4.4.5.2.1
		Biological Resources Benthic habitats could be disrupted during deployment of the PAM equipment, which may include installation of anchors on the sea floor. Impacts would be localized and short-term. Increased vessel activity for deploying and monitoring effects of noise may result in increases in direct interactions with marine mammals, however this is expected to be minimal given the limited number of trips (one to two per year) and potential for combining such efforts with other vessel trips.	4.4.5.2.2
		Human Uses and Socioeconomics Using new or improved technologies could have potential long-term, minor to moderate indirect adverse impacts to socioeconomic resources. This pilot is only gathering data and disseminating information to industry. Implementation of new or improved technologies and equipment would not be required but would be provided as a voluntary option to the industry and may be incentivized.	4.4.5.2.3
2	Passive acoustic monitoring of vessel retrofit and new designs	Physical Resources Short-term, minor adverse impacts could occur due to deployment and monitoring of PAM equipment, including installation of anchors on the sea floor and mooring lines to	4.4.5.2.1

		support the equipment. The project team would implement BMPs to minimize the likelihood and severity of disturbance. Temporary, towed PAM equipment would have no impacts on physical resources. This pilot would have no effect on hydrology and water quality as there are no discharge activities planned.	
		<u>Biological Resources</u> Benthic habitats could be disrupted during deployment of the PAM equipment, which may include installation of anchors on the sea floor. Impacts would be localized and short-term. Increased vessel activity for deploying and monitoring effects of noise may result in increases in direct interactions with marine mammals, however this is expected to be minimal given the limited number of trips (one to two per year) and potential for combining such efforts with other vessel trips.	4.4.5.2.2
		<u>Human Uses and Socioeconomics</u> Using new or improved equipment and designs on vessels could have potential long-term, minor to moderate indirect adverse impacts to socioeconomic resources. Depending on outcomes of the industry engagement and the strategies developed to reduce noise impacts on marine mammals, marine transportation industries may change behaviors, which could result in short-term minor impacts to costs. However, noise reducing strategies can benefit shipping industries, since typical noise reduction technologies focus on creating efficient operation for large ships. Updated, efficient ships could decrease utilization costs for shipping companies. Implementation of new or improved designs and equipment would not be required but would be provided as a voluntary option to the industry and may be incentivized.	4.4.5.2.3
3	Industry outreach and partnership building	There would be no impacts to biological or physical resources or human uses and socioeconomics from outreach activities. Data collected in this pilot may be used to inform future restoration activities such as on the ground speed reduction and alternative routing trials.	

In the Environmental Consequences section, OO RP2/EA described the impacts from the project as largely beneficial with minor adverse impacts (Section 4.4.5.2). Additionally, OO RP2/EA concluded that benefits to physical and biological environments and human use and socioeconomic resources would result if this project was implemented (Section 4.4.5.2). The pilot projects, as described above, would not result in additional environmental consequences beyond those considered in OO RP2/EA and the PDARP/PEIS.

<u>Compliance with Other Laws</u>

At the time OO RP2/EA was finalized and compliance reviews were completed, the reviews for MMPA, EFH, and ESA under NMFS jurisdiction were deemed phased compliance. Phased compliance indicates that compliance will need to be reevaluated later to fully evaluate the potential effects, once initial planning has occurred and locations and methodologies for the work are determined. Additionally, at the time OO RP2/EA was finalized, the National Historic Preservation Act (NHPA) review was in progress and has since been completed.

Now that the Noise Project team has determined the location and methodologies for the pilot projects, a BE form was completed for the pilot projects and reviewed by NMFS and USFWS. The OO TIG has completed technical assistance for these pilots and made determinations for MMPA, EFH, and ESA under NMFS jurisdiction as described below.

1. Endangered Species Act - Section 7 (NMFS)

Since OO RP2/EA, a Rice's whale (formerly GOM Bryde's whale) core distribution area (CDA)[1] has been designated. The pilot projects do not plan work within the Rice's whale CDA, though some potential partners have vessels conducting existing operations in that area. Based on technical assistance with NMFS, pilot projects #2 and #3 were determined to have no effect on ESA-listed species and habitats. Pilot project #1 activities (noise measurements of ongoing seismic surveys) would only occur in areas and with partners who have existing authorizations for seismic work, thus no additional NMFS ESA consultation is required.

2. Magnuson Stevens Act (EFH) (NMFS)

While some of the pilot project activities will take place in nearshore and offshore areas with designated EFH, NOAA determined that none of the project activities are expected to affect EFH.

3. Marine Mammal Protection Act (MMPA) (NMFS)

Based on technical assistance with NMFS, pilot projects #2 and #3 were determined not to affect species protected under MMPA. Pilot project #1 activities (noise measurements of ongoing seismic surveys) would only occur in areas and with partners who have existing authorizations for seismic work, thus no additional MMPA reviews are required.

Conclusion

In OO RP2/EA, the Noise Project was evaluated based on the project details at the time which included use of passive acoustic equipment to detect marine mammal and noise sources, identifying existing technologies ready for implementation, and working with industry to provide voluntary opportunities to test and try new technologies and equipment.

No further analyses under OPA or NEPA are necessary and modifications to the final restoration plan are not required. In addition, the original public comment period conducted for the OO RP2/EA solicited public input on the project and comments were supportive with no controversial issues identified.

The OO TIG confirms that the effects of the pilot projects fall within the OPA and NEPA analysis completed in OO RP2/EA. In addition, no additional reviews are needed for NMFS ESA, MMPA or EFH based on the analysis provided of the pilot projects.

[1] https://www.fisheries.noaa.gov/resource/map/rices-whale-core-distribution-area-map-gis-data

References

Deepwater Horizon Natural Resource Damage Assessment Trustees. 2016. *Deepwater Horizon oil spill: Final Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental Impact Statement.* Retrieved from http://www.gulfspillrestoration.noaa.gov/restoration-planning/gulf-plan. (PDARP/PEIS)

Open Ocean Trustee Implementation Group. 2019. *Deepwater Horizon* Oil Spill Natural Resource Damage Assessment, Open Ocean Trustee Implementation Group, Final Restoration Plan 2/ Environmental Assessment: Fish, Sea Turtles, Marine Mammals, and Mesophotic and Deep Benthic Communities. (OO RP2/EA)