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

Civil Action Nos. 10-4536; 10-04182; 10-03059; 13-4677; 13-158; 13-00123 (E.D. La.)
MDL No. 2179

Resolution #OO-2026-014

Open Ocean Trustee Implementation Group Resolution to Approve Changes to the Project, Project Implementation Plan, and Authorized Budget for Mesophotic and Deep Benthic Communities - Active Management and Protection Project (ID 233)

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 Restoration Plan and Final Programmatic Environmental Impact Statement (PDARP/PEIS), and the Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the *Deepwater Horizon* Oil Spill (August 2, 2021) (TC SOPs), 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 Mesophotic and Deep Benthic Communities - Active Management and Protection project (ID 233) (AMP Project) was selected in the OO TIG Final Restoration Plan 2 and Environmental Assessment (OO RP2/EA) in November 2019. The original project duration was seven years, and the original project budget was $20,689,000. The project is consistent with the restoration goals identified in the Final PDARP/PEIS and the Consent Decree resolving the civil actions referenced above.

3. Through Resolutions OO-2020-004 and OO-2020-012, the OO TIG approved the project implementation plan and authorized budgets for the National Oceanic and Atmospheric Administration (NOAA) and the Department of the Interior (DOI) as Implementing Trustees. Through these and subsequent resolutions, identified in the table below, the OO TIG authorized a total commitment of $20,689,000 in Mesophotic and Deep Benthic Communities (MDBC) restoration type funds and approved a change in authorized budget for NOAA and DOI (OO-2023-009).

Resolution	Authorized Project Budget	NOAA Budget	NOAA Disbursement	DOI Budget	DOI Disbursement
OO-2020-004	$20,689,000	$19,737,515	$1,018,314	$951,485	$0
OO-2020-012	$20,689,000	$19,737,515	$0	$951,485	$161,000
OO-2022-001	$20,689,000	$19,737,515	$5,193,900	$951,485	$145,000
OO-2023-002	$20,689,000	$19,737,515	$3,048,927	$951,485	$0
OO-2023-009	$20,689,000	$20,383,000	$0	$306,000	$0
OO-2023-014	$20,689,000	$20,383,000	$11,121,859	$306,000	$0
Funding Total	$20,689,000	$20,383,000	$20,383,000	$306,000	$306,000

4. NOAA and DOI requested changes to the project and provided the project change analysis document: "Evaluation of Changes to the Project: Mesophotic and Deep Benthic Communities - Active Management and Protection (ID 233) (August 2026)," which is attached to this Resolution. The changes

[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.

requested are to extend the project duration by five years and increase the authorized budget by $12,500,000. The budget increase will allow the cost-effective continuation of approved activities to meet the project's objectives. Based on their review of the project change analysis document, the OO TIG determined that the additional funding will allow the AMP Project to leverage the substantial capacity and partnerships developed to date to conduct additional restoration and reduce threats to MDBC to achieve the Trustees goals.

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 document. Based on their evaluation, the Trustees conclude that the project changes are consistent with 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. Therefore, no 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 Trustees 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 with in the course of implementation.

7. The revised project implementation plan (PIP), which is attached to this Resolution, has been updated to reflect the project changes and change in authorized budget. The Implementing Trustees will inform the public of the project changes through the Trustee website and an update to the DIVER project record. The Implementing Trustees shall implement and monitor the project according to the TC SOPs and the attached project implementation plan entitled "Implementation of the Project: Mesophotic and Deep Benthic Communities - Active Management and Protection (ID 233) (revised August 2026)."

8. The Implementing Trustees 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 Trustees 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	Implementing Trustee	Project Name (ID)	Previous Authorized Budget	Total Budget Change	New Authorized Budget
MDBC	NOAA	MDBC - Active Management and Protection (ID 233)	$20,383,000	$12,115,000	$32,498,000
MDBC	DOI	MDBC - Active Management and Protection (ID 233)	$306,000	$385,000	$691,000
		Total	$20,689,000	$12,500,000	$33,189,000

11. Funds identified in Paragraph 10 as approved for use by NOAA and DOI may only be used for the restoration activities approved by this Resolution and described in the PIP. Funds authorized by prior

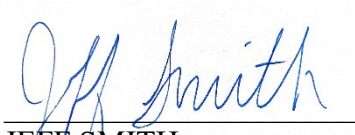
Resolutions identified in Paragraph 3 may continue to be used as originally authorized. Any other use of funds disbursed pursuant to this Resolution is prohibited. Any unauthorized use of disbursed funds must be reported to the full OO TIG immediately upon discovery.

12. Through this Resolution and associated *Deepwater Horizon* Trustee Withdrawal Forms, the OO TIG authorizes the commitment and disbursement of up to $12,500,000 in Mesophotic and Deep Benthic Communities Restoration Type funds from the Open Ocean General Subaccount to NOAA and DOI as detailed in the table below to conduct the tasks described in the PIP. Disbursement of authorized funds will be executed through the Implementing Trustees' 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
MDBC	NOAA	MDBC - Active Management and Protection (ID 233)	$12,115,000
MDBC	DOI	MDBC - Active Management and Protection (ID 233)	$385,000
		Total	$12,500,000

13. It is resolved that after a review of this Resolution and the attached project change analysis document, the duly authorized officials for the OO TIG approve the following: 1) the changes to the Mesophotic and Deep Benthic Communities - Active Management and Protection project (ID 233) as summarized in Paragraph 4 and in the attached project change analysis document; 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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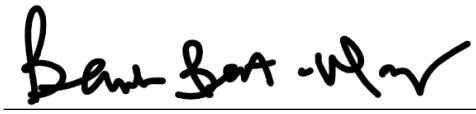

BENITA BEST-WONG
Principal Representative, U.S. Environmental Protection Agency

DATE OF LAST SIGNATURE: September 10, 2026

Evaluation of Changes to the Project Mesophotic and Deep Benthic Communities - Active Management and Protection (ID 233)
August 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/National Environmental Policy Act (NEPA) analysis, or whether 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 the Oil Pollution Act (OPA).

The **Mesophotic and Deep Benthic Communities (MDBC) - Active Management and Protection Project (ID 233)** (AMP Project or 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 RP2/EA), approved by the OO TIG in November 2019. It was selected with three other preferred MDBC alternatives, committing a total of $126,188,000 of the $273,300,000 MDBC allocation. Taken together, the four projects provide a coordinated approach, maximizing efficiencies and cost-effectiveness, to achieve the MDBC restoration goals. The shared timeline for the four projects is 2020 through 2027-28.

In 2025, the OO TIG began a review of the MDBC projects to evaluate progress in meeting MDBC restoration goals and consider committing additional funds to continue their implementation. In February 2026, the OO TIG approved a five-year extension and budget increase of $12.5 million for the MDBC Habitat Assessment and Evaluation Project. Currently, $151.9 million has been allocated to MDBC restoration planning and implementation projects. The TIG is concurrently considering five-year extensions for this AMP Project, the Mapping, Ground-truthing, and Predictive Habitat Modeling (MGM) Project (ID 234), and the Coral Propagation Technique Development Project (ID 235), with budget increases of $12.5 million, $10 million, and $21 million respectively. Continued implementation of these three MDBC Projects for five years would commit an additional $43.5 million of the remaining $121.4 million MDBC allocation. Execution of this full suite of proposed extensions and their associated budget increases would leave approximately $77.9 million for future MDBC restoration.

This document describes the OO TIG's review of the AMP Project and evaluates a $12.5 million increase in authorized budget to extend its implementation for 5 years.

II. Project Background

The AMP Project provides a framework for management and protection of Mesophotic and Deep Benthic Communities (MDBC) through impact reduction activities targeting an array of factors detrimental to MDBC health, science-to-management activities such as engaging resource management entities, and

education and outreach activities focused on resource users and the public. The AMP Project has the following objectives:

1. Actively manage valuable MDBC to protect against multiple threats, and
2. Provide a framework for monitoring, education, and outreach.

The project completed the approved implementation planning stage in 2022. The 5-year implementation phase began in 2022 and is anticipated to continue through 2026. The project scope includes a final period for analysis, synthesis, and reporting of project results, planned for 2027-2028. The AMP Project, in conjunction with the other MDBC projects, holds annual adaptive management workshops to assess data collected to address uncertainties, evaluate progress towards project objectives and develop annual work plans.

As selected in OO RP2/EA, the AMP Project's authorized budget of $20,689,000. The full project description can be found in Section 3.8.4 of the OO RP2/EA. OO RP2/EA is consistent with and tiered from the 2016 Programmatic Damage Assessment and Restoration Plan/Programmatic Environmental Impact Statement (PDARP/PEIS), which was prepared by the Trustees to programmatically plan restoration projects to restore natural resources and services injured by the spill. 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 National Oceanic and Atmospheric Administration (NOAA) and the Department of the Interior (DOI) are co-implementing trustees for the AMP Project, which began work in 2020.

In 2026-27, the AMP Project will complete currently approved implementation and reporting activities. Since commencing work in 2020, the AMP Project has made substantive progress and developed the necessary capacity to address environmental threats to priority MDBC, prevent future injury, and provide a framework for monitoring, education, and outreach. Continued and expanded work to fully understand and address threats to MDBCs at priority locations is needed to meet MDBC restoration goals. High-priority objectives for threat reduction include the prevention and avoidance of activities that impact the seafloor (e.g. boat anchoring through mooring buoy installation and maintenance); improved understanding of visitor uses and reduced user conflict; identifying and characterizing future opportunities and feasible techniques to reduce risks associated with abandoned or leaking oil and gas infrastructure; and improved management through enhanced resource protection capacity. Continued science-to-management applications are also needed to communicate outcomes of MDBC long-term monitoring, socio-economic analyses of potential management and protection actions, and the evaluation of MDBC community/ecosystem boundaries relative to managed area boundaries. It is also important to continue education and outreach to increase the public's awareness and support for MDBC restoration. The AMP Project advances education and outreach goals through the array of partnerships, high-traffic venues such as aquariums and museums, and through strategic communications products.

The OO Trustees reviewed progress made by the AMP Project and determined that it is successfully advancing the Trustees' MDBC restoration goals by reducing threats to MDBC, communicating project results to inform MDBC management and protection, and conducting education and outreach to increase awareness and appreciation of MDBC. Committing additional MDBC restoration funds to continue implementation of the AMP Project beyond its current duration would constitute an effective and efficient strategy to meet MDBC restoration goals, specifically to actively manage valuable MDBC to protect

against multiple threats, to provide a framework for monitoring, education, and outreach, and to inform better management of MDBC.

Currently Approved Project Scope

The following is a summary of the project activities approved in the OO RP2/EA:

Reduce threats to priority MDBC: Activities to assess and reduce threats to MDBC include installing mooring buoys to reduce damage to MDBCs from anchoring, removal of invasive species such as lionfish, documentation and removal of marine debris and derelict fishing gear, using desktop analysis to assess risks to MDBC associated with leaking and abandoned oil and gas infrastructure, and gathering and sharing information to support efficiency of enforcement activities in managed areas with MDBC. AMP Project activities also include conducting visitor use studies to better understand threats to MDBC habitats. The project continually adds information about newly identified threats to a database, which serves as the primary resource to produce site assessment and prioritization reports and directly inform field work planning for subsequent years. These activities are conducted in high-priority areas where the respective threats to MDBC habitats are documented. The project develops mission and mobilization plans with project sequencing and a logistics strategy to implement fieldwork in a manner designed to minimize environmental consequences and apply Best Management Practices (BMPs) to minimize impacts.

Science to management: The AMP Project provides communication and data products to deliver MDBC science to natural resource managers. Delivering science-to-management efforts focus on providing the results of field data collections and analyses to entities with resource management responsibilities. AMP Project managers established points of contact with management entities in the MDBC Area of Interest (AOI) to provide regular engagement. Continued science-to-management applications are fostered by the implementation of a long-term monitoring program, socio-economic analyses of potential management and protection actions, and by evaluation of the extent of priority MDBC within managed area boundaries.

Education and outreach: The AMP Project conducts education and outreach activities to support the distribution of educational resources, the maintenance of MDBC-related web pages, and the development of multimedia products (web stories, videos, photo collections, story maps, social media posts, etc.) to communicate MDBC portfolio-wide activities across various channels run by project partners and external media outlets. Project team members support exhibit development and interpretation of existing exhibits, and evaluation of education and outreach activities specific to MDBC work, expanding the reach of educational resources and activities. Cruise communications plans and staffing facilitate content collection and development of communications products translating fieldwork to broad audiences. The AMP Project works with National Marine Sanctuary Foundation partnerships to develop, evaluate, and distribute K-12 resources.

Planning, data management, and reporting: The AMP Project conducts activities to compile data, update gap analysis and spatial summaries for threats to MDBC, coordinate across work elements, monitor and evaluate project outcomes, engage stakeholders, and manage data. Activities are broadly divided into work directly tied to the planning, acquisition, and processing cycle, and continuations of work started in the planning phase of the project to accrete data and perform gap analysis. The AMP Project also contributes to cross-project long-term monitoring planning and implementation. This monitoring effort collects data to inform the outcome of threat reduction activities such as marine debris

removal or mooring installation and creates a valuable dataset for natural resource managers to reference in decision-making processes.

Annual project monitoring and adaptive management: Management of the AMP Project involves ongoing planning and administration, completing annual project work plans and budgets, overseeing and coordinating implementation of partner agreements, and leading the development of mission plans including coordination of all needed assets for field efforts. Project managers support adaptive management reviews, stakeholder engagement, coordination of annual implementation activities through ongoing gap analysis, long-term planning and reporting, and integration with the rest of the MDBC portfolio. The project also produces information that builds upon the 2020-2022 planning phase and prior implementation products and reports that information in publications and data repositories.

Previous Analyses of Project Scope

The AMP Project, along with the other MDBC projects, was approved as a long-term project with phased compliance. The project's activities as described in Sections 2.6.4.4 and 3.8.4.2 of the OO RP2/EA are summarized as follows: protect and manage MDBC through development of a framework for management and protection, including monitoring, education, outreach, and engagement; and, provide resource management and protection by directly addressing threats, including preventing damage from boat anchoring through mooring buoy installation and maintenance; improving understanding of visitor uses and reducing user conflict through evaluation and development of vessel registration and/or fishing endorsement programs; using desktop analysis to assess risks of contaminant releases or physical impacts to MDBC from abandoned or leaking oil and gas infrastructure; preventing damage by removing marine debris and derelict fishing gear where appropriate (where site assessment indicates removal can be accomplished without resulting in more harm than benefit); supporting stable MDBC by removing invasive lionfish and other invasive species; and improving management through enhanced resource protection capacity. Project activities also include education and outreach targeting resource users and the public; and engagement of stakeholders and development of socioeconomic analyses to evaluate potential impacts of management or protection actions. This project is adaptively managed over its seven-to-eight-year timeframe.

Following completion of the Implementation Planning Phase, implementation activities were detailed and reviewed in the following documents approved by the OO TIG through Resolutions OO-2022-001 and OO-2023-009:

- Mesophotic and Deep Benthic Communities Restoration Projects: National Environmental Policy Act and Environmental Compliance Review of Implementation Activities (January 2022).
- Mesophotic and Deep Benthic Communities Restoration Projects: National Environmental Policy Act and Environmental Compliance Review of Implementation Activities 2023-2027 (April 2023).

Geographic areas for field operations are described in Section 4.3.2.1.1 of the OORP2/EA and Section 5 of the January 2022 NEPA and environmental compliance review. AMP Project field operations take place in the MDBC AOI, which encompasses mesophotic reef habitats along the continental shelf edge (50-to-200-meter depths) and ocean floor habitats in the continental slope (>200-to-800-meter depths) and/or deep sea (>800-meter depths), extending south to the 27th north parallel.

Field-based activities included in the AMP Project for directly addressing threats to MDBC (OO RP2/EA Section 3.8.4.2) began in 2024. Operation plans are developed for these activities incorporate the most current compliance requirements and BMPs to minimize any potential environmental impacts.

III. Description of Project Changes

The proposed project change is a 5-year extension to continue implementation of approved project activities within the MDBC AOI and an associated increase of $12,500,000 in MDBC funds. The time extension and increase in funding will provide additional restoration benefits by allowing NOAA and DOI to leverage the capacities and partnerships established to date and conduct additional restoration to actively manage valuable MDBC to protect against multiple threats, and provide a framework for monitoring, education, and outreach. The additional funds would be distributed between co-implementing trustees as follows: NOAA: $12,115,000 and DOI: $385,000. This would result in an increase in the project authorized budget from $20,689,000 to $33,189,000. No change to the geographic areas for field operations is requested. The previously approved project activities described above would continue to be conducted at priority areas in the MDBC AOI. Activities would be conducted using the full suite of available technologies previously evaluated for the project.

Proposed Budget Changes

The following provides a summary of the budget changes requested for the AMP Project and for the co-implementing trustees.

Trustee	Current Authorized Budget (OO-2023-009)	Requested Increase in Authorized Budget	Updated Total Authorized Budget
NOAA	$20,383,000	$12,115,000	$32,498,000
DOI	$306,000	$385,000	$691,000
Total Budget	$20,689,000	$12,500,000	$33,189,000

IV. Determination of Need for Additional OPA Evaluation

NOAA and DOI, as Implementing Trustees, reviewed previous OPA evaluations to compare prior assessments of the original project to the project with the proposed change in duration and cost as described in Section III of this document. The purpose of this comparison is to evaluate whether project changes affect the Trustees' selection of the project under OPA in OO RP2/EA and subsequent implementation compliance review documents.

The OPA evaluation of the AMP Project was described in Section 3.8.4.3 of the OO RP2/EA. Consistency of the implementation phase of the project with the OO RP2/EA OPA evaluation was described in Section 6 of the memo, "Mesophotic and Deep Benthic Communities Restoration Projects: National Environmental Policy Act and Environmental Compliance Review of Implementation Activities (January 2022)" and in Section 3 of the memo, "Mesophotic and Deep Benthic Communities Restoration

Projects: National Environmental Policy Act and Environmental Compliance Review of Implementation Activities 2023-2027 (April 2023)."

The project was selected in OO RP2/EA as a long-range action structured to include a full lifecycle of activities such as initial project design and assessment, tool design, and tool testing through long-term site-specific project implementation. The trustees' analysis in OO RP2/EA found the project has a strong nexus to injuries and would contribute to meeting restoration goals as outlined in the PDARP/PEIS. It was also found to meet the Trustees' goals at reasonable and appropriate costs, have a high likelihood of success, and provide potential benefits to more than one natural resource or service. In addition, the Trustees determined that the project is not expected to have negative impacts to public health and safety and would avoid collateral injury by evaluating environmental consequences of techniques during the project planning and design activities and by identifying BMPs to minimize potential collateral injury. Additionally, the Trustees recognized that the project would increase scientific understanding of restoration, improve the Trustees' ability to target restoration activities and track resource and ecosystem recovery. Subsequent evaluation of project implementation activities in January 2022 and April 2023 found that all project implementation activities remain consistent with the OPA findings in OO RP2/EA and fully meet OPA evaluation standards.

Application of OPA NRDA evaluation standards to project with change

The following summarizes the Trustee's evaluation of the OPA evaluation standards for the project with proposed changes to continue implementation of currently approved activities for an additional 5 years and increase the authorized budget by $12.5 million.

Cost to Carry Out the Alternative

The estimated cost of $12,500,000 to continue implementation of the AMP Project for an additional five years is based on experience gained through current implementation of the project and knowledge by subject matter experts. Project activities would continue to be highly cost efficient, maximizing cross-project infrastructure established to support implementation, including survey and monitoring technological equipment (AUVs, ROVs, landers, sensors) as well as high-traffic venue exhibits and interpretive material acquired during the 2022-2026 implementation phase. The project would continue to maximize cost efficiency through continued staff expertise and established partnerships. Cost estimates are based on an understanding of the best available, most appropriate technologies and equipment for accomplishing the goals of the project. Cost-effectiveness of the project would also be enhanced by continued use of an adaptive management process and progress monitoring.

Trustee Restoration Goals and Objectives

The AMP Project would continue to meet the Trustees' goals to actively manage valuable MDBC to protect against multiple threats and provide a framework for monitoring, education, and outreach. This project would continue to have a strong nexus to the injuries caused by the DWH oil spill and response activities, particularly because it would reduce threats to MDBC at priority areas, provide relevant information for restoration, management, and protection, and improve understanding of MDBC.

Likelihood of Success

The AMP Project has a high likelihood of continuing to successfully reduce threats to MDBC and providing a framework for monitoring, education, and outreach. The project has established successful

technology, techniques, standards, and partnerships to conduct effective and efficient threat reduction, monitoring, education and outreach activities. The likelihood of continued project success would also be enhanced by continuing its adaptive management process and progress monitoring.

Prevents Future Injury and Avoids Collateral Injury

The long-term monitoring and Science to Management focused activities would continue to improve our understanding and inform restoration and management of injured MDBC to prevent continued loss of ecosystem services provided by MDBC. The project would continue to avoid collateral injury by evaluating environmental consequences of techniques and by identifying BMPs to minimize potential collateral injury during mooring buoy installations, marine debris and derelict fishing gear removal, removal of invasive species, and desktop analysis to identify opportunities for future actions to address damage from leaking and abandoned oil and gas infrastructure. Should any potential effects be identified, the OO TIG would ensure proper coordination and protective measures are put in place.

Benefits Multiple Resources

The AMP Project would continue to indirectly benefit multiple resources by reducing threats, enhancing resource management, and increasing awareness and support for the protection of MDBC. Expected benefits for marine organisms associated with these communities would occur by maintaining ecological integrity and increasing ecosystem resilience, resulting in improved populations.

Public Health and Safety

Continued implementation of the AMP Project is not expected to affect public health and safety. Field operations associated with this project would be performed in remote offshore areas by experienced, licensed crews applying rigorous safety plans and SOP. The project would ensure personnel are properly trained, that appropriate equipment and safety standards are employed, and that routine safety inspections are performed. Negative impacts to public health and safety from this project are not likely.

OPA Evaluation Conclusions

The proposed changes to the AMP Project as described in Section III of this document do not change the OPA evaluation described in the OO RP2/EA or in the January 2022 and April 2023 analyses. The additional funding will allow the AMP Project to cost effectively leverage the substantial capacity and partnerships developed to date to conduct additional restoration and reduce threats to MDBC to achieve the Trustees goals using techniques with a high likelihood of success. The project with proposed changes fully meets the OPA evaluation standards and is consistent with the PDARP/PEIS. In addition, the proposed changes described above in Section III do not affect the Trustees' selection of the project under OPA.

V. Determination of Need for Additional NEPA Analysis

NOAA and DOI, as Implementing Trustees, reviewed previous NEPA analyses to compare the environmental impacts of project implementation activities and associated NEPA as previously analyzed to the impacts expected from the proposed changes as described in Section III of this document. The purpose of this comparison is to determine whether the original NEPA analysis in OO RP2/EA and the subsequent analyses captured and analyzed the impacts of continued implementation of approved AMP Project field operational activities. Implementation of 'desktop' activities that have no environmental

impact were analyzed in the PDARP/PEIS (Section 6.4.14) and no additional NEPA analysis is necessary. These include education and outreach activities, desktop analysis to assess risks to MDBC associated with leaking and abandoned oil and gas infrastructure and gathering and sharing information to support efficiency of enforcement activities in managed areas with MDBC.

In OO RP2/EA, the MDBC projects are described as "long-range activities" structured to include a full lifecycle of activities and evaluated from a programmatic perspective. Therefore, the OO TIG committed to review site-specific actions to be conducted by the MDBC projects to affirm their consistency with the NEPA Analysis provided in the OO RP2/EA. The Affected Environment was described in Section 4.3 of the OO RP2/EA. It was further detailed in Section 7 of the Mesophotic and Deep Benthic Communities Restoration projects: National Environmental Policy Act and Environmental Compliance Review of Implementation Activities (January 2022) memo. The January 2022 analysis provides a detailed description of the areas targeted for field operations as well as updated descriptions of additional protected areas within the project area since approval of the OO RP2/EA. The additional project activities that were analyzed in April 2023 do not modify the MDBC areas and habitats described in the Affected Environment section of the January 2022 analysis. The proposed project change to continue implementation of approved project activities does not change the project area previously analyzed in the Affected Environment section of the OO RP2/EA and the subsequent analyses.

The original impacts analysis of AMP Project activities can be found in Section 4.4.6.4 and Table 4-8 of the OO RP2/EA and is incorporated by reference. The impacts from the project were found to include beneficial effects as well as some short and long-term adverse effects. Impacts from the project were described in the OO RP2/EA as having short to long-term, localized minor adverse impacts and long-term benefits to physical resources depending on the management actions and the type of debris removed. The permanent placement of mooring buoys may result in long-term, minor adverse effects to the localized area, however, this is expected to be minimal. Management activities undertaken with sonar operations (e.g., ship-mounted, towed, and AUV-mounted side scan sonars; synthetic aperture sonars; multi-beam echo-sounders) may result in temporary, short-term, minor changes to the acoustic environment. Overall, the effects to physical resources expected from continuing implementation of the AMP Project are expected to fall within the environmental consequences analyzed under the original OO RP2/EA, which were considered both beneficial and short term to long term minor to moderate adverse effects.

Project activities were also described as having short-term and long-term, minor adverse impacts and long-term benefits to marine fauna and protected species as well as long-term benefits to habitats, marine fauna, and protected species. Some field operations may have short-term, minor adverse impacts to protected species such as marine mammals and sea turtles based on the adverse impacts to the noise environment. There may also be long-term benefits through the protection and management of protected species' habitats. The analysis in OO RP2/EA also found that the project would not adversely impact human uses and socioeconomics, but may have long-term, minor adverse impacts to cultural resources. However, mapping and application of best practices during subsea operations would be used, making these impacts unlikely. The Finding of No Significant Impact (FONSI) can be found in Appendix H of the OO RP2/EA. The FONSI concluded that implementation of the OO RP2/EA preferred alternatives, including the AMP Project, would not significantly impact the quality of the human environment.

Project activities were further evaluated in Section 7 of the Mesophotic and Deep Benthic Communities Restoration Projects: National Environmental Policy Act and Environmental Compliance Review of Implementation Activities memo (January 2022) and in Section 4 of the Mesophotic and Deep Benthic

Communities Restoration Projects: National Environmental Policy Act and Environmental Compliance Review of Implementation Activities 2023-2027 memo (April 2023). Through both of these evaluations, the potential environmental effects of the planned field operations, including anticipated methods and geographic locations, were found to be consistent with the environmental review in the OO RP2/EA or with other relevant NOAA NEPA documents that were incorporated by reference for specific field operations not described in detail in OO RP2/EA. The reviews determined that BMPs identified in required permits, consultations, or environmental reviews will be followed to reduce or eliminate potentially adverse environmental impacts including BMPs identified for other similar work and from consultations conducted for that work. For example, vessels will follow the most recent NMFS SERO vessel strike avoidance measures to further reduce the potential of a vessel strike. There are no other likely routes of adverse impacts for these species. The reviews also determined that there were no substantial changes relevant to environmental concerns, and no significant new circumstances or information relevant to environmental concerns not addressed in the OO RP2/EA impact analysis. The extension of previously evaluated project implementation activities and increase in project budget as proposed in this document do not modify the areas and habitats addressed or environmental consequences to those resources as addressed in previous NEPA documentation.

Overall, the effects to physical and biological resources expected from continued implementation of the AMP Project fall within the environmental consequences analyzed under the original OO RP2/EA AMP Project, which were considered both beneficial and short-term, minor adverse effects.

NEPA Analysis Conclusions

The proposed project changes described in Section III of this document do not change the scope of the original AMP Project that was defined and analyzed in the OO RP2/EA or in the January 2022 and April 2023 analyses. No changes would be made to the project implementation activities, conservation measures and best management practices to be implemented. Therefore, prior NEPA determinations in the OO RP2/EA and subsequent analyses are still applicable, and no new impacts are anticipated to result from the proposed project changes. In addition, there are no substantial changes, new information or new circumstances relevant to environmental concerns, that would alter the analysis in the OO RP2/EA.

VI. Determination of Need for Additional Environmental Compliance

Environmental compliance reviews were completed or in progress at the time the "Mesophotic and Deep Benthic Communities Restoration Projects: National Environmental Policy Act and Environmental Compliance Review of Implementation Activities 2023-2027 memo (April 2023)" was finalized. All reviews have since been completed. This project change does not alter the activities previously reviewed, thus additional compliance reviews are not required.

If future compliance reviews include new or updated best management practices or requirements, project field work will follow the most recent requirements. If additional field activities or methodologies are added in the future, the need for additional compliance reviews will be evaluated at that time.

VII. Conclusions

Section 9.5.2 of the TC SOPs provides that the TIG will review proposed material project changes to determine the following factors:

- Whether any change to the project is consistent with the environmental review in OO RP2/EA NEPA analysis, or whether there are substantial changes that are relevant to environmental concerns.
- 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.
- Whether project changes affect their selection under OPA.

Outcome of Evaluation of Project Changes:

- The changes to the AMP Project are consistent with the environmental review in the OO 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 OO TIG evaluated whether project changes affect the selection under OPA and determined they do not.
- The OO TIG evaluated whether the project changes affect the need for additional consultations or reviews for environmental compliance. Based on review of the proposed project changes, completed consultations and reviews remain valid.

Continued implementation of the AMP Project for 5 years and increasing the authorized budget by $12,500,000 do not impact the overall project objectives or environmental consequences. These changes do not affect the selection of this project under OPA and the project is consistent with the NEPA review conducted for the OO RP2/EA. Therefore, 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 of this project with no controversial issues identified. The public will be informed of the changes to the project through the Gulf Spill Restoration website.

Implementation of the Project: Mesophotic and Deep Benthic Communities - Active Management and Protection (Revised July 2026)

Approved by Resolution #OO-2026-014

This Implementation Plan outlines the tasks and activities to be undertaken to implement the Mesophotic and Deep Benthic Communities - Active Management and Protection Project (ID 233, AMP Project) authorized by Resolution #OO-2020-004. It has been revised to reflect project changes approved by Resolution OO-2026-014. The National Oceanic and Atmospheric Administration (NOAA) and Department of the Interior (DOI) are designated as the Implementing Trustees for this Project, which the Open Ocean Trustee Implementation Group (OO 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* (Final RP2/EA). This project will be implemented in a manner consistent with the Final RP2/EA.

A. Project Overview and Roles of Implementation Partners

Despite the depth at which MDBC occur, human activities threaten the health and resiliency of these communities. The AMP Project aims to protect and manage these communities through development of a framework for management and protection, including monitoring, education, outreach, and engagement. AMP Project activities would include education and outreach targeting resource users and the public; engagement of stakeholders and development of socioeconomic analyses to evaluate potential impacts of management or protection actions; and directly addressing threats to MDBC through management activities such as mooring buoy installations, removal of invasive species such as lionfish, documentation and removal of marine debris and derelict fishing gear, and the desk-top assessment of risks to MDBC associated with leaking and abandoned oil and gas infrastructure. The project completed the approved implementation planning stage in 2022. The original 5-year implementation phase began in 2022 and is anticipated to continue through 2026. The project scope includes a final period for analysis, synthesis, and reporting of project results, planned for 2027-2028.

In 2025, the AMP Project completed its fifth year of the seven-to-eight-year original duration. NOAA and DOI requested a project change to continue the activities performed under the project beyond 2026. Based on their review of the project change analysis document, the OO TIG determined that the requested extension of time and increased budget will continue to meet MDBC restoration goals and efficiently transition to additional future restoration at a scale commensurate with the DWH injury. Therefore, through Resolution OO-2026-014, the OO TIG approved a project extension of 5 years, for a total estimated duration of 11 years. The project budget was also increased by $12.5 million from $20,689,000 to $33,189,000 to continue implementation of previously approved activities which are described below and in the project change analysis document, "Evaluation of Changes to the Project Mesophotic and Deep Benthic Communities - Active Management and Protection Project (ID 233)."

B. Project Tasks and Activities

The project consists of the following tasks, which may be implemented concurrently. Dates provided below are estimated and subject to change as project activities are adaptively managed.

Task 1: Implementation Planning Phase (Completed)

This task was completed in 2022. Project managers assessed available information in cooperation with the other MDBC projects to evaluate priority areas and coordinate outreach and education activities. The project adopted the portfolio data management framework and incorporated data infrastructure and management standards, coordinated with existing data repositories, and identified final data and analysis products. Project managers also established communication, education and outreach protocols. Project managers provided stakeholder engagement, developed an adaptive management plan with milestones for technical and strategic evaluations to assess progress towards project objectives and overall restoration outcomes, and completed implementation work plans, budgets, environmental compliance, and reporting of project results.

Timeline: This activity was undertaken in 2020-2022.

Roles: NOAA led this activity with support from DOI.

Products or Deliverables: Five-year Implementation Plan and environmental compliance analysis as well as planning phase reports and products were completed and publicly shared through the project DWH annual reports.

Task 2: Project Management and Administration

The purposes of this ongoing 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, NOAA and DOI
- Engage stakeholders and coordinate field and lab efforts through annual workshops
- Compile monitoring information and ensure MAM reports are completed

Further, NOAA and DOI will ensure that all elements are sequenced and implemented in accordance with the OO RP2/EA and TC SOPs including implementation of the project's Monitoring and Adaptive Management Plan. The AMP Project would continue ongoing activities to compile data, update gap analysis and spatial summaries for threats to MDBC, coordinate across work elements, monitor and evaluate project outcomes, engage stakeholders, and manage data. Activities would be broadly divided into work directly tied to the planning, acquisition, and processing cycle, and continuations of work started in the planning phase of the project to accrete data and perform gap analysis. The AMP project would also contribute to cross-project long-term monitoring planning and implementation. This monitoring effort would collect data to inform the outcome of threat reduction activities such as marine debris removal or mooring installation and would create a valuable dataset for natural resource managers to reference in decision-making processes.

Timeline: 2020-2031

Roles: NOAA will lead this activity with support from DOI.

Products or Deliverables: DIVER reports, annual implementation updates to the OO TIG, annual project workshops.

Task 3: Outreach, Education, Communication, and Science to Management

This activity will develop partnerships with education venues to create and display educational exhibits and associated programs about MDBC; develop and disseminate content for K-12 education programs, social media, and traditional media sources; collaborate with researchers to interpret science and produce educational materials; and assess education and outreach outcomes with behavioral and attitudinal surveying techniques.

During the extended duration, the AMP Project will continue education and outreach activities to support the distribution of educational resources, the maintenance of MDBC-related web pages, and the development of multimedia products (web stories, videos, photo collections, story maps, social media posts, etc.) to communicate portfolio-wide activities across various channels run by project partners and external media outlets. Project team members would also continue to support exhibit development and interpretation of existing exhibits, and evaluation of education and outreach activities specific to MDBC work, expanding the reach of educational resources and activities. Cruise communications plans and staffing would facilitate content collection and development of communications products translating fieldwork to broad audiences. K-12 resources identified by the current project, and resources developed through National Marine Sanctuary Foundation partnerships would continue to be developed, evaluated, distributed, and compiled into a K-12 resource guide that can be leveraged extensively in future years and as the MDBC projects accomplish further objectives.

The AMP Project will also continue to provide communication and data products to deliver MDBC science to natural resource managers. Science to management efforts include providing results of field data collections and analyses to entities with resource management responsibilities. AMP project managers established points of contact with management entities with resource management interests in the MDBC Area of Interest (AOI). The extended AMP project would continue regular engagements with these contacts for the duration of MDBC restoration implementation. Project managers would also expand engagement efforts to nonprofit organizations that participate in management processes and relevant NOAA offices. Continued science-to-management applications would be fostered by the implementation of a long-term monitoring program that would be supported by all of the MDBC projects, a continued focus on socio-economic analyses of potential management and protection actions, and by evaluations of the extent of priority MDBC within managed area boundaries.

Timeline: 2022-2031

Roles: NOAA will lead this activity with support from DOI.

Partners: National Marine Sanctuary Foundation

Products or Deliverables: Educational resources (lesson plans, exhibits, web stories, etc.), data resulting from evaluation of education and outreach efforts, data packages compiled from across projects and

shared with resource managers, evaluation of utility of MDBC data for resource management decision-making.

Task 4: Threat reduction

This activity will provide resource management and protection by directly addressing threats through the following activities:

- Prevent damage from boat anchoring through mooring buoy installation & maintenance
- Improve understanding of visitor uses and reduce user conflict through evaluation and development of vessel registration and/or fishing endorsement programs
- Use desktop analysis to assess risks associated with contaminant releases or physical impacts from abandoned or leaking oil and gas infrastructure
- Prevent damage by removing marine debris and derelict fishing gear
- Support stable MDBCs by removing invasive lionfish and other invasive species
- Improve management through enhanced resource protection capacity

These field and desk-top activities to reduce threats to MDBC would continue during the project extension. The extended AMP project would also identify additional opportunities to gather and share information to support efficiency of enforcement activities in managed areas with MDBCs, support long-term monitoring, and conduct visitor use studies to better understand threats to MDBC habitats. It would continually add information about newly identified threats to a project database throughout the duration of the project, which would serve as the primary resource to produce site assessment and prioritization reports and directly inform field work planning for subsequent years. These activities would be planned in high-priority areas where the respective threats to MDBC habitats are documented. Mission and mobilization plans with project sequencing and a logistics strategy would be developed with the intent to implement fieldwork in a manner designed to minimize environmental consequences and apply Best Management Practices (BMPs) to minimize impacts during activities.

Timeline: 2024-2031

Roles: NOAA will lead this activity.

Products or Deliverables: Data, reports, manuscripts, and other products sharing results of threat reduction activities

Task 5: Restoration monitoring and adaptive management

As part of the OO RP2/EA (Appendix A), the OO TIG developed a Monitoring and Adaptive Management Plan (MAM Plan) for this project. The MAM Plan will continue to be implemented in accordance with Section 3.2 of the OO RP2/EA. Monitoring of restoration activities will follow the MAM Plan in cooperation with project partners and will be updated as needed based on implementation activities.

Project management would support adaptive management reviews, stakeholder engagement, coordinate annual implementation activities through ongoing gap analysis, support long-term planning to direct AMP

Project implementation and reporting for the duration of the project life, and support integration with the rest of the MDBC portfolio.

Timeline: 2020-2031

Leads: NOAA and DOI

Products or Deliverables: Revisions of MAM Plan as needed, annual DIVER monitoring report, final MAM report

Task 6: Project Wrap-up and Closeout

The purpose of this task is to complete the closeout reporting and processes described in both the OO 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 and DOI will lead this wrap-up and close-out reporting, incorporating, as appropriate, material from final reports from partners.

Timeline: 2030-2031

Leads: NOAA and DOI

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

Budget components, estimated dollar values, and expected timelines are provided in the table below. Budget estimates have been revised to reflect the additional $12.5 million authorized by the OO TIG as a $12,115,000 increase in the NOAA budget and a $385,000 increase in the DOI budget for project management and administration, implementation and monitoring and adaptive management, and contingency. Amounts and dates provided below are estimated and subject to change as project activities are adaptively managed. The Implementing Trustee may expend funds for their documented costs related to management, planning, implementation, monitoring, and adaptive management of the Project in accordance with requirements set in the approving OO TIG resolution OO-2026-014. 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	DOI Budget	Expected Timeline
Implementation Planning	$1,178,314	$1,018,314	$160,000	2020-2022
Implementation: Project Management and Administration	$6,416,412	$6,122,668	$293,744	2020-2031

Cost Category	Estimated Budget	NOAA Budget	DOI Budget	Expected Timeline
Implementation: Execution and Monitoring and Adaptive Management	$22,579,384	$22,407,679	$171,705	2022-2031
Contingency	$3,014,890	$2,949,339	$65,551	2020-2031
Total Budget	$33,189,000	$32,498,000	$691,000	2020-2031

D. Project Implementation Guidelines

This project will be implemented in a manner consistent with the OO RP2/EA, Resolution OO-2026-014, 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 Trustees shall track the progress of implementation and monitoring according to the TC SOPs and provide the OO TIG with status updates annually or as requested.

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

The Implementing Trustees 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-2026-014, and in the TC SOPs.