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-2026-015

Open Ocean Trustee Implementation Group Resolution to Approve Changes to the Project, Project Implementation Plan, and Authorized Budget for Mesophotic and Deep Benthic Communities - Mapping, Ground-truthing, and Predictive Habitat Modeling Project (ID 234)

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 - Mapping, Ground-truthing, and Predictive Habitat Modeling Project (ID 234) (MGM 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 $35,909,000. 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-2020-005 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 $35,909,000 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-2020-005	$35,909,000	$35,083,466	$1,008,314	$825,534	$0
OO-2020-012	$35,909,000	$35,083,466	$0	$825,534	$172,000
OO-2021-016	$35,909,000	$35,083,466	$1,000,000	$825,534	$0
OO-2022-001	$35,909,000	$35,083,466	$13,624,766	$825,534	$653,534
OO-2023-002	$35,909,000	$35,083,466	$4,805,023	$825,534	$0
OO-2023-009	$35,909,000	$34,425,412	$0	$1,483,588	$0
OO-2023-014	$35,909,000	$34,425,412	$13,987,309	$1,483,588	$658,054
Funding Total	**$35,909,000**	**$34,425,412**	**$34,425,412**	**$1,483,588**	**$1,483,588**

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 - Mapping, Ground-truthing, and Predictive Habitat Modeling Project (ID 234) (August 2026)," which is attached to this

[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.

Resolution. The changes requested are to extend the project duration by five years and increase the authorized budget by $10,000,000. 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 MGM Project to leverage the substantial capacity and partnerships developed to date to conduct additional restoration by documenting MDBC abundance and distribution, extent, species composition, and habitat characteristics 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 - Mapping, Ground-truthing, and Predictive Habitat Modeling Project (ID 234) (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 - Mapping, Ground-truthing, and Predictive Habitat Modeling Project (ID 234)	$34,425,412	$9,325,000	$43,750,412

Restoration Type	Implementing Trustee	Project Name (ID)	Previous Authorized Budget	Total Budget Change	New Authorized Budget
MDBC	DOI	MDBC - Mapping, Ground-truthing, and Predictive Habitat Modeling Project (ID 234)	$1,483,588	$675,000	$2,158,588
		Total	$35,909,000	$10,000,000	$45,909,000

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 $10,000,000 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 - Mapping, Ground-truthing, and Predictive Habitat Modeling Project (ID 234)	$9,325,000
MDBC	DOI	MDBC - Mapping, Ground-truthing, and Predictive Habitat Modeling Project (ID 234)	$675,000
		Total	$10,000,000

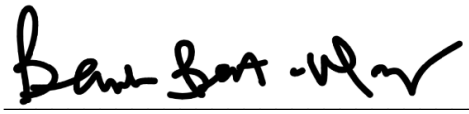
13. It is resolved that after a review of this Resolution and the attached project change analysis document, the duly authorized officials for the OO TIG approve the following: 1) the changes to the Mesophotic and Deep Benthic Communities: Mapping, Ground-truthing, and Predictive Habitat Modeling project (ID 234) 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
Principal Representative, National Oceanic and Atmospheric Administration

MARY JOSIE BLANCHARD
Principal Representative, Department of the Interior

DORIS G. WASHINGTON
Alternate to Principal Representative, U.S. Department of Agriculture



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 - Mapping, Ground-truthing, and Predictive Habitat Modeling (ID 234)
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) - Mapping, Ground-truthing, and Predictive Habitat Modeling Project (ID 234) (MGM 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 the MGM Project, the Active Management and Protection (AMP) Project (ID 233), and the Coral Propagation Technique Development Project (ID 235), with budget increases of $10 million, $12.5 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 MGM Project and evaluates a $10 million increase in authorized budget to continue implementation for 5 years.

II. Project Background

The goal of the MGM Project is to document the abundance and distribution of MDBC; to gain a better understanding of their extent, species composition, and habitat characteristics; and to inform future restoration planning. 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 MGM 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 MGM Project's authorized budget was $35,909,000. The full project description can be found in OO RP2/EA Section 3.8.1. 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 MGM Project, which began work in 2020.

In 2026-27, the MGM Project will complete currently approved implementation and reporting activities. Since commencing work in 2020, the MGM Project has considerably advanced understanding of the abundance and distribution of MDBC habitats across the continental shelf and slope from Texas to Florida. Nevertheless, key knowledge gaps remain related to the abundance and distribution of MDBC habitats throughout the MDBC Area of Interest (AOI). These gaps continue to present challenges to decision-making for restoration and evaluation. Data collected by the MGM Project addresses these gaps to prioritize and support MDBC protection and management activities and to identify locations for direct restoration and monitoring activities. In addition, the extent and resolution of data generated by the MGM project to date have been greater in mesophotic depths (<300m) than in deep benthic habitats (>300m), and key dedicated surveying equipment are only becoming available for long-term use near the end of the implementation phase of the current restoration projects. Therefore, surveys at restoration and reference sites continue to be a critical need to inform adaptive management and long-term evaluation of success. Additional priority needs include more of the micro-scale habitat mapping and characterization critical to informing direct restoration activities, monitoring, and supporting "science to management" applications. The validation of current habitat prediction models and development of moderate resolution models in newly mapped areas also continue to be an important tool for continued MDBC restoration.

The OO Trustees reviewed progress made by the MGM Project and determined that it is successfully advancing the Trustees' MDBC restoration goals by providing fundamental information about the abundance and distribution of MDBC to support their protection and management and target locations for active restoration activities such as substrate placement and coral propagation. Committing additional MDBC restoration funds to continue implementation of the MGM Project beyond its current duration would constitute an effective and efficient strategy to meet MDBC restoration goals, specifically to improve understanding of MDBC to inform better management and ensure resiliency.

Previous Analysis of Project Scope

The abundance and distribution of MDBC across the Gulf of America (formerly Gulf of Mexico) are not completely known, particularly in deeper waters, presenting a challenge to decision-making for restoration, management, and protection and to evaluations of DWH injuries and recovery. The MGM Project, along with the other MDBC projects, was approved as a long-term project with phased

compliance. The project's activities as described in OO RP2/EA Section 2.6.4.1 and Section 3.8.1.2 are summarized as follows: conduct high-resolution mapping efforts in both mesophotic and deep benthic habitats and use this information to refine predictive models to improve the effectiveness and cost efficiency of future restoration and mapping efforts; and analyze the abundance and distribution of these communities, as well as provide species-specific data on depth ranges, densities, and distributions of specific coral species. The data collected in this project would provide fundamental information to prioritize and support MDBC protection and management activities and to identify potential locations for direct restoration activities. This project would be adaptively managed throughout 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. MGM field operations take place in the MDBC Area of Interest (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.

As described in the January 2022 NEPA and environmental compliance review, MGM field operations (OO RP2/EA Section 3.8.1.1) include moderate-resolution (2-16 meter) ship-based exploratory mapping using multi-beam echosounders, underway conductivity, temperature, and depth (CTD) probes, Remotely Operated Vehicle (ROV)-based ground-truthing, high resolution (<2 meter) mapping over potential dive targets using ship- and Autonomous Underwater Vehicle (AUV)-based sensors, and ground-truthing previously mapped sites. AUV operations would include multibeam echosounder or sonar surveys from vehicles flown at low altitude above the seafloor, as well as laser line scanning and photo imaging of the seabed for ground-truthing, photomosaic assemblage, and photogrammetry. Ship-based multi-beam operations would be performed with instruments including the Kongsberg EM2040 (hydrographic surveying in mesophotic depths of 50-300m), Kongsberg EM710 (hydrographic surveying in depths of 300-2000m), Kongsberg ME70 and Kongsberg Simrad EK80 (fish and deep scattering layer characterization, and coarse resolution hydrographic surveying in deep water), and Knudsen CHIRP 3260 (sub-bottom profiling in mesophotic depths).

III. Description of Project Changes

The proposed project change is a 5-year extension to continue implementation of approved activities within the MDBC AOI and an associated increase of $10,000,000 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 by

documenting MDBC abundance and distribution, extent, species composition, and habitat characteristics. The additional funds would be distributed between co-implementing trustees as follows: NOAA: $9,325,000 and DOI: $675,000. This would result in an increase in authorized budget from $35,909,000 to $45,909,000. No change to the geographic areas or methodologies or 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 MGM Project and for the co-implementing trustees.

Trustee	Current Authorized Budget (OO-2023-009)	Requested Increase in Authorized Budget	Updated Total Authorized Budget
NOAA	$34,425,412	$9,325,000	$43,750,412
DOI	$1,483,588	$675,000	$2,158,588
Total Budget	$35,909,000	$10,000,000	$45,909,000

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 changes 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 MGM Project was described in Section 3.8.1.3 of the OO RP2/EA. Consistency 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 MGM 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 $10 million.

Cost to Carry Out the Alternative

The estimated cost of $10,000,000 to continue implementation of MGM Project activities for an additional five years is based on experience gained through current implementation of the project and knowledge by subject matter experts. Continuing the activities performed under the MGM Project would be highly cost efficient, maximizing cross-project infrastructure established to support implementation, including survey and monitoring technological equipment (AUVs, ROVs, landers, sensors) acquired during the 2022-2026 implementation phase. Use of uncrewed systems to conduct work associated with this project increases the efficiency and coverage area of each cruise, helping to reduce overall costs associated with data collection. 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 MGM Project would continue to meet the Trustees' goals to improve the understanding of MDBC to inform management and ensure resiliency by providing fundamental information about the abundance and distribution of MDBC to support their protection and management, and to target and monitor locations for active restoration activities such as substrate placement, coral propagation, or threat reduction. The project would continue to fill remaining information gaps, especially for deeper areas, perform more of the micro-scale habitat mapping and characterizations critical to informing and monitoring direct restoration activities and "science to management" applications; develop updated habitat prediction models in areas newly mapped, and validate models developed by the current project. The MGM Project would continue to have a strong nexus to injuries caused by the DWH oil spill, specifically it would provide relevant information for the restoration, management, monitoring and protection of MDBC that were impacted by the DWH oil spill. The MGM Project would continue to be consistent with OO TIG goals and contribute to the MDBC Restoration Type-specific goals outlined in the PDARP/PEIS.

Likelihood of Success

The MGM Project has a high likelihood of continuing to successfully map MDBC and improve the understanding of these communities. The project would continue the use of best available science, proven techniques and established methods, including data and best practices established by the current project. Implementation during the extension would continue ground-truthing existing predictive habitat models and producing refined models that have a high likelihood of providing the information needed to identify

priority areas for mapping and ground-truthing and for restoration. 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 MGM Project would continue to provide high resolution data on injured and reference MDBC and would continue monitoring restoration and recovery. These activities would improve our understanding of the long-term recovery of injured habitat and inform management and restoration activities to prevent continued loss of the ecosystem services provided by MDBC. The MGM Project would continue to avoid collateral injury by evaluating environmental consequences of techniques and applying BMPs to minimize potential collateral injury developed by the current project. Should any potential effects be identified, the OO TIG would ensure proper coordination and that protective measures are put in place.

Benefits Multiple Resources

This project would continue to indirectly benefit multiple resources by providing a better understanding of MDBC which would lead to improved concurrent and future direct restoration and management to reduce threats. 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 MGM 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 MGM 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 MGM Project to cost effectively leverage the substantial capacity and partnerships developed to date to achieve the Trustees' goals by providing fundamental information about the abundance and distribution of MDBC to support their protection and management, and to target and monitor locations for active restoration activities such as substrate placement, coral propagation, or threat reduction. 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 MGM Project activities.

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 as previously analyzed in the Affected Environment section of the OO RP2/EA and the subsequent analyses.

The original impacts analysis of MGM Project activities can be found in Section 4.4.6.1 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-term, localized, and minor adverse impacts to physical resources. The mapping and ground-truthing activities that would be undertaken through this project would include sonar operations (e.g., ship-mounted, towed, and AUV-mounted side scan sonars; synthetic aperture sonars; multi-beam echo-sounders) that may result in short-term, minor adverse impacts to the acoustic environment in the areas that would be mapped.

Project activities were also described as having short-term, minor adverse impacts to marine fauna and protected species as well as long-term benefits to habitats, marine fauna, and protected species. Some ship-based and subsurface project activities 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. 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 MGM 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 would 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 would follow the NMFS SERO vessel strike

avoidance measures (2021) to further reduce the potential of a vessel strike. There are no other likely routes of adverse impacts for these species. Landers or other equipment deployed do not have lines to the surface so there is no likelihood of entanglement. 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 biological resources expected from continuing implementation of the MGM Project fall within the environmental consequences analyzed under the original OO RP2/EA project, which were considered both beneficial and short-term, minor adverse effects.

NEPA Analysis Conclusions

The proposed project changes to the duration and the authorized budget of the MGM Project described in Section III of this document do not change the scope of the original 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. Section VI below reviews the project's environmental compliance status and finds that no additional compliance is necessary because project activities would not change in any substantive way that would require additional compliance. 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 includes additional time and funding but 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 MGM 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.

Continuing implementation of the MGM Project for 5 years and increasing the authorized budget by $10,000,000 do not impact the overall project objectives or environmental consequences. These changes do not affect the selection of this project under the OPA, and the project is consistent with the NEPA review conducted in 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 - Mapping, Ground-Truthing, and Predictive Habitat Modeling (Revised August 2026)

Approved by Resolution #OO-2026-015

This Implementation Plan outlines the tasks and activities to be undertaken to implement the Mesophotic and Deep Benthic Communities - Mapping, Ground-Truthing, and Predictive Habitat Modeling Project (ID 234, MGM Project) authorized by Resolution #OO-2020-005. A second revision was made in November 2021 to clarify project tasks and budgets, which were approved by Resolution OO-2021-006. This current revision reflects changes to the project tasks and budget which were approved by Resolution OO-2026-015. 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

The abundance and distribution of Mesophotic and Deep Benthic Communities (MDBC) across the Gulf of America are not completely known, particularly in deeper waters, presenting a challenge to decision-making for restoration, management, and protection, and to evaluations of Deepwater Horizon injuries and recovery. This project will conduct high-resolution mapping efforts in both mesophotic and deep benthic habitats and use this information to refine predictive models to improve the effectiveness and cost efficiency of future restoration and mapping efforts. This project will also analyze the abundance and distribution of these communities, as well as provide species-specific data on depth ranges, densities, and distributions of specific coral species. The data collected in this project will provide fundamental information to prioritize and support MDBC protection and management activities and to identify potential locations for direct restoration activities. 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 Project completed its fifth year of the seven-to-eight-year original project 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 is needed to continue critical activities and to efficiently transition future restoration actions to implementation at a scale commensurate with the DWH injury. Therefore, through Resolution OO-2026-015, 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 $10 million from $35,909,000 to $45,909,000 to continue implementation of approved activities described below and in the project change analysis document, “Evaluation of Changes to the Project Mesophotic and Deep Benthic Communities - Mapping, Ground-Truthing, and Predictive Habitat Modeling Project (ID 234).”

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 established data infrastructure and management standards, coordinated with existing data repositories, and identified final data and analysis products. Project managers also established data collection protocols and sampling designs and assessed mapping data and habitat models to prioritize mapping sites. 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 OO 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.

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: Implementation- Field Data Collection and Analysis

The MGM Project will continue activities to meet the following project objectives:

1. Map (e.g., high-resolution surveying, backscatter interpretation, and photomosaic assemblage) and ground-truth (i.e., visually and including sample collections) MDBC at sufficiently high-resolution for habitat characterization, and
2. Refine predictive models to improve the effectiveness and cost efficiency of restoration and mapping efforts.

Data collected in the extended MGM project will continue to provide fundamental information to prioritize and support MDBC protection and management activities and to identify potential locations for direct restoration and monitoring activities. During the extended implementation period, the MGM Project will conduct surveys at restoration and reference sites, in cooperation with the other MDBC projects, at sufficient spatial scales and frequency to inform adaptive management and long-term evaluation of success. Data collection and surveys will be conducted across the MDBC Area of Interest using the full suite of available technologies previously evaluated for the project in the OO RP2/EA and the subsequent 2022 and 2023 NEPA evaluations. Mission and mobilization plans with project sequencing and a logistics strategy will be developed with the intent to implement field work in a manner designed to minimize environmental consequences and apply BMPs to minimize impacts during activities.

Task 4: 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.

Timeline: 2020-2031

Leads: NOAA and DOI

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

Task 5: 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 $10 million authorized by the OO TIG as a $9,325,000 increase in the NOAA budget and a $675,000 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-2026-015. 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 Phase (Completed)	$2,178,314	$2,008,314	$170,000	2020-2022
Implementation Phase Project Management and Administration	$4,708,294	$3,452,808	$1,255,486	2020-2031
Implementation/Execution	$34,891,625	$34,233,571	$658,054	2020-2031
Contingency	$4,130,767	$4,055,719	$75,048	2020-2031
Total Budget	$45,909,000	$43,750,412	$2,158,588	2020-2031

D. Project Implementation Guidelines

This project will be implemented in a manner consistent with the OO RP2/EA, Resolution OO-2026-015, 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-2026-015, and in the TC SOPs.