United States Department of the Interior

FISH AND WILDLIFE SERVICE
Deepwater Horizon Gulf Restoration Office
341 Greeno Road North, Suite A
Fairhope, Alabama 36532

In Reply Refer To:
FWS/R4/DH NRDAR

Memorandum

September 29, 2022

To: Memorandum to File

From: Michael Barron, Deepwater Horizon Gulf Restoration Office

Subject: Marine Mammal Protection Act Compliance Determination for Open Ocean Trustee Implementation Group's Project: Broad-Scale Vessel Surveys for Abundance and Distribution of Marine Mammals and Seabirds

Based on our review of the Biological Evaluation provided for Open Ocean Trustee Implementation Group's Project: Broad-Scale Vessel Surveys for Abundance and Distribution of Marine Mammals and Seabirds, the Marine Mammal Protection Act (MMPA) of 1972, as amended (16 U.S.C. 1461 et seq.), a compliance determination of May Affect, Not Likely to Adversely Affect has been made and the appropriate avoidance measures will be implemented. We received concurrence from the Mississippi Field Office on September 28, 2022.

Should the project be modified in a way that could adversely impact species or habitats, this determination will be reevaluated as appropriate.

If you have questions or concerns regarding this action, please contact Michael Barron, Fish and Wildlife Biologist, at 251-421-7030 or michael_barron@fws.gov.

Biological Evaluation Form

Deepwater Horizon Oil Spill Restoration

U.S. Fish and Wildlife Service & National Marine Fisheries Service

This form will be filled out by the Implementing Trustee and used by the regulatory agencies. The form will provide information to initiate informal Section 7 consultations under the Endangered Species Act (ESA) and may be used to document a No Effect determination or to initiate pre-consultation technical assistance.

It is recommended that this form also be completed to inform and evaluate additional needs for compliance with the following authorities: Migratory Bird Treaty Act (MBTA), Marine Mammal Protection Act (MMPA), Coastal Barrier
Resources Act (CBRA), Bald and Golden Eagle Protection Act (BGEPA) and Section 106 of the National Historic Preservation Act (NHPA).

Further information may be required beyond what is captured on this form. Note: if you need additional space for writing, please attach pages as needed.

For assistance, please contact the
compliance liaisons USFWS: Michael
Barron at michael_barron@fws.gov
NMFS: Christy Fellas at christina.fellas@noaa.gov

A. Project Identification

Federal Action Agency(one or more):USFWS ☒ NOAA ☒ EPA ☐ USDA ☐

Implementing Trustee(s): National Oceanic and Atmospheric Administration (NOAA)

Contact Name: Julia Goss Phone: 000-000-0000 Email: Julia.goss@noaa.gov

Project Name: BROAD-SCALE VESSEL SURVEYS FOR ABUNDANCE AND DISTRIBUTION OF MARINE MAMMALS AND SEABIRDS

DIVER ID# Click to enter text TIG: Open Ocean TIG Restoration Plan # MAIP

B. Project Phase

Please choose the box which best describes the project status, as proposed in this BE form, check ALL that apply:

Construction/Implementation ☒ Planning/Conceptual ☐ Engineering & Design ☐

If “Engineering & Design” was selected, please describe the level of design that has been completed and is available for review:

Click here to enter text.

C. Project Location

I. State and County/Parish of action area

The project will take place in U.S. Federal waters from South Texas to Southwest Florida.

II. Latitude/Longitude for action area (Decimal degrees and datum [e.g., 27.71622°N, 80.25174°W NAD83)

[online conversion: https://www.fcc.gov/encyclopedia/degrees-minutes-seconds-tofrom-decimal-degrees]

Click here to enter text.

III. Maps and Drawings

Please insert any maps, aerial photographs, or design drawings here or attach to the end of this BE form.

Examples of such supporting documentation include, but are not limited to:

Plan view of design drawings Aerial images of project action area and surrounding area, showing state or regional scale Map of project area with elements proposed (polygons showing proposed construction elements) Map of action area with critical habitat units or sensitive habitats overlayed

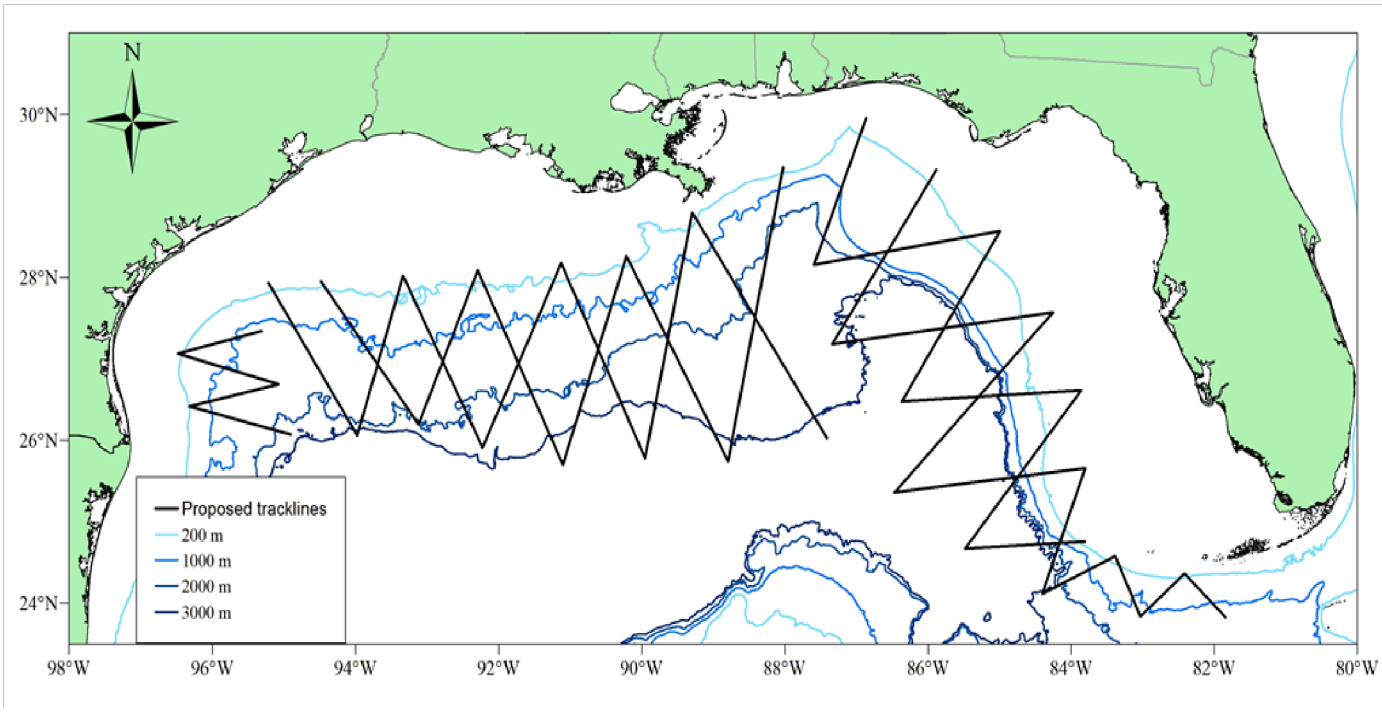

Figure 1. Planned track lines for vessel surveys consistent with those used during the GoMMAPPS surveys. Track lines go from deeper waters (3000 m or more) to 100 meters at the shallowest. These

surveys will not take place within state waters.

D. Existing Compliance Documentation

NEPA Documents

Are there any **existing** draft or final NEPA analyses (not PDARP/PEIS) that cover all or part of this project?

YES☒ NO☐

Examples:
-TIG Restoration Plan/EA or EIS (draft or final)
-USACE programmatic NEPA analysis
-USACE Clean Water Act individual permit for the project
-NEPA analysis provided by a federal agency that gave approval, funding or authorization

Permits

Have any federal permits been obtained for this project, if so which ones and what is the permit number(s)?

YES☒ NO☐ Permit Number and Type: Permit to Take Protected Species for Scientific Purposes (No. 21938-03)

Have any federal permits been applied for but not yet obtained, if so which ones and what is the permit number(s)?

YES☐ NO☒ Permit Number and Type: Click or tap here to enter text.

If yes to any question above, please provide details in the text box (i.e. link to the NEPA document, or name of the document, year, lead federal agency, POC, copy of the permit or permit application, etc.). This is needed to check for consistency of the project scope across different sources and to facilitate the NEPA analysis. If you do not have a link, email the documents to the TIG representative for the Trustee designated as lead federal agency for the restoration plan.

NMFS. 2019. Mammal Research Activities MMPA and ESA Permit (#21938) issued by NMFS Office of Protected Resources to NMFS Southeast Fisheries Science Center, May 21, 2019.

NEPA analysis is being conducted in the MAIP (currently under development for this project).

Any documentation or information provided will be very helpful in moving your project forward.

Name of Person Completing this Form: Julia Goss Name of Project

Lead: Jenny Litz
Date Form Completed: 02/01/2022
Date Form Updated: 04/15/2022

E. Description of Action Area

Provide a description of the existing environment (e.g., topography, vegetation type, soil type, substrate type, water quality, water depth, tidal/riverine/estuarine, hydrology and drainage patterns, current flow and direction), and land uses (e.g., public, residential, commercial, industrial, agricultural). Describe all areas that may be directly or indirectly affected by the action. If critical habitat (CH) is not designated in the area, then describe any suitable habitat in the area.

a. Waterbody & Wetlands

If applicable. Name the body of water, including wetlands (freshwater or estuarine), on which the project is located. If applicable, please describe water quality, depth, hydrology, current flow, and direction of flow.

See Figure 1 above. The work will take place in offshore areas in the Gulf of Mexico

Does the project area include a river or estuary?

YES☐ NO☒

If yes, please approximate the navigable distance from the project location to the marine environment. Click or tap here to enter text.

b. Existing Structures

If applicable. Describe the current and historical structures found in the action area (e.g., buildings, parking lots, docks, seawalls, groynes, jetties, marina). If known, please provide the years of construction.

N/A

c. Seagrasses & Other Marine Vegetation

If applicable. Describe seagrasses found in action area. If a benthic survey was done, provide the date it was completed and a copy of the report. Estimate the species area of coverage and density. Attach a separate map showing the location of the seagrasses in the action area.

N/A

d. Mangroves

If applicable. Describe the mangroves found in action area. Indicate the species found (red, black, white), the species area of coverage in square footage and linear footage along project shoreline. Attach a separate map showing the location of the mangroves in the action area.

N/A

e. Corals

If applicable. Describe the corals found in action area. If a benthic survey was done, provide the date it was completed and a copy of the report. Estimate the species area of coverage and density. Attach a separate map showing the location of the corals in the action area. Click here to enter text.

N/A

f. Uplands

If applicable. Describe the current terrestrial habitat in which the project is located (e.g. pasture, forest, meadows, beach and dune habitats, etc.).

N/A

g. Soils and Sediments

If applicable. Indicate topography, soil type, substrate type.

N/A

h. Land Use

If applicable. Indicate existing or previous land use activities (agriculture, dredge disposal, etc).

N/A

Click here to enter text.

i. Marine Mammals

Please select the following marine mammals that could be present within the project area:

Dolphins YES☒ NO☐
Whales YES☒ NO☐
Manatees YES☒ NO☐

If applicable. Indicate and describe the species found in the action area. Use NMFS' Stock Assessment Reports (SARs) for more information, see http://www.nmfs.noaa.gov/pr/sars/region.htm

Marine mammals recorded in NMFS stock assessment report for this action area in the GOM include: Rice's whale (Balaenoptera ricei), sperm whale (Physeter microcephalus), Cuviers beaked whale (Ziphius cavirostris), Blainville's beaked whale (Mesoplodon densirostris), Gervais' beaked whale (Mesoplodon europaeus), common bottlenose dolphin (Tursiops truncatus truncatus), Atlantic spotted dolphin (Stenella frontalis), pantropical spotted dolphin (Stenella attenuate), striped dolphin (Stenella coeruleoalba), spinner dolphin (Stenella longirostris), rough-toothed dolphin (Steno bredanensis), Clymene dolphin (Stenella clymene), Fraser's dolphin (Lagenodelphis

hosei), killer whale (Orcinus orca), false killer whale (Pseudorca crassidens), pygmy killer whale (Feresa attenuata), dwarf sperm whale
(Kogia sima), pygmy sperm whale (Kogia breviceps), Melon-headed whale (Peponocephala electra), Risso's dolphin (Grampus griseus), and short-finned pilot whale (Globicephala macrorhynchus).

F. Project Description

I. *Describe the Proposed Action/Project Objectives: What are you trying to accomplish and how with this project? Describe in detail the construction equipment and methods** needed; long term vs. short term impacts; duration of short term impacts; dust, erosion, and sedimentation controls; restoration areas; if the project is growth-inducing or facilitates growth; whether the project is part of a larger project or plan; and what permits will need to be obtained.*

Attach a separate map showing project footprint, avoidance areas, construction accesses, staging/laydown areas.

***If construction involves overwater structures, pilings and sheetpiles, boat slips, boat ramps, shoreline armoring, dredging, blasting, artificial reefs or fishery activities, list the method here, but complete the next section(s) in detail.*

This project will not involve construction.

Recent analyses of the Gulf of Mexico Marine Assessment Program for Protected Species (GoMMAPPS) vessel survey data show significant declines in the abundance of offshore dolphins (specifically, pantropical spotted dolphins) between 20032004 and 2017-2018 and shifts in the spatial distribution of endangered sperm whales. These results are difficult to interpret without additional data to evaluate potential trends versus interannual variability. There is a need to understand how consistent these trends are to confirm if the populations are declining further and whether there is a multispecies decline. The project will also support adaptive management of current restoration projects, potentially informing selection of project sites and/or changes to the monitoring plans.

More specifically, the project will provide updated population information for marine mammals in the GOM by:

- Conducting a dual-team visual line transect survey to estimate the abundance and spatial distribution of cetacean stocks in U.S. Gulf of Mexico waters
- Conducting passive acoustic surveys simultaneous with visual surveys to provide supplemental information on cetacean abundance and spatial distribution
- Periodically collecting oceanographic and environmental data utilizing scientific echosounders (EK60) to quantify acoustic backscatter from small fish and zooplankton
- Collecting vertical profiles of hydrographic parameters (e.g., temperature, salinity, oxygen concentration) using conductivity, temperature and depth (CTD) and Expendable BathyThermograph (XBT) probes
- Opportunistically collect remote biopsy samples of priority cetacean species including, but not limited to, Rice's whales and sperm whales.
- Collecting data on the distribution and abundance of seabirds and other marine life

Methods

For the activities identified in this MAIP, the SEFSC will utilize the same methods and track-lines (Figure 1) used in the GoMMAPPS 2017 - 2018 vessel surveys. Using the same data collection methods will allow for easier comparisons and interpretation of the data results from these surveys to those from GoMMAPPS. These activities include:

1. Pre-cruise planning:

- Request ship time in January 2022
- Ship time confirmed for September 2022
- About three months prior to sail date of each cruise the SEFSC Field Team Lead will complete the following steps:
  - Complete staffing for survey, scheduling SEFSC staff (FTEs and affiliates) as available and contract additional staff as "temporary workers"
  - Complete cruise instructions and submit to the Office of Marine and Aviation Operations (OMAO). The final document can also be shared with the Restoration Center.
  - Finalize cruise plans and logistics with the Vessel Commanding Officer.
  - Order any expendable supplies needed for the cruise.
  - Just prior to the cruise, transport equipment (bigeye binoculars, acoustics array, field computers etc.) to load onto the ship and set up.

2. Vessel surveys: Two vessel surveys (~60-days each) will be conducted in two consecutive summers using the same methods and tracklines employed during the GoMMAPPs vessel surveys for consistency including using two teams of visual marine mammal observers that operate independently of one another. Distance sampling, a commonly used methodology, will be used to estimate the detection probabilities for marine mammal sightings which is used to estimate density. Observers will record other species, such as sea turtles and large fish, if and when they are seen, but it is often difficult to see these species from a large vessel.

Observers will be considered "on effort" whenever the ship is on a prescribed trackline or transit line, at survey speed , and the visual team is actively searching for cetaceans through the bigeye binoculars. Visual surveys are conducted during daylight hours (approximately from 0700 to 1900). During the independent observer approach, one survey team will be stationed on the vessel's flying bridge. The second team will be stationed on the bridge deck and located on the bridge wings. Both visual survey teams will utilize pedestal mounted, 25x150 mm "bigeye" binoculars located on the port and starboard sides of the ship and a 3rd observer searching closer to the ship with only handheld binoculars. The survey will primarily be conducted in "passing mode" whereby the ship maintains a steady course and speed while the visual teams identify the sighting to species level if possible and count the number of individuals in a sighting. Under certain circumstances, a "closing mode" technique will be employed, which entails maneuvering the ship to more closely approach a sighting. This survey mode is used sparingly and restricted to sightings of special interest. Data will be recorded by the centralized data recorder using a custom written visual data acquisition program (VisSurvey) installed on a networked laptop. For each encounter, time, position, bearing and reticle, species, group size, behavior, bottom

depth, sea surface temperature, and associated animals (e.g., seabirds, fish) will be recorded. An attempt will be made to photograph animals that closely approach the ship.

In addition, passive acoustic surveys will be conducted simultaneously with visual surveys to provide supplemental information on cetacean abundance and spatial distribution. Passive acoustic monitoring for odontocetes will be conducted using a modular towed hydrophone array deployed approximately 300 m behind the ship and hydrophone depth will vary depending on survey speed, ship turns, and current. Acoustic signals will be monitored by a team of two acoustic technicians that rotate through a primary and on-call secondary position every 1 to 2.5 hours while the array is deployed. Acoustic localizations will be mapped and compared with visual sighting locations using a custom-written acoustic version of VisSurvey.

Directional sonobuoys will be used for acoustic detection, localization, and recording of low-frequency sounds produced by baleen whales which are too low in frequency to be detected by the towed array system. Sonobuoys will be deployed during daylight hours concurrent with visual surveys. The sonobuoy deployment strategy will be to 1) deploy a single sonobuoy at predetermined stations where the trackline intersected the 250 m isobath and 2) opportunistically deploy at least two sonobuoys spaced 5 km apart within 2 km of all visually-sighted baleen whales. The two acoustic field technicians will only cursorily monitor the recordings for data quality and received radio signal strength in real time while focusing their effort on towed array monitoring.

Oceanographic and environmental data can be collected by utilizing scientific echosounders (EK60) to quantify acoustic backscatter from small fish and zooplankton. EK60 data will be collected beginning at sunset and until the commencement of acoustic survey effort the following day. The EK60 system on Gordon Gunter has the ability to utilize 18, 38, 120 and 200 kHz transducers. On a typical protected resource survey, the EK60 is secured during daylight hours. At night, the system may be activated to quantify backscatter. Depending on several factors including water depth, we adjust the parameters for EK60 operation. Vertical profiles of hydrographic parameters (e.g., temperature, salinity, oxygen concentration) will be collected using a conductivity, temperature and depth sensor (CTD) unit and expendable bathythermographs (XBT). Environmental data including water temperature, salinity, and weather conditions (e.g., wind speed, wind direction) will be continuously collected in situ via the ship's Scientific Computer System (SCS) and recorded in the visual marine mammal sighting database.

Remote biopsy samples may be opportunistically collected from priority species if encountered. Tissue samples will be collected from the small boat with a crossbow fitted with a custom designed sampling dart and head to extract a small core of skin and blubber. All sampling will be conducted by personnel with training and experience to collect biopsy samples from wild cetaceans and as authorized by the MMPA permit issued by the Office of Protected Resources to SEFSC (Permit No. 21938-03).

Data on the distribution and abundance of seabirds and other marine life may also be collected by two seabird observers provided by USGS for each cruise. The seabird observers will use binoculars to conduct counts of birds detected from the bridge within a 300-m strip transect while the ship is underway. No biopsies or other samples will be taken from seabirds, only visual surveys. Survey time will

be approximately 9-12 hrs/day depending on weather.

3. Post-survey data processing and product development:

Following each vessel survey, all resulting data files are transferred (Access databases, photographs, scanned data sheets, photographic logs, etc.) from an external hard drive to the SEFSC Miami lab network server for extensive auditing of the visual data. Data auditing consists of making corrections based on error log notes from the field, plotting trackline points to identify errors made when recording effort status, and verifying sighting data based on data sheets from the field. Detailed steps of the visual data auditing process are available upon request. Once the data auditing is complete, R scripts are run to extract data and prepare the data for distance sampling analysis. The final data sets are archived to NCEI (see example here: https://www.ncei.noaa.gov/access/metadata/landing-page/bin/iso?id=gov.noaa.nodc:0241032) and a final cruise report is prepared (see example: https://repository.library.noaa.gov/view/noaa/32749) The cruise report will be submitted to the Restoration Center after each cruise as an interim product.

After both surveys are completed, the survey data will be analyzed using a Distance Sampling analysis using an independent observer approach to estimate detection probability. The data from these surveys will be used to test the predictive ability of habitat models developed with GoMMAPPS data. This will be done by comparing new sighting data with predicted surface densities from the existing models. After the comparison, we will incorporate the new data to fit new habitat models. The new models will benefit from additional data to obtain better fits for probability of detection functions in Distance Sampling. Additional data are particularly important for rare species with few sightings and to further evaluate changes in distribution and abundance of cetaceans. The overall result will be improved surface density models for cetaceans in the oceanic Gulf of Mexico. The improved spatial density models will be made publicly available through the GoMMAPPS model viewer website (currently under development) and a final report for the project will be generated and submitted 6 months after the completion of the second survey.

II. *Construction Schedule (What is the anticipated schedule for major phases of work? Include duration of in-water work.)*

This MAM Activity will be completed within a 3-year timeframe with the bulk of the work in the final two years (March 2023 - March 2025)

	Jan 2022	**Fall 2022**	**Jan - May 2023**	**Summer 2023**	**Fall 2023**	**Jan - May 2024**	**Summer 2024**	**Fall 2024**	**winter 2025**
Request Shiptime									

Shiptime confirmed									
Pre-cruise planning									
60-day vessel survey									
Data QA/QC/Interim products									
Update spatial density models									
Final products									

III. *Specific In-Water and/or Terrestrial Construction Methods*

Please check yes or no for the following questions related to in-water work and overwater structures

Does this project include in-water work?	YES☐	NO☒
Does this project include terrestrial construction?	YES☐	NO☒
Does this project include construction of an overwater structure?	YES☐	NO☒
Will fishing be allowed from this overwater structure?	YES☐	NO☒
Will wildlife observation be allowed from this overwater structure?	YES☐	NO☒
Will boat docking be allowed from this overwater structure?	YES☐	NO☒

If this is a fishing pier, please provide the following information: public or private access to pier, estimated number of people fishing per day, plan to address hook and line captures of protected species, specific operating hours/open 24 hours, artificial lighting of pier (if any), number of fish cleaning stations, and number of pier attendants (if any).

N/A

Construction: Provide a detailed account of construction methods. It is important to include step-by-step descriptions of how demolition or removal of structures is conducted and if any debris will be moved and how.

Describe how construction will be implemented, what type and size of materials will be used and if machines will be used, manual labor, or both. Indicate if work will be done from upland, barge, or both.)

iii. *Use of "Dock Construction Guidelines"?*
http://sero.nmfs.noaa.gov/protected_resources/section_7/guidance_docs/documents/dockkey2002.pdf iv. *Type of decking: Grated – 43% open space; Wooden planks or composite planks – proposed spacing?* v. *Height above Mean High Water (MHW) elevation?*
vi. *Directional orientation of main axis of dock?*
vii. *Overwater area (sq ft)?*

N/A

b. *Pilings & Sheetpiles: If this project includes installation of pilings or sheets, please provide answers to questions 1-11 listed below*

1. Method of pile installation	
2. Material type of piles used	
3. Size (width) of piles/sheets	
4. Total number of piles/sheets	
5. Number of strikes for each single pile	
6. Number of strikes per hour (for a single pile)	
7. Expected number of piles to be driven each day	
8. Expected amount of time needed to drive each pile (minutes of driving activities)	
9. Expected number of sequential days spent pile driving	
10. Whether pile driving occurring in-water or on land	
11. Depth of water where piles will be driven	

c. *Marinas and Boat Slips (Describe the number and size of slips and if the number of new slips changes from what is currently available at the project. Indicate how many are wet slips and how many are dry slips. Estimate the shadow effect of the boats - the area (sqft) beneath the boats that will be shaded.)*

N/A

d. *Boat Ramp (Describe the number and size of boat ramps, the number of vessels that can be moored at the site (e.g., staging area) and if this is a public or private ramp. Indicate the boat trailer parking lot capacity, and if this number changes from what is currently available at the project.)*

N/A

e. *Shoreline Armoring (This includes all manner of shoreline armoring (e.g., riprap, seawalls, jetties, groins, breakwaters, etc.). Provide specific information on material and construction methodology used to install the shoreline armoring materials. Include linear footage and square footage. Attach a separate map showing the location of the shoreline armoring in the action area.*

N/A

f. *Dredging or digging (Provide details about dredge type (hopper, cutterhead, clamshell, etc.), maximum depth of dredging, area (ft2) to be dredged, volume of material (yd3) to be produced, grain size of material, sediment testing for contamination, spoil disposition plans, and hydrodynamic description (average current speed/direction)). If digging in the terrestrial environment, please describe fully with details about possible water jetting, vibration methods to install pilings for dune walk-over structure, or other methods. If using devices/methods/turtle relocation dredging to relocate sea turtles, then describe the methods here.*

N/A

g. *Blasting (Projects that use blasting might not qualify as "minor projects," and a Biological Assessment (BA) may need to be prepared for the project. Arrange a technical consultation meeting with NMFS Protected Resources Division to determine if a BA is necessary. Please include explosive weights and blasting plan.)*

N/A

h. *Artificial Reefs (Provide a detailed account of the artificial reef site selection and reef establishment decisions [i.e., management and siting considerations, stakeholder considerations, environmental considerations, long term maintenance plan (periodic clean-up of lost fishing gear/debris]), deployment schedule, materials used, deployment methods, as well as final depth profile and overhead clearance for vessel traffic. For additional Information and detailed guidance on artificial reefs, please refer to the artificial reef program websites for the particular state the project will occur in.*

N/A

i. *Fishery Activities (Describe any use of gear that could entangle or capture protected species. This includes activities that may enhance fishing opportunities (e.g. fishing piers) or be fishery/gear research related (e.g. involve trawl gear, gillnets, hook and line gear, crab pots etc)).*

N/A

G. NOAA Essential Fish Habitat (EFH)

If applicable, describe any designated Essential Fish Habitat within the project area in the text box and answer the questions below about habitat effects, conversions or benefits. If there is no EFH in your project area, enter N/A in the box below and move to section F.

Depending on the effects of your project, EFH consultation with NMFS may be required:
https://www.fisheries.noaa.gov/southeast/consultations/essential-fish-habitat-consultations-southeast
The NMFS and the Gulf of Mexico Fishery Management Council (Gulf Council) have identified and described essential fish habitat (EFH) for a variety of federally managed species that overlaps with the MDBC field operations project area. For those species managed by the Gulf Council, EFH maps were spatially defined based on five eco-regions (Figure 5). Within each eco-region, three habitat zones (estuarine, nearshore, offshore) are recognized, and specific habitat types are mapped within each eco-

region and habitat zone. The MM survey project area is located in the offshore habitat zone, and spans all five eco-regions.

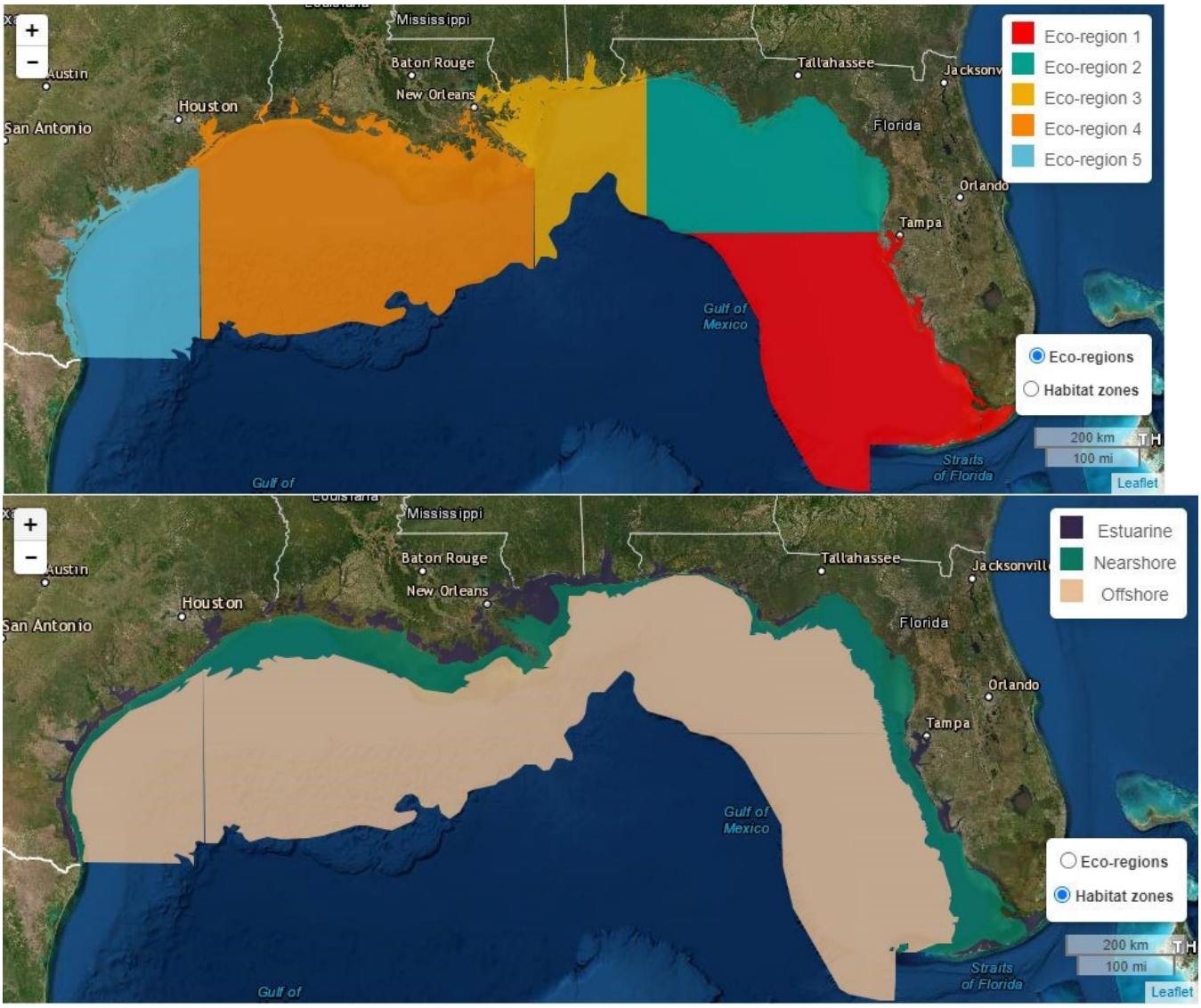

Figure 5. Gulf of Mexico EFH eco-regions (top) and habitat zones (bottom) as described by the Gulf Council

The offshore marine EFH habitats in the project action area may include vegetated bottoms (e.g., benthic algae), nonvegetated bottoms (e.g., sand/shell bottoms, soft bottoms of mud/clay/silt), live/hard bottoms (e.g., low relief or high relief irregular bottoms), coral and coral reefs (e.g., reef halos, patch reefs, deep reefs), continental shelf/geologic features (e.g., shelf edge, shelf slope, salt domes), marine water column associated, and drift algae (e.g., Sargassum). These habitats areas are associated with various life stages of federally managed species, including all six management units for which the Gulf Council has developed fishery management plans (FMP): coastal migratory pelagics (e.g., cobia and mackerels), red drum, reef fish (e.g., snappers, groupers, jacks, triggerfish, hogfish), shrimp (e.g., brown, white, pink, royal red), spiny lobster, and coral (e.g., hydrozoa and anthozoa).

In this table, please use checkboxes to indicate which EFH eco-region(s) and habitat zone(s) in which the project is located. For more information about EFH Eco Regions see the references here:
https://dwh.nmfs.noaa.gov/tc/CrTIGRes/Env_Compliance/SiteAssets/EFH%20Resources
https://portal.gulfcouncil.org/EFHreview.html

Gulf of Mexico EFH Eco-Region	Estuarine	Nearshore	Offshore
Eco-Region 1: South Florida (*Florida Keys north to Tarpon Springs, Florida*)	☐	☐	☒
Eco-Region 2: North Florida (*Tarpon Springs, Florida, north and west to Pensacola Bay, Florida*)	☐	☐	☒
Eco-Region 3: East Louisiana, Mississippi, and Alabama (*Pensacola Bay, Florida, west to the Mississippi River Delta)*	☐	☐	☒
Eco-Region 4: East Texas and West Louisiana (*Mississippi River Delta west and south to Freeport, Texas)*	☐	☐	☒
Eco-Region 5: West Texas (*Freeport, Texas south to the U.S./Mexico border)*	☐	☐	☒

Effects to EFH

In this section, please indicate if your project has effects on EFH, either beneficial or adverse. For example, whether the project creates, improves, removes or converts habitat. Please describe the types of habitats that will be affected by the project, including number of acres.

Will this project affect EFH?	YES☐ NO☒
If no, please proceed to section X. (For example, your project is wholly upland or includes only desktop analysis tasks) If yes, please proceed to additional boxes below.	

Click here to enter text.

Will this project have beneficial effects to EFH?	YES☐ NO☒
If yes, please describe how your project will have beneficial effects the text box below:	

Click here to enter text.

Will this project have adverse effects on EFH?	YES☐ NO☒
If yes, please describe what type of adverse effects your project will cause to EFH in the text bow below:	

Click here to enter text.

H. NOAA ESA Species and Critical Habitat and Effects Determination Requested

If your project occurs in a location that does not contain any listed NOAA species or designated Critical Habitats, please check the box below. If this box is checked, you may skip Section H. and proceed to Section I.

☐This project occurs in a location that does not contain any listed NOAA species or designated Critical Habitats.

☒ESA effects have been accounted for under an existing consultation.

Work conducted under ESA Permit (#21938) issued by NMFS Office of Protected Resources to NMFS SEFSC

1. List all species, critical habitat, proposed species and proposed critical habitat that may be found in the action area. Species that do not currently occur in the action area (but are listed on county species lists) do not need to be listed in drop downs. For species not included in the drop down menu please add manually to the table.

2. Attach a separate map identifying species/critical habitat locations within the action area. For information on species and critical habitat under NMFS jurisdiction, visit: http://sero.nmfs.noaa.gov/protected_resources/section_7/threatened_endangered/Documents/gulf_of_mexico.pdf.

If Gulf sturgeon in marine waters may be affected, include them in the table here. If Gulf Sturgeon in riverine/freshwater may be affected include them in the USFWS table below in Section H. If sea turtles in water may be affected include them in the table here. If sea turtles on land may be affected include them in the USFWS table below in Section H.

Species and/or Critical Habitat	**CH Unit** (if applicable)	**Location** (Sea turtles and Gulf Sturgeon **only**)	**Determinations** (see definitions below)	**For "No Effect", please select justification.**
Choose an item.		Choose an item.	Choose an item.	Choose an item.
Choose an item.		Choose an item.	Choose an item.	Choose an item.
Choose an item.		Choose an item.	Choose an item.	Choose an item.
Choose an item.		Choose an item.	Choose an item.	Choose an item.
Choose an item.		Choose an item.	Choose an item.	Choose an item.
Choose an item.		Choose an item.	Choose an item.	Choose an item.
Choose an item.		Choose an item.	Choose an item.	Choose an item.
Choose an item.		Choose an item.	Choose an item.	Choose an item.
		Choose an item.	Choose an item.	Choose an item.
		Choose an item.	Choose an item.	Choose an item.
		Choose an item.	Choose an item.	Choose an item.

Determination Definitions

Please make the appropriate choice in the drop down menus for both species and designated critical habitat listed in the firs column.

NE = no effect. This determination is appropriate when the proposed action will not directly, indirectly, or cumulatively impact, either positively or negatively, any listed, proposed, candidate species or designated/proposed critical habitat.

NLAA = may affect, not likely to adversely affect. This determination is appropriate when the proposed action is not likely to adversely impact any listed, proposed, candidate species or designated/proposed critical habitat or there may be beneficial effects to these resources. Response requested is concurrence with the not likely to affect determination. This conclusion is appropriate when effects to the species or critical habitat will be wholly beneficial, discountable, or insignificant. Beneficial effects are contemporaneous positive effects without any adverse effects to the species or habitat. Insignificant effects relate to the size of the impact, while discountable effects are those that are extremely unlikely to occur. Based on best judgment, a person would not: (1) be able to meaningfully measure, detect, or evaluate insignificant effects; or (2) expect discountable effects to occur. If the Services concur in writing with the Action Agency's determination of "is not likely to adversely affect" listed species or critical habitat, the section 7 consultation process is completed.

LAA = may affect, likely to adversely affect. This determination is appropriate when the proposed action is likely to adversely impact any listed, proposed, candidate species or designated/proposed critical habitat. Response requested for listed species is formal consultation for action with a likely to adversely affect determination, with a biological opinion as the concluding document. This conclusion is reached if any adverse effect to listed species or critical habitat may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effect is not discountable or insignificant. In the event the overall effect of the proposed action is beneficial to the listed species or critical habitat, but may also cause some adverse effect on individuals of the listed species or segments of the critical habitat, then the determination is "likely to adversely affect." Any LAA determination requires formal section 7 consultation and will require additional information.

I. USFWS Species and Critical Habitat and Effects Determination Requested

If your project occurs in a location that does not contain any listed USFWS species or designated Critical Habitats, please check the box below. If this box is checked, you may skip Section I and proceed to Section J.

☐This project occurs in a location that does not contain any listed USFWS species or designated Critical Habitats.

☐ESA effects have been accounted for under an existing consultation.

*1. List all species, critical habitat, proposed species and proposed critical habitat **generated by IPaC** that may be found in the action area*. For species not included in the drop down menu please add manually to the table.

2. Attach a separate map identifying species/critical habitat locations within the action area. For information on species and critical habitat under NMFS jurisdiction, visit: http://sero.nmfs.noaa.gov/protected_resources/section_7/threatened_endangered/Documents/gulf_of_mexico.pdf.

If Gulf sturgeon in riverine/freshwater waters may be affected, include them in the table here. If Gulf Sturgeon in

marine waters may be affected include them in the NMFS table above in Section G. If sea turtles on land may be affected include them in the table here. If sea turtles in water may be affected include them in the NMFS table above in Section G.

Species and/or Critical Habitat	**CH Unit** (if applicable)	**Location** (Sea turtles and Gulf Sturgeon **only**)	**Determinations** (see definitions below)	**For "No Effect", please select justification.**
West Indian Manatee		Choose an item.	May Affect, Not Likely to Adversely Affect	Choose an item.
Choose an item.		Choose an item.	Choose an item.	Choose an item.
Choose an item.		Choose an item.	Choose an item.	Choose an item.
Choose an item.		Choose an item.	Choose an item.	Choose an item.
Choose an item.		Choose an item.	Choose an item.	Choose an item.
Choose an item.		Choose an item.	Choose an item.	Choose an item.
Choose an item.		Choose an item.	Choose an item.	Choose an item.
Choose an item.		Choose an item.	Choose an item.	Choose an item.
		Choose an item.	Choose an item.	Choose an item.
		Choose an item.	Choose an item.	Choose an item.
		Choose an item.	Choose an item.	Choose an item.

Determination Definitions

Please make the appropriate choice in the drop down menus for both species and designated critical habitat

NE = no effect. This determination is appropriate when the proposed action will not directly, indirectly, or cumulatively impact, either positively or negatively, any listed, proposed, candidate species or designated/proposed critical habitat.

NLAA = may affect, not likely to adversely affect. This determination is appropriate when the proposed action is not likely to adversely impact any listed, proposed, candidate species or designated/proposed critical habitat or there may be beneficial effects to these resources. Response requested is concurrence with the not likely to affect determination. This conclusion is appropriate when effects to the species or critical habitat will be wholly beneficial, discountable, or insignificant. Beneficial effects are contemporaneous positive effects without any adverse effects to the species or habitat. Insignificant effects relate to the size of the impact, while discountable effects are those that are extremely unlikely to occur. Based on best judgment, a person would not: (1) be able to meaningfully measure, detect, or evaluate insignificant effects; or (2) expect discountable effects to occur. If the Services concur in writing with the Action Agency's determination of "is not likely to adversely affect" listed species or critical habitat, the section 7 consultation process is completed.

LAA = may affect, likely to adversely affect. This determination is appropriate when the proposed action is likely to adversely impact any listed, proposed, candidate species or designated/proposed critical habitat. Response requested for listed species is formal consultation for action with a likely to adversely affect determination, with a biological opinion as the concluding document. This conclusion is reached if any adverse effect to listed species or critical habitat may occur as a direct or indirect result of the proposed action or its interrelated or interdependent

actions, and the effect is not discountable or insignificant. In the event the overall effect of the proposed action is beneficial to the listed species or critical habitat, but may also cause some adverse effect on individuals of the listed species or segments of the critical habitat, then the determination is "likely to adversely affect." Any LAA determination requires formal section 7 consultation and will require additional information.

J. Effects of the Proposed Project to the Species and Actions to Reduce Impacts

NOTE: Species selected as "No Effect" with justification in tables above do not need to be addressed in Section I or J.

I. *Explain the potential beneficial and adverse effects to each species listed above. Describe what, when, and how the species will be impacted and the likely response to the impact. Be sure to include direct, indirect, and cumulative impacts and where possible, quantify effects.*

If species are present (or potentially present) and will not be adversely affected describe your rationale. If species are unlikely to be present in the general area or action area, explain why. This justification provides documentation for your administrative record, avoids the need for additional correspondence regarding the species, and helps expedite review.

The survey boat will likely be transiting in some nearshore areas to get to/from the ports and these areas may overlap with the distribution of West Indian manatees. The potential for a boat strike is unlikely, and to future reduce any potential effects the Standard Manatee In Water Conditions will be followed. No other ESA-listed species or habitats under the jurisdiction of USFWS are present in the action area.

II. *Explain the actions to reduce adverse effects to each species listed above. For each species for which impacts were identified, describe any Conservation Measures and/or BMPs that will be implemented to avoid or minimize the impacts. Conservation Measures and/or BMPs are designed to avoid or minimize effects to listed species and critical habitats or further the recovery of the species under review. Conservation Measures and/or BMPs are considered part of the proposed action and their implementation is required. Any changes to, modifications of, or failure to implement these conservation measures may result in a need to reinitiate this consultation.*

Frequently Recommended Conservation Measures and BMPs: This checklist provides standard practices recommended by NMFS and USFWS. Please select any BMPs that will be implemented:

- ☒ **USFWS Standard Manatee In Water Conditions**
- ☐ **NMFS Protected Species Construction Conditions (2021)[1]**
- ☐ **NMFS Measures for Reducing the Entrapment Risk to Protected Species[1]**
- ☐ **NMFS Vessel Strike Avoidance Measures (2021)[1]**

Additional BMPs or Conservation Measures

Chapter 6 of the PDARP included an important appendix (6.A) of best practices, see information starting on page 6-173.
http://www.gulfspillrestoration.noaa.gov/sites/default/files/wp-content/uploads/Chapter-6_Environmental-

[1] https://www.fisheries.noaa.gov/southeast/consultations/regulations-policies-and-guidance

Consequences_508.pdf
Use the box below to indicate which best management practices or conservation measures you'll be using in your project (that were not listed in Section I above)

Click here to enter text.

K. Effects to Critical Habitats and Actions to Reduce Impacts

NOTE: Species selected as "No Effect" with justification in table do not need to be addressed in Section I or J.

I. *Explain the potential beneficial and adverse effects to critical habitat listed above. Describe what, when, and how the critical habitat will be impacted and the likely response to the impact. Be sure to include direct, indirect, and cumulative impacts to physical and biological features, and where possible, quantify effects (e.g. acres of habitat, miles of habitat).*

Describe your rationale if designated or proposed critical habitats are present and will not be adversely affected.

No critical habitat will be affected.

II. *Explain the actions to reduce adverse effects to critical habitat listed above. For critical habitat for which impacts were identified, describe any conservation measures (e.g. BMPs) that will be implemented to avoid or minimize the impacts. Conservation measures are designed to avoid or minimize effects to listed species and critical habitats or further the recovery of the species under review.*
Conservation measures are considered part of the proposed action and their implementation is required. Any changes to, modifications of, or failure to implement these conservation measures may result in a need to reinitiate this consultation.

Click here to enter text.

L. Marine Mammals

I. The Marine Mammal Protection Act prohibits the taking (including disruption of behavior, entrapment, injury, or death) of all marine mammals (e.g.,whales, dolphins, manatees). However, the MMPA allows limited exceptions to the take prohibition if authorized, such as the incidental (i.e., unintentional but not unexpected) take of marine mammals. The following questions are designed to allow the Agencies to quickly determine if your action has the potential to take marine mammals. If the information provided indicates that incidental take is possible, further discussion with the Agencies is required.

Is your activity occurring in or on marine or estuarine waters? ☐NO ☒YES

If yes, is your activity likely to cause large-scale, ecosystem level impacts to the quality (e.g. salinity, temperature) of marine or

estuarine waters? ☒NO ☐YES

II. If Yes, describe activities further using checkboxes. Does your activity involve any of the following:

NO	YES	ACTIVITY

☐	☒	*a) Use of active acoustic equipment (e.g., echosounder) producing sound below 200 kHz*
☒	☐	*b) In-water construction or demolition*
☒	☐	*c) Temporary or fixed use of active or passive sampling gear (e.g., nets, lines, traps; turtle relocation trawls)*
☒	☐	*d) In-water Explosive detonation*
☒	☐	*e) Aquaculture*
☒	☐	*f) Restoration of barrier islands, levee construction or similar projects*
☒	☐	*g) Fresh-water river diversions*
☒	☐	*h) Building or enhancing areas for water-related recreational use or fishing opportunities (e.g. fishing piers, bridges, boat ramps, marinas)*
☒	☐	*i) Dredging or in-water construction activities to change hydrologic conditions or connectivity, create breakwaters an living shorelines, etc.*
☒	☐	*j) Conducting driving of sheet piles or pilings*
☒	☐	*k) Use of floating pipeline during dredging activities*

III. If you checked "Yes" to any of the activities immediately above or the activity could impact the quality of marine or estuarine waters, please describe the nature of the activities in more detail or indicate which section of the form already includes these descriptions. See the NOAA Acoustic Guidance for more information: http://www.nmfs.noaa.gov/pr/acoustics/faq.htm

The EK60 echosounder system on Gordon Gunter has the ability to utilize 18, 38, 120 and 200 kHz transducers. Sound was considered in the existing MMPA permit, no additional BMPs are needed. The ESA/MMPA permit requires an annual authorization for Rice's whale research, and these authorizations will be done by NMFS SEFSC annually.

IV. *Frequently Recommended BMPs for marine mammals (manatees are covered in Section I above): This checklist provides standard BMPs recommended by NOAA. Please select any BMPs that will be implemented:*

☐	NMFS Southeast U.S. Marine Mammal and Sea Turtle Viewing Guidelines[2]
☐	NMFS Protected Species Construction Conditions (2021)[3]
☐	NMFS Measures for Reducing the Entrapment Risk to Protected Species (2012)[3]
☐	NMFS Vessel Strike Avoidance Measures and Reporting for Mariners (2021)[3]
☐	NMFS Reproducing and posting outreach signs: Dolphin Friendly Fishing Tips sign, Don't Feed Wild Dolphins sign[4]

If not listed above, please describe any additional BMPs or conservation measures that may be be implemented for marine mammals. Click here to enter text.

M. Bald Eagles

[2] https://www.fisheries.noaa.gov/topic/marine-life-viewing-guidelines
[3] https://www.fisheries.noaa.gov/southeast/consultations/regulations-policies-and-guidance
[4] https://www.fisheries.noaa.gov/southeast/consultations/protected-species-educational-signs

Are bald eagles present in the action area? ☒NO ☐YES

If YES, the following conservation measures should be implemented:

1. If bald eagle breeding or nesting behaviors are observed or a nest is discovered or known, all activities (e.g., walking, camping, clean-up, use of a UTV, ATV, or boat) should avoid the nest by a minimum of 660 feet. If the nest is protected by a vegetated buffer where there is *no* line of sight to the nest, then the minimum avoidance distance is 330 feet. This avoidance distance shall be maintained from the onset of breeding/courtship behaviors until any eggs have hatched and eaglets have fledged (approximately 6 months).
2. If a similar activity (e.g., driving on a roadway) is closer than 660 feet to a nest, then you may maintain a distance buffer as close to the nest as the existing tolerated activity.
3. If a vegetated buffer is present and there is no line of sight to the nest and a similar activity is closer than 330 feet to a nest, then you may maintain a distance buffer as close to the nest as the existing tolerated activity.
4. In some instances, activities conducted at a distance greater than 660 feet of a nest may result in disturbance. If an activity appears to cause initial disturbance, the activity shall stop and all individuals and equipment will be moved away until the eagles are no longer displaying disturbance behaviors.

Will you implement the above measures? ☐NO ☐YES

If these measures cannot be implemented, then you must contact the Service's Migratory Bird Permit Office.
Texas – (505) 248-7882 or by email: permitsR2MB@fws.gov
Louisiana, Mississippi, Alabama, Florida – (404) 679-7070 or by email: permitsR4MB@fws.gov

N. Migratory Bird Treaty Act

In accordance with the Migratory Bird Treaty Act of 1918 as amended (16 U.S.C. 703-712), will this project cause the take of any birds covered under this act? ☒NO ☐YES

If YES, please explain and indicate if the pertinent permits will be or have been obtained:

Project proponent will review the appropriate BMPs and CMs found at this website and implement the appropriate measures to the extent practicable:
https://www.fws.gov/birds/management/project-assessment-tools-and-guidance.php
☐NO ☐YES

If NO, please explain:

O. Request Approval for Use of NMFS PDCs for This Project

Complete this section only if your project qualifies for streamlined ESA consultation under the ESA Framework Programmatic Biological Opinion completed by NMFS on February 10, 2016.

To be eligible for streamlined ESA consultation with NMFS, you must implement all Project Design Criteria (PDCs) applicable to your project. Check "yes" for PDC categories that apply to the proposed project, and request PDC checklist from NMFS.

NO	YES	ACTIVITY
☒	☐	**Oyster Reef Creation and Enhancement**
☒	☐	**Marine Debris Removal**
☒	☐	**Construction of Living Shorelines**
☒	☐	**Marsh Creation and Enhancement**
☒	☐	**Construction of Non-Fishing Piers**

P. Submitting the BE Form

We request that all BE forms and consultation materials be placed on Sharepoint for review. Upon receipt, we will conduct a preliminary review and provide any comments and feedback, including any requests for modifications or additional information.

If modifications or additional information is necessary, we will work with you until the Biological Evaluation form is considered complete. Once complete, we will use the Biological Evaluation form to initiate appropriate consultations.

Questions may be directed to:

NMFS ESA § 7 Consultation
Christy Fellas, National Oceanic Atmospheric Administration
Email: Christina.Fellas@noaa.gov
Phone: 727-551-5714

USFWS ESA § 7 Consultation
Michael Barron, Department of the Interior
Email:
michael_barron@fws.
gov Phone: 251-421-
7030