



# 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

July 21, 2023

To: Memorandum to File  
From: Michael Barron, Deepwater Horizon Gulf Restoration Office  
Subject: Marine Mammal Protection Act Compliance Determination for Mississippi Trustee Implementation Group's Project: Jourdan River Boardwalk

Based on our review of the Biological Evaluation provided for Mississippi Trustee Implementation Group's Project: Jourdan River Boardwalk, 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 July 7, 2022.

Should any 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](mailto: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](mailto:michael_barron@fws.gov)  
NMFS: Christy Fellas at  
[christina.fellas@noaa.gov](mailto:christina.fellas@noaa.gov)

---

#### A. Project Identification

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

Implementing Trustee(s): Mississippi Department of Environmental Quality

Contact Name: Valerie Alley Phone: 601-961-5182 Email: [VAlley@mdeq.ms.gov](mailto:VAlley@mdeq.ms.gov)

Project Name: Jourdan River Boardwalk

DIVER ID# Project is a Proposed Alternative in DRAFT TIG: Mississippi TIG Restoration Plan # 4

#### 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:

## Conceptual

### C. Project Location

#### I. State and County/Parish of action area

Hancock County, Mississippi

#### 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>]

Northwest: 30.3680474°N ,

89.3998260°W Northeast:

30.3691232°N , 89.3976648°W

Southwest: 30.3662354°N , 89.3995689°W

Southeast: 30.3661824°N , 89.3992375°W

### III. Maps, Drawings, and GIS Data

Please insert any maps, aerial photographs, or design drawings here or attach to the end of this BE form. GIS files may be added to the same folder location as where this BE is filed on Sharepoint . 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

GIS Files to include ARCGIS, KMZ, CAD, or other GIS files are required (WGS 84) for projects with a field component



#### 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: [Click or tap here to enter text](#)

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.

National Environmental Policy Act (NEPA) analysis for this project will be included in the draft Mississippi Trustee Implementation Group (MS TIG) Restoration Plan # 4 that is expected to be released by the MS TIG in August 2023.

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

Name of Person Completing this Form: Rachel Kistler

Name of Project Lead:

Tina Nations Date Form

Completed: 6/1/2023

Date Form Updated: [Click here to enter text.](#)

## **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.*

The project is located along the east bank of the Jourdan River north of Interstate Highway 10 and extends into a man-made canal in Diamondhead, MS. Inland freshwater drainage from northern portions of the Jourdan River and its tributaries, combined with saltwater from the Mississippi Sound, creates an estuarine environment in the Saint Louis Bay and lower Jourdan River. The Jourdan River empties into the west side of the Saint Louis Bay just north of the city of Bay St. Louis.

Both “freshwater forested wetlands” and “estuarine and marine wetlands” are present in the project area. A single daily diurnal tidal cycle influences this body of water. The oligohaline stretch of the mid-Jourdan River is a transition zone with a mixed marsh of saltgrass (*Cladium jamaicense*) and needle rush (*Juncus roemerianus*) north of I-10 with the *Cladium* rapidly declining to the south of the interstate (within - 1 mile). The creeks and rivers are lined with smooth cordgrass (*Spartina alterniflora*) or wild-rice (*Zizania aquatica*) and saltmeadow cordgrass (*Spartina patens*) bands occur along the upland borders. The oligohaline marshes of the lower Jourdan River are dominated by needle rush (*Juncus roemerianus*) with scattered pure stands of big cordgrass (*Spartina cynosuroides*) and common reed (*Phragmites australis*). These marshes are quite similar to those occurring along the northwest to northeast shores of St. Louis Bay.

*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.*

To Saint Louis Bay: Approximately 2 miles; To Mississippi Sound: Approximately 7.5 miles

#### **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.*

A bulkhead and boat ramp are present at the terminus of the man-made canal. The Interstate 10 (I-10) bridge crossing the Jourdan River is located immediately south of the project area.

#### **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.*

Smooth cordgrass (*Spartina alterniflora*) occurs as a narrow band along the creeks and bayous with eelgrass (*Vallisneria americana*) occurs in narrow beds along the river.

#### **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.*

This area contains soils derived from sandy and loamy marine and fluviomarine deposits (Holocene to upper Pleistocene) derived from sedimentary rock (USGS). The nearshore subtidal benthic habitat is composed mostly of unconsolidated bottom types including sand, muddy sand, and mud bottom.

**h. Land Use**

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

The wetlands in the project vicinity were dredged in the early 1970s for the creation of a public boat ramp for access to the Jourdan River.

**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>*

According to the US Atlantic and Gulf of Mexico Marine Mammal Stock Assessments (2021), Common bottlenose dolphins are distributed throughout the bays, sounds, and estuaries of the northern Gulf of Mexico (Mullin 1988). Bottlenose dolphins may be present within the project area.

According to the US Atlantic and Gulf of Mexico Marine Mammal Stock Assessments (2020), various species of large and small whales are dispersed in the Northern Gulf of Mexico, but not throughout the bays, sounds, and estuaries of the northern Gulf of Mexico, and not in estuarine river systems, where the project is located.

According to the West Indian Manatee (Florida) Stock Assessment Report (2014), Florida manatees are found throughout the southeastern US. Florida manatees are generally restricted to the inland and coastal waters of peninsular Florida during the winter, when they shelter in and/or near warm-water springs, heated industrial effluents, and other warm water sites (Hartman 1979, Lefebvre et al. 2001, Laist and Reynolds 2005, Stith et al. 2006, Laist et al. 2013). In warmer months, manatees leave these sites and can disperse great distances throughout the bays, sounds, and estuaries of the northern Gulf of Mexico. According to the USFWS publication, "Federally Endangered, Threatened, and Candidate Species in Mississippi," most manatee sightings in Mississippi occur in tidal rivers such as the Pascagoula and Jourdan Rivers. Manatees have also been spotted in Biloxi Bay, Bay St. Louis, and near shore in the Gulf of Mexico. Most of the sightings in Mississippi occur during the months of June through November.

## **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 would fund construction of a public boardwalk along the Jourdan River to provide access to and information about this tidal estuarine ecosystem in coastal Mississippi. The project includes the installation of approximately 1,250 linear feet of 8-foot wide timber pile supported pier and walkway, one 20'x20' elevated nature observatory (with upper level deck), three 20'x20' seating areas, associated low level lighting and safety railing. The decking is anticipated to be timber with an alternate bid item to include fiberglass reinforced plastic grating for better weather resiliency. Educational signs and displays would be placed along the boardwalk to provide information about the wetlands, coastal, and nearshore habitats including the tidal Jourdan River, adjacent estuarine marsh, and wildlife (e.g., birds) that use these habitats.

A U.S. Army Corps of Engineers Section 404/Section permit, a Mississippi Coastal Wetlands Permit, and a Mississippi Department of Environmental Quality Water Quality Certification (401) would be

required, in addition to any applicable local building permits. Engineering and design and permitting is anticipated to take approximately 1.5 years. Construction would take approximately 6 months.

II. *Construction Schedule (What is the anticipated schedule for major phases of work? Include duration of in-water work.)* Years 1-2 (2024-2025) Engineering and design; Permitting; Construction

Years 2-5 (2025-2029)- Boardwalk open to public access; Monitoring

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 <input checked="" type="checkbox"/> | NO <input type="checkbox"/>            |
| Does this project include terrestrial construction?                 | YES <input type="checkbox"/>            | NO <input checked="" type="checkbox"/> |
| Does this project include construction of an overwater structure?   | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/>            |
| Will fishing be allowed from this overwater structure?              | YES <input type="checkbox"/>            | NO <input checked="" type="checkbox"/> |
| Will wildlife observation be allowed from this overwater structure? | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/>            |
| Will boat docking be allowed from this overwater structure?         | YES <input type="checkbox"/>            | NO <input checked="" type="checkbox"/> |

*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).*

Boardwalk structure is a non-fishing pier.

*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"? <https://media.fisheries.noaa.gov/dam-migration/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)?

The project includes the installation of approximately 1,250 linear feet of 8-foot wide timber pile supported boardwalk and walkway, 1-20'x20' elevated nature observatory (with upper level deck), and 1-20'x20' seating areas, associated low level lighting and safety railing. The decking is

anticipated to be timber with an alternate bid item to include fiberglass reinforced plastic grating for better weather resiliency. Height above will be determined during E&D and permitting. See figure in Section C.III for directional orientation of each section. Overwater area totals 10,800 square feet.

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   | Vibratory Hammer |
| 2. Material type of piles used   | Timber           |
| 3. Size (width) of piles/sheets  | 12" Diameter     |
| 4. Total number of piles/sheets  | 250-300          |
| 5. Number of strikes for each single pile  | Vibratory        |
| 6. Number of strikes per hour (for a single pile)                                    | Vibratory        |
| 7. Expected number of piles to be driven each day                                    | 20-30 piles      |
| 8. Expected amount of time needed to drive each pile (minutes of driving activities) | 15-20 minutes    |
| 9. Expected number of sequential days spent pile driving                             | 15-20 days       |
| 10. Whether pile driving occurring in-water or on land                               | In-water         |
| 11. Depth of water where piles will be driven  | TBD during E&D   |

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 (ft<sup>2</sup>) to be dredged, volume of material (yd<sup>3</sup>) 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>

Essential Fish Habitat is present in the project area, which encompasses bays, wetlands, and rivers which flow into the Mississippi Sound and the larger Gulf. EFH in the project area would primarily apply to aquatic habitat where fish feed or grow to maturity.

*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://noaasdd.sharepoint.com/:f/s/tcover/Euupi2PMtXdEqQtJSdKyq-wBdyb42ubMUUbMy7QsijqK7A?e=oYqSsb>

<https://portal.gulfcouncil.org/EFHreview.html>

| <u>Gulf of Mexico EFH Eco-Region</u>   | <u>Estuarine</u>                    | <u>Nearshore</u>         | <u>Offshore</u>          |
|--|-------------------------------------|--------------------------|--------------------------|
| <u>Eco-Region 1: South Florida</u><br>(Florida Keys north to Tarpon Springs, Florida)  | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |
| <u>Eco-Region 2: North Florida</u><br>(Tarpon Springs, Florida, north and west to Pensacola Bay, Florida)                      | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |
| <u>Eco-Region 3: East Louisiana, Mississippi, and Alabama</u><br>(Pensacola Bay, Florida, west to the Mississippi River Delta) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <u>Eco-Region 4: East Texas and West Louisiana</u><br>(Mississippi River Delta west and south to Freeport, Texas)              | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |
| <u>Eco-Region 5: West Texas</u><br>(Freeport, Texas south to the U.S./Mexico border)   | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |

#### 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 <input checked="" type="checkbox"/> NO <input type="checkbox"/> |
| 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. |   |

EFH for red drum (*Sciaenops ocellatus*) (larvae, early juveniles, adults), grey snapper (*Lutjanus griseus*) (adults), Spanish mackerel (*Scomberomorus maculatus*) (adults), cobia (*Rachycentron canadum*) (eggs, larvae), lane snapper (*Lutjanus synagris*) (larvae, post larvae, early juvenile), brown shrimp (*Penaeus aztecus*) (all life stages), pink shrimp (*Penaeus duorarum*) (all life stages), and white shrimp (*Penaeus setiferus*) (all life stages) is present in the project area. Primary categories of affected EFH would include estuarine water bottoms, estuarine water column, submerged aquatic vegetation, and estuarine emergent marsh.

|   |   |
|---|---|
| Will this project have beneficial effects to EFH?   | YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> |
| If yes, please describe how your project will have beneficial effects the text box below: |   |

N/A

|   |   |
|---|---|
| <i>Will this project have adverse effects on EFH?</i>   | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> |
| <i>If yes, please describe what type of adverse effects your project will cause to EFH in the text box below:</i><br>Placement of pilings would result in short-term, minor impacts to water quality as a result of resuspension of sediment by vessels (barges, tugs, skiffs, etc.) moving in and out of the project area and construction of the pier. The suspended sediment may be transported into surrounding wetlands, waterways, and the Mississippi Sound. However, the area is currently exposed to elevated turbidity levels as a result of resuspension of sediment from river transport, erosion of existing shoreline and frequent storms, tides, and other typical weather events. Best management practices, along with other avoidance and mitigation measures required by state and federal regulatory agencies, would be employed to minimize potential water quality and sedimentation impacts. Impacts from turbidity would be minor, short term, and limited in spatial extent. In addition to turbidity, the water quality could be impacted by leaks or spills of fuel and lubricants used by vessels and other equipment during the construction of the breakwater. Appropriate best management practices, such as routine maintenance, inspection, and proper refueling of construction equipment, would be used to prevent, control, and mitigate impacts. |   |

H.

N\_O|A\_A|E\_E|S\_S|A\_A|S\_S|p\_p|e\_e|c\_c|e\_e|s\_s|a\_a|n\_n|d\_d|C\_C|r\_r|i\_i|t\_t|i\_i|c\_c|a\_a|H\_H|a\_a|b\_b|i\_i|t\_t|a\_a|t\_t|a\_a|n\_n|d\_d|E\_E|f\_f|f\_f|e\_e|c\_c

*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.**

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](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.

| <b>Species and/or Critical Habitat</b> | <b>CH Unit (if applicable)</b> | <b>Location</b><br>(Sea turtles and Gulf Sturgeon <b>only</b> ) | <b>Determinations</b><br>(see definitions below) | <b>For "No Effect", please select justification.</b> |
|--|--------------------------------|---|--|--|
| Green Sea Turtle (T)                   |                                | Marine  | May Affect, Not Likely to Adversely Affect       | Choose an item.                                      |
| Loggerhead Sea Turtle (T)              |                                | Marine  | May Affect, Not Likely to Adversely Affect       | Choose an item.                                      |
| Kemp's Ridley Sea Turtle (E)           |                                | Marine  | May Affect, Not Likely to Adversely Affect       | Choose an item.                                      |
| Gulf Sturgeon (T)                      |                                | Marine  | 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.                                      |

### Determination Definitions

Please make the appropriate choice in the drop down menus for both species and designated critical habitat listed in the first 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. The IPaC website can be found here: <https://ipac.ecosphere.fws.gov/>.*

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](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.

| <b>Species and/or Critical Habitat</b> | <b>CH Unit (if applicable)</b> | <b>Location (Sea turtles and Gulf Sturgeon <u>only</u>)</b> | <b>Determinations (see definitions below)</b> | <b>For "No Effect", please select justification.</b> |
|--|--------------------------------|---|---|--|
| West Indian Manatee                    |                                |   | May Affect, Not Likely to Adversely Affect    | Choose an item.                                      |
| Eastern Black Rail                     |                                |   | May Affect, Not Likely to Adversely Affect    | Choose an item.                                      |
| Black Pinesnake                        |                                |   | No Effect                                     | No suitable habitat action area                      |
| Gopher Tortoise                        |                                |   | No Effect                                     | No suitable habitat action area                      |
| Alligator Snapping Turtle              |                                |   | May Affect, Not Likely to Adversely Affect    |  |
| Louisiana Quillwort                    |                                |   | No Effect                                     | Species does not occur within action area            |

|                   |  |  |           |                                 |
|-------------------|--|--|-----------|---------------------------------|
| Monarch Butterfly |  |  | No Effect | No suitable habitat action area |
|-------------------|--|--|-----------|---------------------------------|

### 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.*

#### **Gulf Sturgeon**

All activities will take place in shallow waters near the shoreline allowing sufficient area for passage of individuals. Gulf sturgeon are highly mobile and will likely avoid the area due to project activity and noise. Normal behavior patterns of Gulf sturgeon are not likely to be disrupted by the project activities because of the short-term localized nature of the activities

and the ability of Gulf sturgeon to avoid the immediate area.

West Indian Manatee - May be present in the project area vicinity during the months of June through November. However, this species is highly mobile and will likely avoid the area due to project activity and noise. Neither the construction nor final structure or usage is anticipated to adversely affect this species.

Eastern Black Rail (BLRA) - Although historically uncommon in Mississippi, the species may be found in coastal marshes during the winter months (i.e., non-nesting season). While it can be found in salt, brackish, and freshwater marshes, it has a very specific niche habitat, requiring dense herbaceous vegetation (i.e., rushes, grasses, sedges) to provide shelter and cover. This species is highly mobile and will likely avoid the area due to project activity and noise during construction. The final structure and usage are not anticipated to adversely affect this species.

Potential Avoidance and Minimization Measures include the following:

1. Avoid or minimize use of heavy machinery and ground disturbance activities.
2. Areas of suitable habitat should not be subjected to water management practices that alter traditional water levels or the seasonally normal drying patterns and rates. Sharp rises in water levels are especially disruptive to feeding and nesting BLRA.
3. The introduction of contaminants, fertilizers, or herbicides into marsh wetlands that contain suitable BLRA habitat should be avoided, especially those compounds that could adversely alter the diversity and numbers of invertebrates, or that could substantially change the composition of marsh vegetation.
4. Project construction should be conducted outside of the wintering season October-April.

Alligator Snapping Turtle - May be present in the project area vicinity. This species is highly mobile and will likely avoid the area due to project activity and noise during construction. If the species is observed, work will cease until the individuals have vacated the area of their own volition.

*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

|                                     |  |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | <b>NMFS Protected Species Construction Conditions (2021)<sup>1</sup></b>               |
| <input type="checkbox"/>            | <b>NMFS Measures for Reducing the Entrapment Risk to Protected Species<sup>1</sup></b> |
| <input checked="" type="checkbox"/> | <b>NMFS Vessel Strike Avoidance Measures (2021)<sup>1</sup></b>                        |

#### 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-Consequences\\_508.pdf](http://www.gulfspillrestoration.noaa.gov/sites/default/files/wp-content/uploads/Chapter-6_Environmental-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)

None.

#### **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.*

N/A

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.*

N/A

#### **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.

---

<sup>1</sup> <https://www.fisheries.noaa.gov/southeast/consultations/regulations-policies-and-guidance>

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

See Section F.

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:

|                                     |   |
|-------------------------------------|---|
| <input type="checkbox"/>            | NMFS Southeast U.S. Marine Mammal and Sea Turtle Viewing Guidelines <sup>2</sup>        |
| <input checked="" type="checkbox"/> | NMFS Protected Species Construction Conditions (2021) <sup>3</sup>                      |
| <input checked="" type="checkbox"/> | NMFS Measures for Reducing the Entrapment Risk to Protected Species (2012) <sup>3</sup> |

<sup>2</sup> <https://www.fisheries.noaa.gov/topic/marine-life-viewing-guidelines>

<sup>3</sup> <https://www.fisheries.noaa.gov/southeast/consultations/regulations-policies-and-guidance>

|                                     |   |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | NMFS Vessel Strike Avoidance Measures and Reporting for Mariners (2021) <sup>3</sup>  |
| <input type="checkbox"/>            | NMFS Reproducing and posting outreach signs: Dolphin Friendly Fishing Tips sign, Don't Feed Wild Dolphins sign <sup>4</sup> |

If not listed above, please describe any additional BMPs or conservation measures that may be implemented for marine mammals. **N/A**

### **M. Bald Eagles**

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

<sup>4</sup> <https://www.fisheries.noaa.gov/southeast/consultations/protected-species-educational-signs>

measures to the extent practicable:

<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>

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                             |
|--------------------------|--------------------------|--------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | Oyster Reef Creation and Enhancement |
| <input type="checkbox"/> | <input type="checkbox"/> | Marine Debris Removal                |
| <input type="checkbox"/> | <input type="checkbox"/> | Construction of Living Shorelines    |
| <input type="checkbox"/> | <input type="checkbox"/> | Marsh Creation and Enhancement       |
| <input type="checkbox"/> | <input type="checkbox"/> | 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