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 February 3, 2022

To: Field Supervisor, Ecological Services Office, Jackson, MS

From: Chief, Planning and Compliance Branch, Deepwater Horizon Gulf Restoration Office

Subject: Informal Consultation Request for Implementation of Four Restoration Projects proposed in the Mississippi Trustee Implementation Group's Restoration Plan #3

After the Deep Water Horizon (DWH) oil spill, federal and state natural resource trustee agencies (Trustees) came together to assess the effects of the spill and plan for the restoration of injured natural resources. As part of the legal settlement reached with BP in 2016, the Trustees prepared a Final Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental Impact Statement (Final PDARP/PEIS), to provide the framework for DWH oil spill restoration across the Gulf. The Final PDARP/PEIS established Trustee Implementation Groups (TIGs) that develop specific plans for, developing, selecting, and implementing specific restoration actions under the Final PDARP/PEIS.

The Mississippi TIG (MS TIG) consists of one Mississippi state trustee agency and four federal trustee agencies: the Mississippi Department of Environmental Quality; the United States Department of Commerce, represented by the National Oceanic and Atmospheric Administration; the United States Department of the Interior, represented by the United States Fish and Wildlife Service and the National Park Service; the United States Department of Agriculture; and the United States Environmental Protection Agency. The MS TIG has developed the *Mississippi Trustee Implementation Group Draft Restoration Plan and Environmental Assessment #3: Habitat Projects on Federally Managed Lands; Sea Turtles; Marine Mammals; Birds; and Provide and Enhance Recreational Opportunities*, which closed for public comment on January 26, 2022. Projects in this plan are being evaluated as potential restoration projects to restore natural resources along the Gulf Coast that were injured as a result of the spill. We have reviewed these projects in accordance with Section 7 of the Endangered Species Act (ESA) of 1973 as amended (16 U.S.S 1531-1544) and have made a May Affect, Not Likely to Adversely Affect determination for these projects. For your information, brief project descriptions and species determinations are provided in Tables 1 and 2 below. Detailed project descriptions are found in the attached Biological Evaluations (BE). Some species impacted are also covered by existing environmental documentation as indicated in Table 2 and in the BEs. This memo requests your concurrence with our determinations for the proposed projects.

Within the BE form, we have also reviewed the proposed projects for impacts to bald eagles (*Haliaeetus leucocephalus*) in accordance with the Bald and Golden Eagle Protection Act of 1940 as amended (16 U.S.C. 668-668c), impacts to migratory birds in accordance with the Migratory Bird Treaty Act of 1918 as amended (16 U.S.C. 703-712), and impacts to West Indian manatee (*Trichechus manatus*) in accordance with the Marine Mammal Protection Act of 1972 as amended (16 U.S.C. 1361-1383b, 1401-1406, 1411-1421h) and we determined that take would be avoided.

To facilitate your response, should you concur with our determination, we have attached a template response letter. If you have questions or concerns regarding this request, please contact Michael Barron, Fish and Wildlife Biologist, at 251-421-7030 or michael_barron@fws.gov.

Attachments (5)

- BE form including project maps (4)
- Template response letter

Table 1. Brief descriptions of the projects in MS TIG RP/EA #3.

Proposed Project	Brief Description
Bird Stewardship and Enhanced Monitoring in Mississippi	This proposed project would increase the acreage of habitat under stewardship and management on the Mississippi barrier islands (Petit Bois, Horn, Ship, and Cat) and includes more than 62 miles of beach and shoreline. Proposed stewardship and management would provide a number of benefits, including, but not limited to: increasing bird nesting success, survival, and production; increasing public awareness; establishing and implementing an adaptive management framework to assess threats; implement strategies to address those threats; and monitor success within and across season, where appropriate. Years 1-2: Planning activities including siting, planning, coordination, and logistics/design. Years 2-7 Activities will include: Stewardship Site Assessments; Site Management; Vegetation Management; Chemical Treatment; Mechanical Clearing; Non-Native Mammal Control/Predator Control; Biological Monitoring; Monitoring of Nest Sites; Monitoring of Winter Migrants; Site Protection including Signage and Symbolic Fencing and Stewards; Outreach and Engagement; Tracking and Banding
Improve Native Habitats by Removing Marine Debris from Mississippi Barrier Islands	This proposed project would remove marine debris on Mississippi barrier islands managed by the National Park Service's Gulf Islands National Seashore (including all of Petit Bois, Horn, and Ship islands and a portion of Cat Island). The project would reduce threats to terrestrial and aquatic wildlife species from entanglement and ingestion, reduce transport of invasive species and toxicity, and reduce effects to humans. Project activities considered in the assessment of the environmental consequences include: Surveys including ground surveys, drones, or Unmanned Aerial Vehicles to conduct pretreatment planning and post treatment monitoring; Removal of large marine debris (pilings, pontoons, boats, tanks, etc.) including the use of marine salvage crews to dismantle in place; Removal of large debris using barge-mounted grapplers, excavators, cranes or track loaders. The excavator would remove items using a chain to hoist items onto the barge, rather than trying to dig items out using a bucket. This should result in less disturbance of the area around the debris to be removed; Annual beach clean ups (entire shoreline) using

	volunteers; Use of pedestrian crews/hand tools to manually clean up scattered and concentrated debris sites, particularly in wetland, seagrass and dune/meadow habitats; Transporting crews to location by boat, specific areas accessed by foot or light equipment; Coordination, as needed, with U.S. Coast Guard and National Park Service for hazardous waste removal (fuel jugs, oil drums, etc.). Fieldwork would be performed opportunistically throughout each year. The initial year could include debris mapping, staffing, environmental compliance, awarding a contract for debris removal, and coordination of volunteer efforts. Years two and three would focus on continuing volunteer cleanup efforts, additional contracting removal needs, additional staff cleanup efforts, and annual progress reporting. The anticipated project duration is three years.
Maintaining Enhanced Marine Mammal Stranding Network Capacity and Diagnostic Capabilities	This proposed project would focus on maintaining the increased capacity of the Mississippi Marine Mammal Stranding Network (MMSN) in order to continue an enhanced ability to respond to stranded, sick, injured, or deceased marine mammals. Project activities include: Providing financial support for personnel, equipment, stranding, training, or other project-related travel, vehicle fuel, and maintenance of vehicles/vessels/trailers to federally permitted MS MMSN organizations to rapidly respond to live and dead stranded marine mammals in Mississippi; Performing field necropsies on carcasses, where applicable; Maintaining current average response time to live or dead stranded marine mammals; and Maintaining MMSN's capacity to respond to unusual natural or anthropogenic events (e.g., oil spills, harmful algal blooms, freshwater events, hurricanes). The anticipated project duration is five years.
Maintaining Enhanced Sea Turtle Stranding Network Capacity and Diagnostic Capabilities	This proposed project would seek to continue the enhanced response and data collection efforts of the Sea Turtle Stranding Network to further understand mortality, inform population studies, and enhance potential for species conservation, recovery and rehabilitation. Stranding response and diagnostic follow-up of stranded animals maintained at the enhanced capacity would allow for current stranding response and data collection efforts in the Mississippi Restoration Area to be continued. Personnel would work to ensure efficient and timely response to sea turtle strandings during peak times are maintained. This includes but is not limited to increases in stranding network personnel, equipment and supplies, and data

	enhancement and coordination. The anticipated project duration is three years.

Table 2. Summary of ESA determinations for proposed projects in MS TIG RP/EA #3.
(NE = No Effect, NLAA = May Affect, Not Likely to Adversely Affect, C = Covered By Existing Consultation/Environmental Documentation; -- = Not Applicable)

ESA Species Under USFWS Jurisdiction	**Status**	**Bird Stewardship and Enhanced Monitoring in Mississippi**	**Improve Native Habitats by Removing Marine Debris from Mississippi Barrier Islands**	**Maintaining Enhanced Marine Mammal Stranding Network Capacity and Diagnostic Capabilities**	**Maintaining Enhanced Sea Turtle Stranding Network Capacity and Diagnostic Capabilities**
Piping Plover (*Charadrius melodus*)	Threatened	NLAA	NLAA	NLAA	NLAA
Piping Plover (CH)	-	NLAA	NLAA	NLAA	NLAA
Red Knot (*Calidris cantutus rufa*)	Threatened	NLAA	NLAA	NLAA	NLAA
West Indian Manatee (*Trichechus manatus*)	Threatened	NE	NE	C	C
Green Sea Turtle (*Chelonia mydas*)	Endangered	NE	NE	NLAA	C
Hawksbill Sea Turtle (*Eretmochelys imbricata*)	Endangered	NE	NE	NE	C
Kemp's Ridley Sea Turtle (*Lepidochelys kempii)*	Endangered	NLAA	NLAA	NLAA	C
Loggerhead Sea Turtle (*Caretta caretta*)	Threatened	NLAA	NLAA	NLAA	C
Loggerhead Sea Turtle (CH)	-	NLAA	NLAA	NLAA	C
Leatherback Sea Turtle (*Dermochelys coriacea*)	Endangered	NE	NE	NE	C
Gulf Sturgeon *(Acipenser oxyrinchus desotoi)*	Threatened	NE	--	NLAA	--
Gulf Sturgeon (CH)	--	NE	--	NLAA	--

In Reply Refer To:

Date

Memorandum

To: Chief, Planning and Consultation Branch, Gulf Restoration Office, Fairhope, AL

From: Field Supervisor, [Field Office Name]

Subject: Informal Consultation and Conference for the Proposed [project name], [project location]

This memorandum acknowledges our receipt of your memorandum on [month day year]. This response is in accordance with Section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.) (ESA). We have reviewed your proposed project(s) and concur with your [month day year] determinations for endangered and threatened species, their critical habitat, and at-risk species (should they become listed). We based our concurrence on the justification below. Where more than one justification was applicable, multiple boxes are checked and additional comments are added.

☐ Species-specific surveys were conducted and there are no endangered, threatened, or at-risk species or designated critical habitat on site. Comments:

_____

_____

_____

☐ Endangered, threatened, and at-risk species are not known from and are not expected to occur within the vicinity of the proposed project. Comments:

_____

_____

_____

☐ Appropriate avoidance and minimization measures have been included within the project description to ensure that any effects to listed species (or at-risk species should they become listed) are insignificant or discountable. Comments:

_____

_____

_____

☐ Critical habitat is not present on site and does not occur within the vicinity of the proposed project. Comments:

_____

_____

_____

☐ Appropriate avoidance and minimization measures have been included within the project description to ensure PCEs and/or critical habitat will not be adversely modified or destroyed. Comments:

_____

_____

_____

☐ The proposed project is completely beneficial to the listed or at-risk species and/or critical habitat considered. Comments:

_____

_____

_____

Unless the project description changes, or new information reveals that the effects of the proposed action may affect listed species in a manner or to an extent not considered, or a new species or critical habitat is designated that may be affected by the proposed action, no further action pursuant to the ESA is necessary.

If you have questions, please contact [Field Office lead] at [###-###-####] or email [first_last@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): Mississippi Department of Environmental Quality

Contact Name: Valerie Alley, MDEQ Program Management Division Chief

Phone: 601 961-5182 Email: valley@mdeq.ms.gov

Project Name: Bird Stewardship and Enhanced Monitoring in Mississippi

DIVER ID# Click to enter text TIG: Mississippi TIG Restoration Plan # Restoration Plan # 3

B. Project Phase and Supporting Documentation

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

Planning/Conceptual ☐ Construction/Implementation ☒ 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.

Supporting Documentation

Please attach any maps, aerial photographs, or design drawings that will support the information in 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
- Map of project area with elements proposed (polygons showing proposed construction elements) Map of action area with critical habitat units or sensitive habitats overlayed

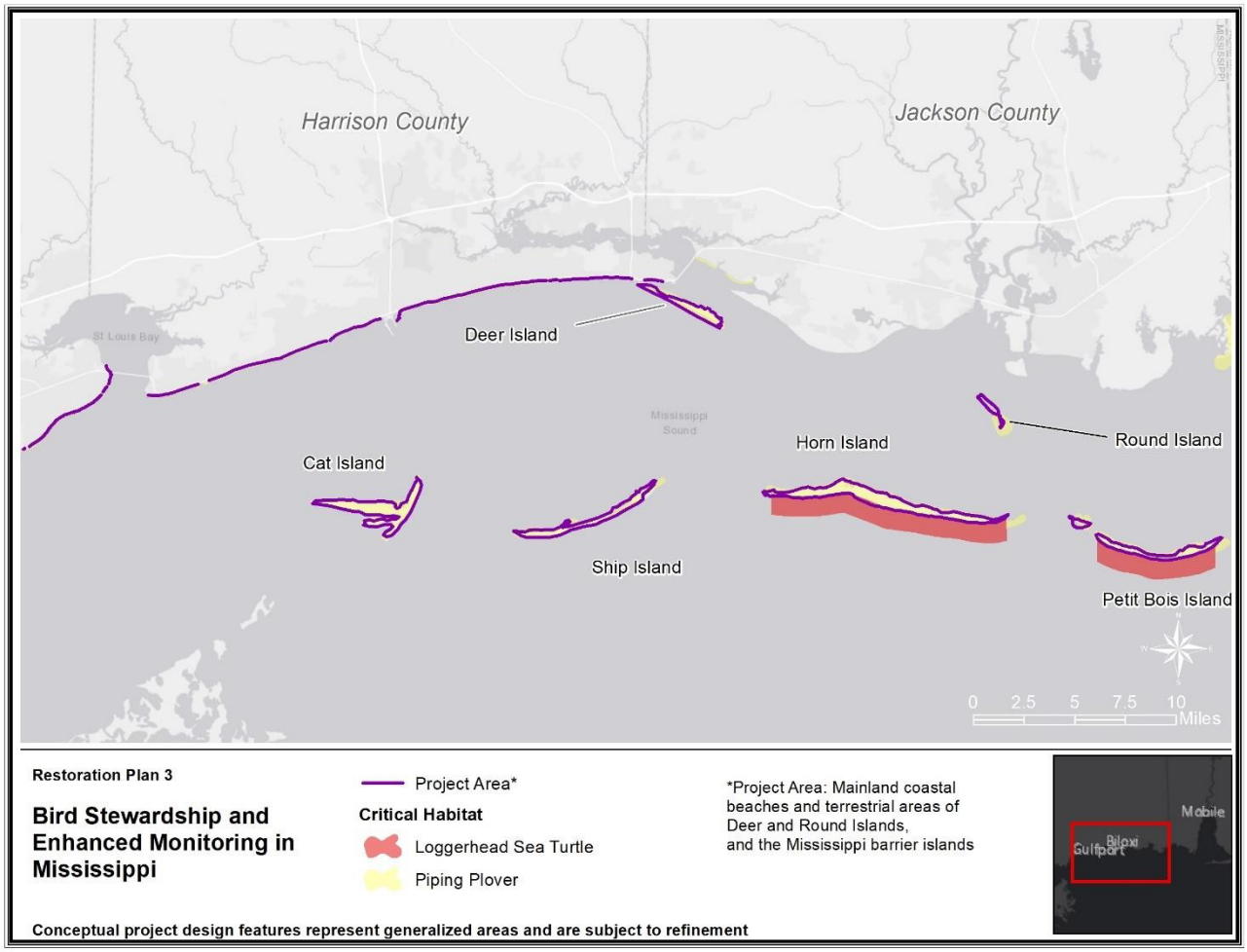


Figure 1 – Project Area

C. Project Location

I. State and County/Parish of action area

Mississippi, Harrison and Jackson counties

Specific locations to be determined on mainland beaches, coastal islands, and Mississippi's barrier islands. See Figure 1.

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] Cat Island: centroid lat 30.227561,long -89.120128; Ship Island: centroid lat 30.209264,long -88.968298; Horn Island: centroid lat 30.245662, long -88.717261; Petit Bois Island centroid lat 30.201817,long -88.475538 Round Island centroid lat 30.305466,-88.595528, Deer Island centroid lat 30.375600, long -88.849275, mainland beaches: centroid lat 30.378044, long -89.042285.

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.

NEPA analysis for this project will be included in the MS TIG Restoration Plan # 3 that is expected to be released by the MS TIG in December 2021.

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

Name of Person Completing this Form: Alane Young
Name of Project Lead: Tina Nations
Date Form Completed: 5-25-21
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 CH is not designated in the area, then describe any suitable habitat in the area

The action area includes the mainland coastal beaches of Mississippi (Hancock, Harrison, and Jackson Counties), Deer and Round Islands, and the Mississippi barrier islands (Figure 1).

Mainland Beaches and Coastal Islands

The majority of the shoreline in coastal Mississippi consists of man-made beaches waterward of concrete seawalls. These beaches were built to reduce risk of storm damage to the roadways and seawalls and also to provide recreation and aesthetic benefits. These artificial beaches are intensively managed through regular grading and renourishment efforts and are often less than 200 feet wide. Invertebrates associated with natural sand shores recolonize artificial beaches after the treatments have been completed. Wind and wave action gradually work the sand back into the Mississippi Sound. The slope is relatively flat from the mean high waterline to the seawall. Resident and migratory birds contribute greatly to the diversity found along artificial

sand beaches, including least terns, gulls, black skimmers, piping plover, Wilson's plover, and several other shorebird species. Numerous colonial waterbird nesting sites exist on beaches in Harrison and Hancock counties. These nest sites are managed through partnerships with Audubon, counties, and municipalities. Artificial backshore dunes have been installed over the years that include grass plantings of sea oat and panicum species.

Mississippi's coastal islands including Deer Island and Round Island. Deer Island is a mixture of high, mid-elevation and low tidal saltmarshes that make up approximately fifty percent of the island. Most of the remainder is Slash Pine maritime forest with smaller areas dominated by Live Oak. Other habitats include beach/dune, salt flats, and freshwater ponds/marshes. Large numbers of gulls, terns, and shorebirds frequent the island's sandy spits and forage along the shore and in the waters. Two small heron rookeries have been active for many years. Species include Great Blue Heron, Snowy Egret, and Green Heron. Number of breeding pairs is probably less than 100. The island is designated as critical wintering habitat for the Piping Plover (Unit MS-12). Similarly, Round Island is composed primarily of narrow sand beaches, Slash pine maritime forest, and an herbaceous layer dominated by *Spartina patens*. Erosion is the primary threat to Round Island, although efforts have been made to slow erosion through breakwaters on the south side of the island. Located northwest of Round Island is a 220-acre dredge spoil island created in 2017 by the state of Mississippi. The island berms are composed primarily of sandy materials; Dredge disposal obtained from the East Pascagoula River Channel is in the interior of islands and is composed mainly of unconsolidated sediments. Dense areas of Spartina alterniflora (smooth cordgrass) have colonized the low marsh zone (Figure 2). *Spartina patens* and *Distichlis spicata* have formed dense patches in the intermediate and high marsh areas in addition to small areas of *Scirpus spp.*, *Salicornia virginica* and *Batis maritima*. In dry areas at higher elevations, *Cyperus esculentus* is ubiquitous and *Baccharis halimifolia* has colonized as the primary shrub. Several colonial waterbird nesting sites were established after the island was constructed including one of the largest sandwich tern colony documented in Mississippi in addition to least tern and black skimmer colonies. The number and size of these colonies have diminished as the sandy berm becomes vegetated. There are plans through Regionwide TIG funds to manage the vegetation in order to promote larger colonial waterbird nesting sites.

Barrier Islands

The Mississippi barrier islands form the southern boundary of the Mississippi Sound and are located approximately 6–12 miles offshore. From east to west, they include Petit Bois Island, Horn Island, Ship Island, and Cat Island, and are located within the administrative boundaries of the Gulf Islands National Seashore (GUIS) Mississippi unit under the jurisdiction of the National Park Service (NPS), however portions of Cat Island and Horn Island are privately and state-owned. Petit Bois and Horn Islands also have been designated by the U.S. Congress as the Gulf Islands Wilderness under the Wilderness Act. Generally, the islands feature broad, sandy beaches to the north with dunes on the southern Gulf side. The typical island profile includes: an average width of less than a half-mile; a Gulf-side broad beach backed by dunes;

intermittent beach and marsh zones in the interior of the island; and, an additional dune bank on the mainland side. With the exception of Cat Island, the barrier islands have migrated westward over time. These islands will continue to migrate, as a result of the longshore littoral drift that moves sand from east to west across the barrier island chain. Relevant hydrologic and coastal processes associated with the barrier islands relate primarily to the effects of waves and longshore currents on island stability over time. As noted, the prevailing winds and resultant longshore currents are the drivers behind the net east-towest sand transport for any given island, as well as for the overall island system under evaluation. Wave energy is a key factor in sediment resuspension and promotion of lateral transport through longshore water movements.

The barrier islands and surrounding waters contain important natural, cultural, and recreational resources. They include habitat for several endangered and threatened animals in diverse ecosystems, serve as critical nursery habitat for marine flora and fauna, serve as a stopover for migratory birds, and provide recreational opportunities.

a. Waterbody

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.

This project would occur in terrestrial habitats on Mississippi barrier islands for stewardship and banding and tracking activities. Banding and tracking would also occur on Mississippi mainland and coastal island beaches.

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.

Adjacent, less than 0.5 miles in some areas, to Gulf of Mexico or state estuaries or bays

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.

Mainland beaches are bordered to the landward side by a seawall (ca 1920s) and Highway 90 and adjacent residential and commercial development. Many structures and developments exist along mainland beaches of the Gulf of Mexico coast. This project could occur near parking lots, roadways, and docks, or piers. On Horn Island there is a communications tower. There are navigational structures in various locations. There are no structures on Round Island. There are no structures on the barrier islands

with the following exceptions. Ship Island has National Park Service buildings and structures including a ferry pier, pedestrian boardwalk, concession stand, picnic pavilions with restrooms and outdoor showers. There is also a historic fort (Fort Massachusetts) located on Ship Island. Cat Island has a few private residences on North Bayou on privately owned land. There is a ferry dock owned by the State of Mississippi on Deer Island.

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.).

Terrestrial habitats in the project area include artificial beaches, natural beaches on the coastal islands, and beach and dune habitats on the barrier islands. Artificial sand beaches are often less than 200 feet wide and are accompanied by a cement seawall that minimizes erosion along the mainland. Wind and wave action gradually work the sand back into the Mississippi Sound which leads to beach replenishment using sand that is periodically pumped from nearshore areas. The beach and dune systems of the islands consist of well-sorted, fine to coarse sand containing large quantities of quartz and minor amounts of shell and heavy minerals. Both shorelines experience erosion and accretion on an ongoing basis,

as prevailing currents move sand westward. Sand movement and storms have caused the islands to decrease in size over the past century. The backshore is the area of the beach between the high tide line and the dunes and serves as a transition zone to the vegetated landscape. The wrack line forms at the edge of the high tide mark and seaborne debris and dead animals accumulate, creating foraging grounds for many species. Beach vegetation is usually very sparse and confined to the upper edges of the backshore. Sea oats, beach morning glory and gulf bluestem are the most capable of tolerating the harsh conditions of the backshore. A few animals, such as the ghost crab, amphipods and various insects, are permanent residents.

g. 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

h. Soils and Sediments

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

Beaches and nearshore bird habitats along the Gulf Coast may contain a variety of fine sands and well-drained soils. Beach sands consist of well-sorted, fine to coarse sand containing large quantities of quartz and minor amounts of shell and heavy minerals.

i. Land Use

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

This project could occur in various beach and nearshore bird nesting, foraging, and roosting habitats. Areas along the coast vary in the degree of developed from undeveloped to high intensity development which includes areas used by the pubic for recreational purposes such as beach-going, hiking, and sight-seeing. Deer Island, Ship Island, Cat Island, west Petit Bois Island and Round Island and the mainland beaches contain dredged materials from habitat restoration efforts.

j. Essential Fish Habitat

If applicable. Describe any designated Essential Fish Habitat within the project area

N/A

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 proposed project would increase the acreage of habitat under stewardship and management on the Mississippi barrier islands (Petit Bois, Horn, Ship, and Cat) and includes more than 62 miles of beach and shoreline, much of which were directly impacted by the Deepwater Horizon oil spill and response actions. Proposed stewardship and management could provide a number of benefits, including, but not limited to: increasing bird nesting success, survival, and production; increasing public awareness; establishing and implementing an adaptive management framework to assess threats; implement strategies to address those threats; and, monitor success within season, where appropriate, and across seasons.

The Implementing Trustees for this proposed project would be the Department of the Interior and the Mississippi Department of Environmental Quality (MDEQ). Project implementation is anticipated to occur over a period of 7 years. The proposed project could be categorized into two tasks: 1) Stewardship and 2) Biological Monitoring. This project does not involve in-water work. Terrestrial work is described below.

Years 1-2 (Stewardship and Biological Monitoring)
Planning activities, including siting, planning, coordination, and logistics/design, would occur during Years 1 to 2.

Years 2-7 Stewardship
Site Assessments: Visits would include an assessment of the current environmental conditions, public and/or private uses of the site, plans forhabitat management, habitat

restoration (e.g. plantings), or other activities on the site or nearby which may affect the quality of the site for nesting birds. If funding is available site assessments could occur in Year 1 as well.

Site Management: Upland vegetation management and non-native mammal control/predator control includes:

Vegetation Management

- Surveys including ground surveys, drones, or Unmanned Aerial Vehicles (UAVs) to conduct pre-treatment planning and post treatment monitoring for invasive plant species.
- Chemical treatment would consist of herbicide application methods, to include foliar spraying, girdle, hack and squirt, basal bark, and cut stump.
- Mechanical clearing would include hand-pulling of nuisance vegetation or use of small equipment (e.g., hand saws, chain saws) to clear tree seedlings. Pulled seedlings would be left hanging on the native vegetation, piled, or disposed of in trash bags and placed in dumpsters where appropriate.
- Transport of crews to boat, specific areas would be access by foot or by motorized UTVs/light equipment.

Non-Native Mammal Control/Predator Control Surveys including ground surveys, drones, or Unmanned Aerial Vehicles (UAVs) to conduct pre-treatment planning and post treatment monitoring for non-native mammalian species.

- Monitoring transects for tracks and scat to detect presence and estimate population levels.
- Non-lethal methods include fencing shorebird nests and colonies, installing perch deterrents, and providing live traps and nets. Examples of lethal methods include foothold traps; snares; walk-in cage traps; dog-proof traps; box, cage, and corral traps; shooting; and manual removal of ghost crabs (NPS, Southeast Regional Office, 2018).
- Collection and transporting of carcasses to a USDA permitted facility for incineration.
- NPS staff or contractors would be transported by boat, accessing sites by motorized vehicles (UTVs) on nonwilderness islands but only on foot in wilderness areas (Petit Bois and Horn).
    - Monitoring of nest sites:
        - Weekly monitoring of breeding bird colonies (e.g., colony size, reproductive output, survival rates), during nesting season.
        - Monitoring of winter migrants would be conducted annually along pre-determined survey routes and would occur in three survey pulses corresponding to fall migration, winter (overwinter) and spring migration.

Site Protection: Signage and Symbolic Fencing: As priority nesting species begin courtship

and nest-site selection, stewardship teams could install signage and symbolic fencing at identified sites and create vegetative buffers. Temporary signage and roping would be removed at the end of nesting season.

Site Protection – Stewards: During high beach-use days, trained stewards, volunteers, and/or law enforcement would work in shifts to oversee nesting birds within symbolic fencing, ensuring that visitors do not disturb nests.

Outreach and Engagement- Increase beach visitor awareness of nesting birds by having stewards with spotting scopes and binoculars share views of incubating adults, cryptic eggs in nests, and hatchlings with interested visitors from a safe distance.

Years 2-7 Biological Monitoring
Nest Site and Bird Monitoring: For monitoring of breeding bird colonies, biological monitoring would be conducted weekly at each colony to estimate colony size and reproductive output and to determine colony survival rates for each year of the project during nesting season. Monitoring of winter migrants would be conducted annually along predetermined survey routes and would occur in three survey pulses, corresponding to fall migration, winter (overwinter) and spring migration.

Tracking and Banding: Year 1 is anticipated to include project planning including analyses of which colonies to select for banding and marking, determination of suitable transmitters, and other project logistics. The objectives below would be met by transmitting, banding and marking individual birds during the nesting season in Year 2. Years 2-7 would include monitoring, data analysis, and reporting. Objectives include: document residency time in specific habitats, patterns of movements among habitats, and inter- and intra-individual variability in habitat use; document explicit links between colonies and foraging or wintering sites; document site fidelity to mainland and barrier island nesting colonies; and document species' ranges at multiple time scales (e.g., daily, seasonally, annually). The contractor (or whoever ends up doing the banding/tagging) will need the handling/tagging permit(s) first- this permit # should be included in the NPS research permit application. The wilderness part (minimum requirements analysis) will be handled as part of the NPS research permit app if required.

National Park Service. 2018. Coastal Species of Concern Predation Management Plan and Programmatic Environmental Assessment. Southeast Regional Office. U.S. Department of the Interior. September.

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

Signing and symbolic fencing would be installed annually prior to nesting in years 2 – 7 and removed at the end of the nesting season. National Park Service personnel would be present for all operations and would ensure that impacts to protected species would be avoided.

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☒
Will fishing 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)?*

Installation of signage and symbolic fencing would be installed and removed with hand tools. Access to the selected sites will be on foot, by ATV, or by truck.

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 Species & 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 G. and proceed to Section H.

☒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.

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.

Identify if Gulf sturgeon are in marine or in freshwater in your Species and/or Critical Habitat list to determine which federal agency will perform the analysis (e.g. Gulf sturgeon CH - marine). Identify if sea turtles are in water or on land in your Species and/or Critical Habitat list to determine which federal agency will perform the analysis (e.g. Loggerhead sea turtle CH - terrestrial).

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.	Select Most Appropriate	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

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.

Critical Habitat No Destruction = When the proposed action will not diminish the value of critical habitat.

H. USFWS Species & 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 G. and proceed to Section H.

☐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 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.

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.

Identify if Gulf sturgeon are in marine or in freshwater in your Species and/or Critical Habitat list to determine which federal agency will perform the analysis (e.g. Gulf sturgeon CH - marine). Identify if sea turtles are in water or on land in your Species and/or Critical Habitat list to determine which federal agency will perform the analysis (e.g. Loggerhead sea turtle CH - terrestrial).

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.**
Piping Plover		Terrestrial	May Affect, Not Likely to Adversely Affect	Choose an item.
Piping Plover CH	MS-1 through MS-13	Terrestrial	May Affect, Not Likely to Adversely Affect	Choose an item.
Red Knot		Terrestrial	May Affect, Not Likely to Adversely Affect	Choose an item.
Loggerhead Sea Turtle CH	LOGG-N-35 LOGG-N-36	Terrestrial	May Affect, Not Likely to Adversely Affect	Choose an item.
Loggerhead Sea Turtle		Terrestrial	May Affect, Not Likely to Adversely Affect	Select Most Appropriate
Leatherback Sea Turtle		Terrestrial	No Effect	Species does not occur within action area**Choose an item.**
Kemp's Ridley		Terrestrial	May Affect, Not Likely to Adversely Affect	Select Most Appropriate
Hawksbill Sea Turtle		Terrestrial	No Effect	Species does not occur within action areaChoose an item.
Green Sea Turtle		Terrestrial	No Effect	Species does not occur within action area
Gulf Sturgeon		Riverine/Freshwater	No Effect	Species does not occur within action area

Gulf Sturgeon CH	Unit 2	Riverine/Freshwater	No Effect	Species does not occur within action area
Pearl Darter		Riverine/Freshwater	No Effect	Species does not occur within action area
Inflated Heelsplitter		Riverine/Freshwater	No Effect	Species does not occur within action area
West Indian Manatee		Marine	No Effect	Species does not occur within action area
Eastern Black Rail		Terrestrial	No Effect	No suitable habitat i action area
Mississippi Sandhill Crane		Terrestrial	No Effect	No suitable habitat i action area
Mississippi Sandhill Crane CH		Terrestrial	No Effect	No suitable habitat i action area
Wood Stork		Terrestrial	No Effect	No suitable habitat i action area
Alabama Red-bellied Turtle		Riverine/Freshwater	No Effect	No suitable habitat i action area
Gopher Tortoise		Terrestrial	No Effect	No suitable habitat i action area
Dusky Gopher Frog		Terrestrial	No Effect	No suitable habitat i action area
Dusky Gopher Frog CH	Units 2, 3, 4, 5, 6, and 7	Terrestrial	No Effect	No suitable habitat i action area
Louisiana Quillwort		Terrestrial	No Effect	No suitable habitat i action area
Red-cockaded Woodpecker		Terrestrial	No Effect	No suitable habitat i action area
Black Pine Snake		Terrestrial	No Effect	No suitable habitat i action area
Black Pine Snake CH	Unit 5	Terrestrial	No Effect	No suitable habitat i action area
Eastern Indigo Snake		Terrestrial	No Effect	No suitable habitat i action area
Yellow-blotched Map Turtle		Riverine/Freshwater	No Effect	No suitable habitat i action area
Ringed Map Turtle		Riverine/Freshwater	No Effect	No suitable habitat i action area

Determination Definitions

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.

Critical Habitat No Destruction = When the proposed action will not diminish the value of critical habitat.

I. Effects of the proposed project to the species 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 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.

Stewardship and monitoring activities may affect, but are not likely to adversely affect piping plover (*Charadrius melodus*) and red knot (*Calidris canutus rufa*). Project activities would occur during the colonial waterbird nesting season in Spring and Summer. Piping Plover and Red Knot are migratory species that overwinter in the area. Some lingering migrants may be affected by the start of project activities in the Spring, but would have enough habitat to use in all areas to avoid impacts. Exclusion devices or symbolic fencing, such as post and ropes, would be placed

at the beginning of the nesting season in areas where birds are anticipated to nest, roost or forage, and would be removed at the end of each nesting season when piping plover and red knot populations arrive in the project area. Some wintering piping plover and red knot may still be in the area and may be loafing within the nesting habitat to be protected by post and rope. If present, these birds could be temporarily displaced during installation activities. Winter bird surveys may sometimes be accessed by ATV. ATVS on the beach could be in the vicinity of shorebirds including piping plover and red knot. Monitoring activities of shorebirds during this project may temporarily affect piping plovers and/or red knots. Best Practices will be implemented to minimize any potential effects to the species and include the following measures: 1) Provide all individuals working on restoration activities associated with the project with information in support of general awareness of piping plover or red knot presence and means to avoid birds and their critical or otherwise important habitats, and 2) avoid removal of wrack year-round along the shoreline.

Sea turtles nest in the project area. Nesting adult sea turtles are active on shore during the evenings, and nests lay vulnerable under the sand for weeks. Hatchlings typically emerge at night. Nesting sea turtles and hatchlings would not likely be disturbed by stewardship activities because those activities would occur during daylight hours. ATVs on the beach could be in the vicinity of sea turtles and their habitat. However, every effort would be made to avoid disturbances to nesting sea turtles. Best Practices will be implemented to minimize any potential effects to sea turtles and will include the following measures: 1) If a sea turtle (either adult or hatchling) is observed, maintain at least 200 feet between the turtle and personnel, equipment, or machinery and notify the sea turtle monitoring program. Allow the turtle to leave the area of its own volition. 2) Existing nests would be avoided by at least 10 feet. Predator management may result in long-term, beneficial impacts to nesting sea turtles because removal of predators, potentially including but not limited to coyote and red fox, would decrease the likelihood of nest predation.

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 (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.*

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

- ☐ **USFWS Standard Manatee In Water Conditions**
- ☐ **NMFS Sea Turtle and Smalltooth Sawfish Construction Conditions**[1]

[1] Documents can be found here: http://sero.nmfs.noaa.gov/protected_resources/section_7/guidance_docs/index.html

☐ **NMFS Measures for Reducing the Entrapment Risk to Protected Species**[1]

☐ **NFMS Vessel Strike Avoidance Measures and Reporting for Mariners**[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-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)

The goal of this project is to enhance coastal waterbird populations through stewardship, protection and education. Although this project is intended to wholly benefit nesting colonial waterbird habitat, actions must be taken to ensure all effects are beneficial, insignificant and/or discountable to all listed species and critical habitats in the action area. Every effort would be made to avoid sea turtle nests. Posts and rope or other symbolic fencing would be removed at the end of each nesting season.

J. 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.

The project is not expected to result in adverse impacts to piping plover or loggerhead sea turtle critical habitat. However, the actions listed above would be taken to ensure there are no adverse impacts to critical habitat.

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.

K. 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

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 Sea Turtle and Smalltooth Sawfish Construction Conditions[3]
☐	NMFS Measures for Reducing the Entrapment Risk to Protected Species[3]
☐	NFMS Vessel Strike Avoidance Measures and Reporting for Mariners[3]
☐	Reproducing and posting outreach signs: Dolphin Friendly Fishing Tips sign, Don't Feed Wild Dolphins sign[3]

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.

L. 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

M. 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

[2] Documents can be found here: http://sero.nmfs.noaa.gov/protected_resources/outreach_and_education/index.html
[3] Documents can be found here: http://sero.nmfs.noaa.gov/protected_resources/section_7/guidance_docs/index.html

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**

N. 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

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): Mississippi Department of Environmental Quality (MDEQ);

Department of the Interior (DOI) Environmental Protection Agency (EPA)

Contact Name: Valerie Alley, MDEQ Program Management Division Chief

Phone: 601 961-5182 Email: valley@mdeq.ms.gov

Project Name: Improve Native Habitats by Removing Marine Debris from Mississippi Barrier Islands

DIVER ID# Click to enter text TIG: Mississippi TIG Restoration Plan 3

B. Project Phase and Supporting Documentation

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

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

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

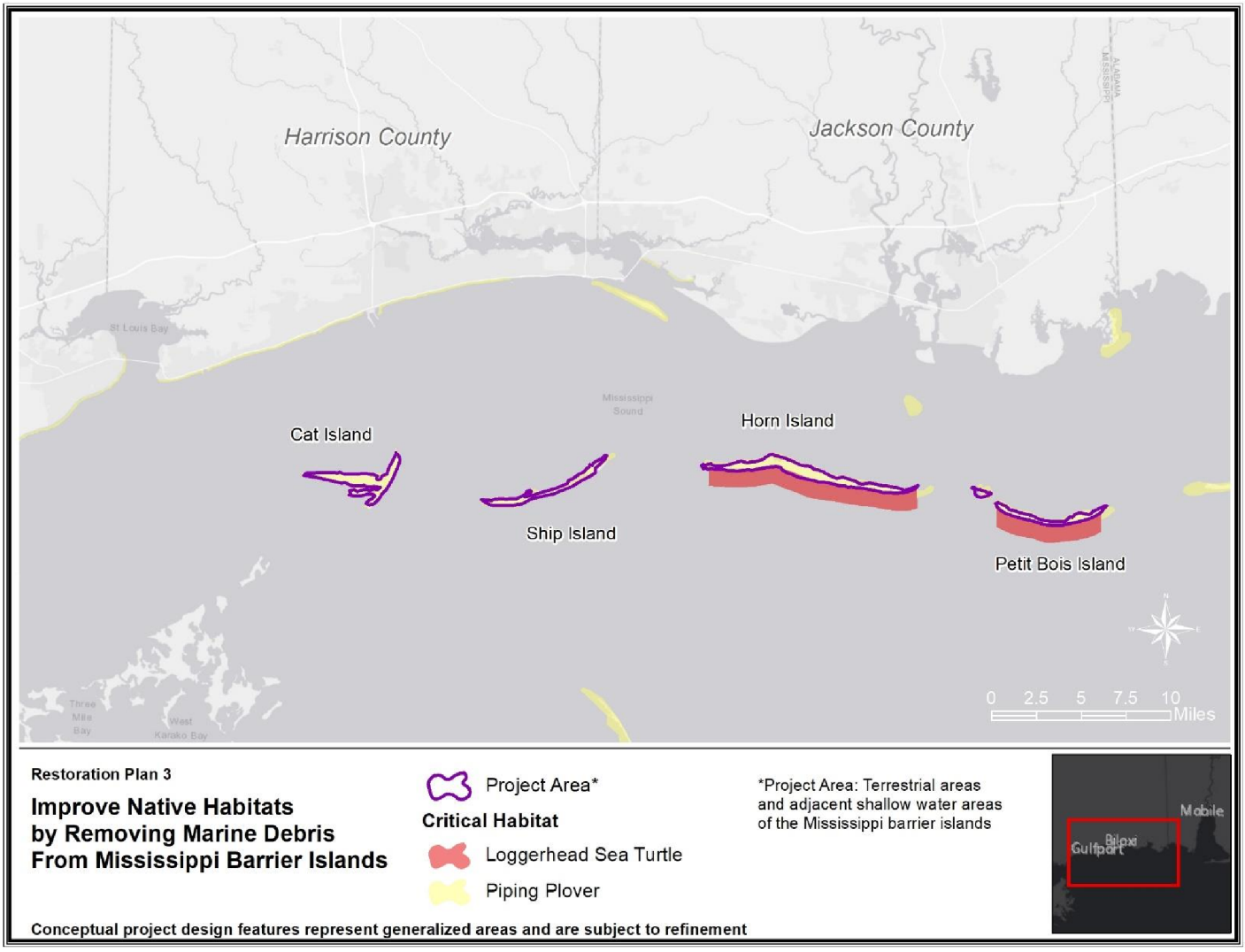
Click here to enter text.

Supporting Documentation

Please attach any maps, aerial photographs, or design drawings that will support the information in 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
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: Project Area



C. Project Location

I. State and County/Parish of action area

Mississippi, Harrison and Jackson Counties

Specific locations to be determined on Mississippi's barrier islands. See Figure 1.

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] Cat Island: centroid lat 30.227561,long -89.120128; Ship Island: centroid lat 30.209264,long -88.968298; Horn Island:

centroid lat 30.245662, long -88.717261; Petit Bois Island centroid lat 30.201817,long -88.475538

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.

NEPA analysis for this project will be included in the MS TIG Restoration Plan # 3 that is expected to be released by the MS TIG in December 2021.

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

Name of Person Completing this Form: Alane Young
Name of Project
Lead: Tina
Nations Date
Form Completed:
6-5-21 Date Form
Updated: 12-7-
21.

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 CH is not designated in the area, then describe any suitable habitat in the area

The Mississippi barrier islands form the southern boundary of the Mississippi Sound and are located approximately 6–12 miles offshore. From east to west, they include Petit Bois Island, Horn Island, Ship Island, and Cat Island, and are located within the administrative boundaries of the Gulf Islands National Seashore (GUIS) Mississippi unit under the jurisdiction of the National Park Service (NPS), however portions of Cat Island and Horn Island are privately and state-owned. Petit Bois and Horn Islands also have been designated by the U.S. Congress as the Gulf Islands Wilderness under the Wilderness Act. Generally, the islands feature broad, sandy beaches to the north with dunes on the southern Gulf side. The typical island profile includes: an average width of less than a half-mile; a Gulf-side broad beach backed by dunes; intermittent beach and marsh zones in the interior of the island; and, an additional dune bank on the mainland side. With the exception of Cat Island, the barrier islands have migrated westward over time. These islands will continue to migrate, as a result of the longshore littoral drift that moves sand from east to west across the barrier island chain. Relevant hydrologic and coastal processes associated with the barrier islands relate primarily to the effects of waves and longshore currents on island stability over time. As noted, the prevailing winds and resultant longshore currents are the drivers behind the net east-towest sand transport for any given island, as well as for the overall island system under evaluation. Wave energy is a key factor in

sediment resuspension and promotion of lateral transport through longshore water movements.

The barrier islands and surrounding waters contain important natural, cultural, and recreational resources. They include habitat for several endangered and threatened animals in diverse ecosystems, serve as critical nursery habitat for marine flora and fauna, serve as a stopover for migratory birds, and provide recreational opportunities.

a. Waterbody

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 Mississippi Sound surrounds the Mississippi barrier islands. Wetlands are present on the barrier islands, and Cat Island has tidal inlets, bays and bayous. Project activities will be limited to terrestrial habitat on the islands; no in-water work is anticipated.

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. The Mississippi Sound surrounds the barrier islands.

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.

Horn Island has a communications tower, administrative buildings have been removed by the time implementation of this project is underway. There are navigational structures on Petit Bois and in various locations throughout the islands. Ship Island has National Park Service buildings and structures including a ferry pier, pedestrian boardwalk,
concession stand, picnic pavilions with restrooms and outdoor showers. There is also a historic fort (Fort Massachusetts) located on Ship Island. Cat Island has a few private residences on North Bayou.

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.).

Terrestrial habitats in the project area include beach and dune habitats on the barrier islands. The beach and dune systems of the islands consist of well-sorted, fine to coarse sand containing large quantities of quartz and minor amounts of shell and heavy minerals. Both shorelines experience erosion and accretion on an on-going basis, as prevailing currents move sand westward. Sand movement and storms have caused the islands to decrease in size over the past century. The backshore is the area of the beach between the high tide line and the dunes and serves as a transition zone to the vegetated landscape. The wrack line forms at the edge of the high tide mark and seaborne debris and dead animals accumulate, creating foraging grounds for many species. Beach vegetation is usually very sparse and confined to the upper edges of the backshore. Sea oats, beach morning glory and gulf bluestem are the most capable of tolerating the harsh conditions of the backshore. A few animals, such as the ghost crab, amphipods and various insects, are permanent residents.

g. 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☒

The Northern Gulf of Mexico stock of Atlantic spotted dolphin and the Mississippi Sound, Lake Borgne, Bay Boudreau Stock and Gulf of Mexico Northern Coastal stocks of bottlenose dolphins could be present in the project area.

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

h. Soils and Sediments

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

Beaches and nearshore bird habitats along the Gulf Coast may contain a variety of fine sands and well-drained soils. Beach sands consist of well-sorted, fine to coarse sand containing large quantities of quartz and minor amounts of shell and heavy minerals.

i. Land Use

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

Portions of the Mississippi barrier islands are managed for the public by Gulf Islands National Seashore. They are mostly undeveloped except for public amenities on Ship Island (ferry pier, pedestrian boardwalk, concession stand, bathrooms), and NPS facilities. There is also a historic fort (Fort Massachusetts) located on Ship Island. Cat Island has a few private residences on North Bayou.

j. Essential Fish Habitat

If applicable. Describe any designated Essential Fish Habitat within the project area

N/A

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 proposed project would remove marine debris from the terrestrial portions of the Mississippi barrier islands managed by the National Park Service's Gulf Islands National Seashore (including all of Petit Bois and Ship islands, most of Horn Island and a portion of Cat Island). Marine debris arrives on the islands from a range of sources, including visitors to the island, mainland sources, offshore oil rigs and services, commercial and recreational activities, as well as debris generated by hurricanes and storms. Marine debris impacts are widespread to both people and ecosystems. Debris represents a threat to a wide range of terrestrial and aquatic wildlife species from entanglement, ingestion, transport of invasive species, and toxicity. Debris can also have impacts to humans including but not limited to: aesthetic impacts of a fouled beach; health and safety concerns from medical, hazardous, or sewage-based debris; cutting and impalement hazards; impacts to vessels from fouling intakes and propellers; and boats hitting marine debris. Marine debris ranges in size from cigarette butts to entire sailboats. Methods to remove debris will be similarly varied and could include contract marine salvage crews removing large debris which may need to be dismantled in place; or crews on foot collecting and aggregating small- and medium-size debris for transport and disposal.

Marine debris inventory and cleanup tasks and objectives could be as follows:

Implement systematic annual surveys to quantify and qualify marine debris on each island using remote control drone aircraft (sUAV) as an observation platform. Alternatively, foot surveys and/or high-resolution aerial imagery may be used. Surveys will cover all habitats but focus on beach – dune – meadow habitats and lagoon – pond – wetland mosaic habitat.

Use survey information to create a database of debris. Debris field character information will consist of: type of debris; approximate size of debris; number of pieces of debris (more appropriate for larger debris); GPS location (including terrestrial, shoreline and inland), partially submerged, totally submerged); area covered; and, habitat impacted.

Target any identified hazardous waste (fuel jugs, oil drums, etc.) for removal, coordinating with U.S. Coast Guard (USCG), NPS (National Park Service), and contractors as appropriate.

Prepare scope of work for removal of large marine debris (pilings, pontoons, boats, tanks, etc.). Evaluate appropriate methods of removal utilizing contractors or NPS personnel. Coordinate cleanup.

Prepare scope of work for removal of concentrated debris areas, including debris

"mats". Coordinate cleanup utilizing contractors, volunteers, and NPS employees as appropriate. Acquire permit(s) from Mississippi
Department of Marine Resources (MDMR) and/or U.S. Army Corps of Engineers (USACE) and comply with National Historic Preservation Act (NHPA) and Endangered Species Act (ESA) as appropriate.

Form a partnership with the Mississippi State University (MSU) Coastal Extension office – coordinators of the Mississippi Coastal Cleanup initiative – to assist in implementing and facilitating volunteer cleanup efforts. Coordinate annual beach (entire shoreline) cleanups utilizing volunteering public with NPS support. This cleanup will target small to medium size debris. Debris will be staged for systematic pick up by National Park Service (NPS) personnel or contractor.

Coordinate and conduct systematic interior cleanup and small debris removal of each island utilizing NPS personnel and equipment or, if appropriate, contractors and/or volunteers.

Manually cleanup scattered and concentrated debris sites, particularly in wetland, seagrass and dune/meadow habitats. Evaluate these areas for need of vegetation restoration plantings or substrate stabilization.

Evaluate collected debris for possible recycling or reuse potential.

This project would remove marine debris on Mississippi barrier islands managed by the National Park Service's Gulf Islands National Seashore (including all of Petit Bois, Horn, and Ship islands and a portion of Cat Island). The project would reduce threats to terrestrial and aquatic wildlife species from entanglement and, ingestion, reduce transport of invasive species, and toxicity, and reduce effects to humans. Project activities considered in the assessment of the environmental consequences include:

- Surveys including ground surveys, drones, or Unmanned Aerial Vehicles (UAVs) to conduct pretreatment planning and post treatment monitoring.
- Removal of large marine debris (pilings, pontoons, boats, tanks, etc.) including the use of marine salvage crews to dismantle in place.
- Removal of large debris using barge-mounted grapplers, excavators, cranes or track loaders. Likely the excavator would removed items using a chain to hoist items onto the barge, rather that trying to dig items out using a bucket. This should result in less disturbance of the area around the debris to be removed.
- Annual beach clean ups (entire shoreline) using volunteers.

- Use of pedestrian crews/hand tools to manually clean up scattered and concentrated debris sites, particularly in wetland, seagrass and dune/meadow habitats.
- Transporting crews to location by boat, specific areas accessed by foot or light equipment.
- Coordination, as needed, with U.S. Coast Guard and NPS for hazardous waste removal (fuel jugs, oil drums, etc.)

Most debris items are located on land including all known derelict vessels. However, if any items are found at the waterline or in the water they would be removed using barge mounted equipment as described above.

The proposed project would last three years. Fieldwork would be performed opportunistically throughout each year. The initial year could include debris mapping, staffing, environmental compliance, awarding a contract for debris removal, and coordination of volunteer efforts. Years two and three could focus on continuing volunteer cleanup efforts, additional contracting removal needs, additional staff cleanup efforts, and annual progress reporting.

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

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☒
Will fishing 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).

Click or tap here to enter text.

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)?*

Click or tap here to enter text.

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.)*

Click here to enter text.

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.)*

Click here to enter text.

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.*

Click here to enter text.

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.*

As described above in Section F, there may be some ground disturbing activities using hand crews and/or large construction equipment to remove marine debris. Working with large equipment would be limited to the smallest amount of area require to remove the marine debris. This work may occur in upland areas or at/near the water line if marine debris is discovered there.

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.)*

Click here to enter text.

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.*

Click here to enter text.

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)).*

Click here to enter text.

G. NOAA Species & 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 G. and proceed to Section H.

☐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.

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.

Identify if Gulf sturgeon are in marine or in freshwater in your Species and/or Critical Habitat list to determine which federal agency will perform the analysis (e.g. Gulf sturgeon CH - marine). Identify if sea turtles are in water or on land in your Species and/or Critical Habitat list to determine which federal agency will perform the analysis (e.g. Loggerhead sea turtle CH - terrestrial).

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.**
Gulf Sturgeon (T)		Marine	May Affect, Not Likely to Adversely Affect	Choose an item.
Loggerhead Sea Turtle		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.
Green Sea Turtle (T)		Marine	May Affect, Not Likely to Adversely Affect	Choose an item.
Leatherback Sea Turtle (E)		Marine	No Effect	Species does not occur within action area
Hawksbill Sea Turtle (E)		Marine	No Effect	Species does not occur within action area
Gulf Sturgeon CH	Unit 8	Marine	No Effect	No suitable habitat action area
Giant Manta Ray			May Affect, Not Likely to Adversely Affect	Choose an item.

Determination Definitions

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.

Critical Habitat No Destruction = When the proposed action will not diminish the value of critical habitat.

H. USFWS Species & 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 G. and proceed to Section H.

☐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 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.

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.

Identify if Gulf sturgeon are in marine or in freshwater in your Species and/or Critical Habitat list to determine which federal agency will perform the analysis (e.g. Gulf sturgeon CH - marine). Identify if sea turtles are in water or on land in your Species and/or Critical Habitat list to determine which federal agency will perform the analysis (e.g. Loggerhead sea turtle CH - terrestrial).

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.**
Piping Plover		Terrestrial	May Affect, Not Likely to Adversely Affect	Select Most Appropriate
Piping Plover CH	MS-1 through MS13	Terrestrial	May Affect, Not Likely to Adversely Affect	Select Most Appropriate
Red Knot		Terrestrial	May Affect, Not Likely to Adversely Affect	Select Most Appropriate
Loggerhead Sea Turtle CH	LOGG-N-35 LOGG-N-36	Terrestrial	May Affect, Not Likely to Adversely Affect	Select Most Appropriate
Loggerhead Sea Turtle		Terrestrial	May Affect, Not Likely to Adversely Affect	Select Most Appropriate
Leatherback Sea Turtle		Terrestrial	No Effect	Species does not occur within action area
Kemp's Ridley		Terrestrial	May Affect, Not Likely to Adversely Affect	Select Most Appropriate
Hawksbill Sea Turtle		Terrestrial	No Effect	Species does not occur within action area
Green Sea Turtle		Terrestrial	No Effect	Species does not occur within action area
Pearl Darter		Riverine/Freshwater	No Effect	Species does not occur within action area
Inflated Heelsplitter		Riverine/Freshwater	No Effect	Species does not occur within action area
West Indian Manatee		Marine	No Effect	Species does not occur within action area
Eastern Black Rail		Terrestrial	No Effect	No suitable habitat action area
Mississippi Sandhill Crane		Terrestrial	No Effect	No suitable habitat action area

Mississippi Sandhill Crane CH		Terrestrial	No Effect	No suitable habitat action area
Wood Stork		Terrestrial	No Effect	No suitable habitat action area
Alabama Red-bellied Turtle		Riverine/Freshwater	No Effect	No suitable habitat action area
Gopher Tortoise		Terrestrial	No Effect	No suitable habitat action area
Dusky Gopher Frog	Units 2, 3, 4, 5, 6, and 7	Terrestrial	No Effect	No suitable habitat action area
Dusky Gopher Frog CH		Terrestrial	No Effect	No suitable habitat action area
Louisiana Quillwort		Terrestrial	No Effect	No suitable habitat action area
Red-cockaded Woodpecker		Terrestrial	No Effect	No suitable habitat action area
Black Pine Snake		Terrestrial	No Effect	No suitable habitat action area
Black Pine Snake CH	Unit 5	Terrestrial	No Effect	No suitable habitat action area
Eastern Indigo Snake		Terrestrial	No Effect	No suitable habitat action area
Yellow-blotched Map Turtle		Riverine/Freshwater	No Effect	No suitable habitat action area
Ringed Map Turtle		Riverine/Freshwater	No Effect	No suitable habitat action area

Determination Definitions

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.

Critical Habitat No Destruction = When the proposed action will not diminish the value of critical habitat.

I. Effects of the proposed project to the species 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 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.

There could be elevated noise levels, increased human activity from crews removing debris/trash, and the presence of suspended sediments in the water column from barge mounted equipment removing land or water-based debris from any in-water activities. Specific conservation measures would also be implemented during construction to avoid and minimize disruption to protected species. Below is a list of potential protected species at the project area. Additional BMPs attached to this BE form will also be followed..

Sea turtles: Loggerhead, green, leatherback, hawksbill, and Kemp's ridley sea turtles could be present in the area in the water. However, only loggerhead and Kemp's ridley sea turtles nest in the area. Vehicle use along the beaches would be restricted during sea turtle nesting season (May 1st to October 31st) which would allow for nesting/hatchling occurrence. BMPs that will be implemented during periods of in-water work include the *Protected Species Construction Conditions* (NMFS 2021), *Measures for Reducing the Entrapment Risk to Protected Species*, *and Vessel Strike Avoidance Measures and Reporting for Mariners*.

Gulf sturgeon Sturgeon are highly mobile and can avoid any disturbances in that area by swimming away. BMPs that will be implemented include *Protected Species Construction Conditions* (NMFS 2021), and Measures for Reducing the Entrapment Risk to Protected Species.

Piping Plover and Red Knot: Project activities could coincide with piping plover and red knot wintering seasons in Mississippi. NPS staff would be present for all project activities. If piping plovers and red knots are present within the buffer, project work would stop until the birds move away from 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 (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.*

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

☐	**USFWS Standard Manatee In Water Conditions**
☒	**NMFS Sea Turtle and Smalltooth Sawfish Construction Conditions**[4]
☒	**NMFS Measures for Reducing the Entrapment Risk to Protected Species**[1]
☒	**NFMS Vessel Strike Avoidance Measures and Reporting for Mariners**[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-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)

J. 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.

There would be no impacts to critical habitat as a result of implementing the project.

[4] Documents can be found here: http://sero.nmfs.noaa.gov/protected_resources/section_7/guidance_docs/index.html

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

K. 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

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[5]
☒	NMFS Sea Turtle and Smalltooth Sawfish Construction Conditions[6]
☒	NMFS Measures for Reducing the Entrapment Risk to Protected Species[3]
☒	NFMS Vessel Strike Avoidance Measures and Reporting for Mariners[3]
☐	Reproducing and posting outreach signs: Dolphin Friendly Fishing Tips sign, Don't Feed Wild Dolphins sign[3]

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.

L. 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

[5] Documents can be found here: http://sero.nmfs.noaa.gov/protected_resources/outreach_and_education/index.html
[6] Documents can be found here: http://sero.nmfs.noaa.gov/protected_resources/section_7/guidance_docs/index.html

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

M. 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**

N. 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

Best Management Practices and Project Conditions for the Regionwide TIG's RP#1 Project
"Reducing Marine Debris Impacts to Birds and Turtles"

The following best management practices (BMPs) will be followed by all RW TIG Trustees during the implementation of this project to ensure compliance with the NMFS Endangered Species Act Project Design Criteria (PDCs) for removal of derelict fishing gear and other marine debris.

NOTE: *Additional BMPs or protective measures may be required as the result of ESA consultation with USFWS for species and habitats under their jurisdiction.*

1. All on-water operations will occur during daylight hours.
2. Vessels and other equipment involved in marine debris removal activities shall not block or impede the movement of ESA-listed species at major ingress or egress points in channels, rivers, passes, and bays.
3. To avoid harassment of listed species, aerial debris surveys shall not be conducted below 1,000 ft (305 m) altitude for manned aircraft. Drone surveys may be conducted at a lower altitude.
4. Debris removal activities shall not affect access by sea turtles to or from nesting sites and will be avoided to the extent practicable during nesting season. If removal activities will be conducted during the nesting season adjacent to a known nesting site, the following BMPs will be implemented:
    a. Sea turtle and bird nesting surveys are to be conducted daily during the nesting and hatching seasons (state seasons vary, minimal time period May 1 through October 31), and all nests within 100 feet (ft.) of the area of operations are to be marked and avoided with a 10 ft. buffer.
    b. A designated individual will be assigned to observe for sea turtles for in-water work adjacent to a known nesting site during nesting season, when the work involves mechanical equipment or is otherwise likely to restrict sea turtle access to the nesting beach (i.e. use of boom or blocking of beach).
    c. If a sea turtle or listed bird is observed, maintain at least 200 ft. between the turtle or bird and response personnel and equipment when practicable.
    d. During the nesting and hatching seasons, no vehicles or equipment shall be used, parked or stored between the waterline and the primary dune, with the exception of existing access points (ramps, walkovers, piers, etc.)
5. Follow the NMFS Southeast Region's *Protected Species Construction Conditions (2021)*$_1$.
6. Follow the NMFS Southeast Region's *Vessel Strike Avoidance Measures (2021)*$_2$
7. If approached by a marine mammal or sea turtle, cease activity and allow the animal to pass or move your vessel away slowly.

[1] This 2021 revision supersedes the previous document "Sea Turtle and Smalltooth Sawfish Construction Conditions". The most recent version is available at: https://www.fisheries.noaa.gov/southeast/consultations/regulations-policies-and-guidance

[2] This document was revised in 2021 and the most recent version is available at: https://www.fisheries.noaa.gov/southeast/consultations/regulations-policies-andguidance

Additional Project Conditions (included in the NMFS ESA Project Design Criteria):

Monitoring

1. Monitoring reports shall include:
    a. Total amount of materials removed
    b. Type of materials removed
    c. Any interactions with protected species

Reporting

1. Report all interactions with, or sightings of stranded, entangled, dead or injured sea turtles, Gulf sturgeon, sawfish, or marine mammals, immediately to:
    a. **Sea Turtles:**
        i. Florida**:** (888) 404-FWCC (888-404-3922)
        ii. Alabama**:** (866) SEA-TURTLE (866-732-8878)
        iii. Mississippi**:** (228) 369-4796 or 1-844-SEA-TRTL
        iv. Louisiana**:** (844) SEA-TRTL
        v. Texas**:** (361) 949-8173 x 226
    b. **Marine Mammals** - Marine Mammal Stranding Network: 1-877-WHALE HELP (1-877-942-5343)
    c. **Gulf sturgeon** - NMFS's Protected Resources Division:
        i. Telephone: 1-844-788-7491 (1-844-STURG 911)
        ii. Email: nmfs.ser.sturgeonnetwork@noaa.gov
        iii. When possible provide:
            1. the location where the fish was found or caught
            2. the condition of the fish
            3. the presence of any research tags
            4. the length of the fish
            5. a photograph
    d. **Smalltooth sawfish** – FWC Fish and Wildlife Research Institute:
        i. Email: Sawfish@MyFWC.com ii. Telephone: 1-941-255-7403
2. Final reports from project monitoring shall be submitted to:
    NOAA Fisheries Southeast Region - Protected Resources Division
    Restoration Project Monitoring Reports
    263 13th Avenue South
    Saint Petersburg, Florida 33701

Endangered Species Act Programmatic Biological Opinion

Deepwater Horizon Oil Spill Restoration

National Marine Fisheries Service

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. By checking all boxes below that apply to this project you are confirming that PDCs are incorporated into the project design and construction. The entire Biological Evaluation Form must be completed and include any information necessary to verify that all applicable PDCs are incorporated into the project. If the project incorporates more than one type of restoration, check boxes in all appropriate categories.

You must receive NMFS approval before proceeding with your project. Note that this PDC checklist does not apply to ESA consultation with USFWS.

Full text of the PDCs can be reviewed at:
http://sero.nmfs.noaa.gov/protected_resources/section_7/freq_biop/documents/DWH_bo/appendix_a.pdf

Oyster Reef Creation and Enhancement Yes No

Marine Debris Removal Yes No

Construction of Living Shorelines Yes No

Marsh Creation and Enhancement Yes No

Construction of Non-Fishing Piers Yes No

Check the box to confirm that all applicable requirements are met and a streamlined consultation with NMFS is requested:

Name of person completing this form:

Date form completed:

*You must receive NMFS approval before proceeding with your project *

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): Mississippi Department of Environmental Quality, National Oceanic and

Atmospheric Adminsitration

Contact Name: Valerie Alley, MDEQ Program Management Division Chief

Phone: 601 961-5182 Email: valley@mdeq.ms.gov

Project Name: 2.5.2.1 MM1-Maintaining Enhanced Marine Mammal Stranding Network Capacity and Diagnostic

Capabilities

DIVER ID# Click to enter text TIG: Mississippi TIGMississippi TIG Restoration Plan # 3

B. Project Phase and Supporting Documentation

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

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

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

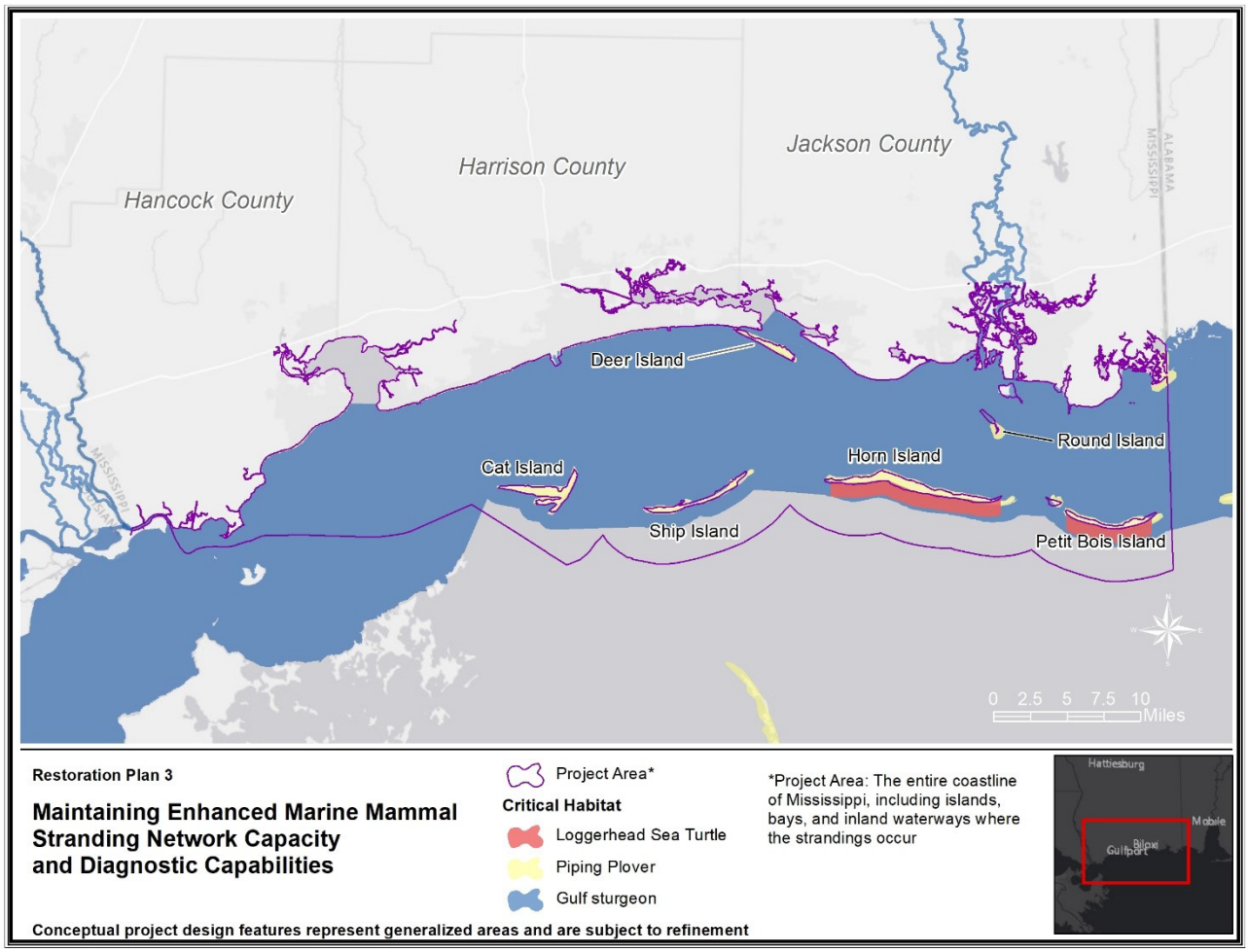
Click here to enter text.

Supporting Documentation

Please attach any maps, aerial photographs, or design drawings that will support the information in 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
- 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 – Project Area



C. Project Location

I. State and County/Parish of action area

The proposed project would focus on the Mississippi Sound and adjacent bays and estuaries in the state of Mississippi. The Mississippi Sound, which encompasses approximately 213,000 hectares or 758 square miles, is essential habitat for marine mammals and is a vital foraging area and nursery ground for young dolphins during birthing in the spring and summer season.

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]

N/A

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 Number and Type: MMPA/ESA

Permit No. 18786-04

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. Click here to enter text.

NEPA analysis for this project will be included in the MS TIG Restoration Plan # 3 that is expected to be released by the MS TIG December 2021.

In addition, IMMS is authorized under Section 112c of the MMPA through a Marine Mammal Stranding Agreement with NOAA's Southeast Regional Administrator. The NMFS marine mammal healther and stranding response project has previously be analyzed under NEPA in a 2009 PEIS (https://repository.library.noaa.gov/view/noaa/4939), which is currently being updated.

MMPA/ESA permit 18786-04:
https://apps.nmfs.noaa.gov/preview/applicationpreview.cfm?ProjectID=18786&view=0100000000

NMFS/USFWS permit 932-1905-01-MA-009526-3

NMFS Biological and Conference Opinion on the Issuance of Permit No. 18786-01:
https://repository.library.noaa.gov/view/noaa/14333

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

Name of Person Completing this Form: Alane Young
Name of Project Lead:
Tina Nations Date Form
Completed: 5-25-21
Date Form Updated: 12-7-21

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 CH is not designated in the area, then describe any suitable habitat in the area

Click or tap here to enter text.
The project will focus on cetaceans that become stranded along the Mississippi Coast. The action area will include shorelines and shallow water areas adjacent to the shoreline of the Mississippi Sound and

adjacent bays and estuaries where the strandings occur.

The Mississippi Sound, which encompasses approximately 213,000 hectares or 758 square miles, is a marine system composed of an array of habitat types that support a large number of species and many different life stages. The Mississippi Sound and adjacent waters of the north Gulf of Mexico provide vital habitat for several endangered and threatened species including Kemp's ridley (*Lepidochelys kempii),* loggerhead (*Caretta caretta),* and green (*Chelonia mydas),* sea turtles and the Mississippi Sound stock of bottlenose dolphins (*Tursiops truncatus*). The Mississippi Sound is a vital foraging area and a nursery ground for young dolphins during birthing in the spring and summer season. In addition, these are habitats to larval and juvenile stages of fish, invertebrates, and several federally threatened and endangered species, such as the Gulf sturgeon.

The action area also includes shorelines of two large, estuarine embayments, St. Louis Bay and Biloxi Bay. The bays range in depth from one to ten feet, except in minor channel segments where the depth reaches 30 feet. The textures of bottom substrates range from muddy sand to sandy mud. Bays are partially-mixed to well-mixed systems, depending on the season and experience tidal surges of one to one and one-half feet on average, but occasionally reach four feet. Salinity levels are in a constant state of flux depending on the ebb and flow of the tides and weather systems impacting the region and season. The muddy bottoms support a diverse group of benthic life forms, mainly polychaetes, mollusks, insects and crustaceans, many of which prefer the bays over other estuarine areas. Numerous species inhabit the coastal bay waters, and the most economically important are menhaden, sea trout, redfish, flounder, shrimp, and blue crabs.

a. Waterbody

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 Mississippi Sound: Depths within the Mississippi Sound are highly variable, but generally shallow. The northern and western parts of the Sound can be described as shallow, with depths ranging from 3 to 9 feet. Greater depths are found in the east, central, and southern portions of the Sound, with a mean depth of about 13 feet. In the vicinity of Pascagoula, natural depths in the Sound are generally less than 13 feet, whereas the Sound deepens toward the Gulf to approximately 20 feet. Waters in the Mississippi Sound are influenced by saline gulf waters flowing into the Sound between the barrier islands, as well as freshwater drainage from 20,000 square miles of mainland watersheds. Larger rivers draining into the Mississippi Sound include the Pearl, Pascagoula River, and Mobile Rivers. The mix of freshwater and saline conditions has created a dynamic estuarine environment. Hydrologic characteristics of the Mississippi Sound are strongly influenced by wind-driven currents in combination with tidal influences of the Gulf of Mexico. Tides within the Sound are diurnal, with an average range of up to 2 feet. The tides are strongly influenced by local bathymetry, local river discharges, and winds.

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.

The project location includes the Mississippi Sound and adjacent bays and estuaries and Gulf of Mexico waters with the State boundaries.

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.

Mississippi coastal waters contain three submergent bed types: barrier island seagrass, widgeon grass and American wildcelery (tapegrass) beds. The types can be distinguished by differences in species composition, habitat requirements and location within the estuary. Barrier island seagrass beds originally contained three species of seagrasses:
shoalweed, turtle, and manatee grasses. Several of these have become very rare or have disappeared altogether. The beds, now composed almost entirely of shoalweed, occur in less turbid, moderately saline habitats of the nearshore zone north of the barrier islands with a couple of nearshore mainland exceptions, including Grand Bay National Estuarine Research Reserve. The barrier island pond/lagoon areas are often dominated by wigeon grass and contain trapped fresh or brackish water. Widgeon grass beds occur in shallow and moderately turbid waters that are lower in salinity. The beds are found in bays, along bayous, on submerged mudflats and occasionally in barrier island ponds.he estuary. Barrier island seagrass beds originally contained three species of seagrasses: shoalweed, turtle, and manatee grasses. Several of these have become very rare or have disappeared altogether. The beds, now composed almost entirely of shoalweed, occur in less turbid, moderately saline habitats of the nearshore zone north of the barrier islands with a couple of nearshore mainland exceptions, including Grand Bay National Estuarine Research Reserve. The barrier island pond/lagoon areas are often dominated by wigeon grass and contain trapped fresh or brackish water. Widgeon grass beds occur in shallow and moderately turbid waters that are lower in salinity. The beds are found in bays, along bayous, on submerged mudflats and occasionally in barrier island ponds.Mississippi coastal waters contain three submergent bed types: barrier island seagrass, widgeon grass and American wildcelery (tapegrass) beds. The types can be distinguished by differences in species composition, habitat requirements and location.

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. 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

On average (based on data from 2005 through 2019), 428 cetaceans (whales or dolphins) strand along the U.S. coast of the Gulf of Mexico each year. This project is anticipated to focus on coastal and estuarine stocks of common bottlenose dolphins (*Tursiops truncatus truncatus*), since they are the most common stranding in the Gulf of Mexico. Other offshore species that strand, especially those that are subject to mass strandings (e.g., short-finned pilot whales and rough-toothed dolphins), may also benefit.

h. Soils and Sediments

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

N/A

i. Land Use

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

N/A

j. Essential Fish Habitat

If applicable. Describe any designated Essential Fish Habitat within the project area

Strandings will occur on shorelines or in shallow waters adjacent to shorelines or in bays and estuaries which are designated as Essential Fish Habitat (EFH) for a large number of fishery species managed by the Gulf of Mexico Fishery Management Council and Highly Migratory Species managed by NOAA. Given the as-yet unknown locations of strandings, identification of Federally managed species having EFH in the project area is difficult. It is unlikely that the project implementation would have an adverse impact on any category of EFH in the study area due to the small areas of potential response activities within EFH. The table below lists EFH species, substrates, and life stages within the study area.

EFH Species Table

Species	Habitats Utilized	Life stages within the Aquatic areas of the Study Area
Red Drum (*Scianops ocellatus*)	SAVs, soft bottom, hard bottom, sand/shell, emergent marsh	Larvae, post larvae, juvenile, adult, spawning adults
Mutton Snapper (*Lutjanus analis*)	SAVs	Juvenile, adult
Cubera Snapper (*Lutjanues cyanopterus*)	SAVs, emergent marsh	juvenile
Gray Snapper (*Lutjanus griseus*)	SAVs, soft bottom, sand/shell, emergent marsh	Post larvae, juvenile, adult,
Lane Snapper (*Lutjanus synagris*)	SAVs, soft bottom, sand/shell	Post larvae, juvenile
Yellowtail Snapper (*Ocyurus chrysurus*)	SAVs, soft bottom	juvenile
Goliath Grouper (*Epinephelus itajara*)	SAVs, hard bottom	juvenile
Red Grouper (*Epinephelus morio*)	SAVs, hard bottom	juvenile
Black Grouper (*Mycteroperca bonaci*)	SAVs	juvenile
Spanish Mackerel (*Scomberomorus maculatus*)	pelagic	Juvenile, adult
Brown Shrimp (*Penaeus aztecus*)	SAVs, soft bottom, sand/shell, emergent marsh, oyster reef	Post larvae, juvenile
White Shrimp (*Penaeus setiferus)*	emergent marsh, soft bottom	Post larvae, juvenile

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.*

Bottlenose dolphins are the most common marine mammal in the Mississippi Sound. This population is a separate stock, as are the other 30 bottlenose dolphin populations in the Gulf bays, sounds, and estuaries. Their inshore distribution makes this population vulnerable to a range of stressors resulting from human activities (e.g., pollution, bycatch, disease, hypoxia). The Mississippi Sound dolphin population was severely injured by the Deepwater Horizon oil spill, suffering both increased mortality and reduction in survival and reproductive rates. The National Oceanic and Atmospheric Administration (NOAA) reported 318 cetacean strandings in Mississippi from March 2010 - 2014. Based on the Unusual Mortality Event (UME) Investigation and the Deepwater Horizon Natural Resource Damage Assessment, it was determined that petroleum products caused adrenal and lung disease in dolphins, which has contributed to an increased number of deaths of dolphins living in the northern GOM. The oil spill has also contributed to an increase in fetal loss in dolphins, indicating that the oil spill severely harmed the reproductive health of dolphins living the oil spill area.

To address the injury, this proposed project would focus on maintaining the enhanced capacity of the Mississippi stranding network in order to provide an improved ability to respond to stranded, sick, injured, or deceased marine mammals. Responding to strandings in a timely manner increases the animal's likelihood of survival. If the response is to a deceased animal, it is also important to respond quickly because data from tissue samples is lost as the decomposition process occurs. These data are imperative to determine cause-of-illness and death, and provide essential information about the animal's life history. This proposed project would build on the National Fish and Wildlife Foundation-Gulf Environmental Benefit Fund (NFWF-GEBF) Mississippi Marine Mammal and Sea Turtle Conservation, Recovery, and Monitoring Program - Phase I that is anticipated to be completed in 2022.

The Implementing Trustee for this proposed project would be the Mississippi Department of Environmental Quality and NOAA.

The anticipated project duration is 5 years. The proposed project would be implemented under two primary tasks:

Enhancing Stranding Network Capacity for Marine Mammal Conservation
This project would focus on maintaining the increased capacity of the Mississippi Marine Mammal stranding network in order to continue an enhanced ability to respond to stranded, sick, injured, or deceased marine mammals. Project activities considered in the assessment of the environmental consequences include:

- Providing financial support for personnel, equipment, stranding, training, or other project-related travel, vehicle fuel, and maintenance of vehicles/vessels/trailers to federally permitted MS MMSN organizations to rapidly respond to live and dead stranded marine mammals in Mississippi;
- Performing field necropsies on carcasses, where applicable;
- Maintaining current average response time to live or dead stranded marine mammals; and
- Maintaining MMSN's capacity to respond to unusual natural or anthropogenic events (e.g., oil spills, harmful algal blooms, freshwater events, hurricanes).

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☒
Will fishing 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 Species & 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 G. and proceed to Section H.

☐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.

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.

Identify if Gulf sturgeon are in marine or in freshwater in your Species and/or Critical Habitat list to determine which federal agency will perform the analysis (e.g. Gulf sturgeon CH - marine). Identify if sea turtles are in water or on land in your Species and/or Critical Habitat list to determine which federal agency will perform the analysis (e.g. Loggerhead sea turtle CH - terrestrial).

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.

Determination Definitions

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.

Critical Habitat No Destruction = When the proposed action will not diminish the value of critical habitat.

H. USFWS Species & 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 G. and proceed to Section H.

☐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 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.

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.

Identify if Gulf sturgeon are in marine or in freshwater in your Species and/or Critical Habitat list to determine which federal agency will perform the analysis (e.g. Gulf sturgeon CH - marine). Identify if sea turtles are in water or on land in your Species and/or Critical Habitat list to determine which federal agency will perform the analysis (e.g. Loggerhead sea turtle CH - terrestrial).

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.	Covered by existing consultations	Select Most Appropriate
Loggerhead Sea Turtle CH	LOGG-N-35 LOGG-N-36	Terrestrial	May Affect, Not Likely to Adversely Affect	Select Most Appropriate
Loggerhead Sea Turtle		Terrestrial	May Affect, Not Likely to Adversely Affect	Select Most Appropriate
Leatherback Sea Turtle		Terrestrial	No Effect	Species does not occur within action area
Kemp's Ridley		Terrestrial	May Affect, Not Likely to Adversely Affect	Select Most Appropriate
Hawksbill Sea Turtle		Terrestrial	No Effect	Species does not occur within action area
Green Sea Turtle		Terrestrial	May Affect, Not Likely to Adversely Affect	Species does not occur within action area
Gulf Sturgeon		Riverine/Freshwater	May Affect, Not Likely to Adversely Affect	Select Most Appropriate
Gulf Sturgeon CH	Unit 2	Riverine/Freshwater	May Affect, Not Likely to Adversely Affect	Select Most Appropriate
Pearl Darter		Choose an item.	No Effect	Species does not occur within action area
Piping Plover		Choose an item.	May Affect, Not Likely to Adversely Affect	Select Most Appropriate
Piping Plover CH	MS-1 through MS-13	Choose an item.	May Affect, Not Likely to Adversely Affect	Select Most Appropriate

Red Knot		Choose an item.	May Affect, Not Likely to Adversely Affect	Select Most Appropriate
Inflated Heelsplitter		Choose an item.	No Effect	Species does not occur within action area
Eastern Black Rail		Choose an item.	No Effect	No suitable habitat in action area
Mississippi Sandhill Crane		Choose an item.	No Effect	No suitable habitat in action area
Mississippi Sandhill Crane CH		Choose an item.	No Effect	No suitable habitat in action area
Wood Stork		Choose an item.	No Effect	No suitable habitat in action area
Alabama Redbellied Turtle		Choose an item.	No Effect	No suitable habitat in action area
Gopher Tortoise		Choose an item.	No Effect	No suitable habitat in action area
Dusky Gopher Frog		Choose an item.	No Effect	No suitable habitat in action area
Dusky Gopher Frog CH	Units 2, 3, 4, 5, 6, and 7	Choose an item.	No Effect	No suitable habitat in action area
Louisiana Quillwort		Choose an item.	No Effect	No suitable habitat in action area
Red-cockaded Woodpecker		Choose an item.	No Effect	No suitable habitat in action area
Black Pine Snake		Choose an item.	No Effect	No suitable habitat in action area
Black Pine Snake CH	Unit 5	Choose an item.	No Effect	No suitable habitat in action area
Eastern Indigo Snake		Choose an item.	No Effect	No suitable habitat in action area
Yellow-blotched Map Turtle		Choose an item.	No Effect	No suitable habitat in action area
Ringed Map Turtle		Choose an item.	No Effect	No suitable habitat in action area

Determination Definitions

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.

Critical Habitat No Destruction = When the proposed action will not diminish the value of critical habitat.

I. Effects of the proposed project to the species 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 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.

Activities include responding to stranding events on the shoreline and shallow water areas adjacent to the shoreline along the Mississippi Sound coast. The area where work would occur would be the area immediately adjacent to the stranded individual or individuals, and would likely be a very small area (likely less than 0.10 acre per event). Disturbance to terrestrial ESA-listed species could occur in or near areas where MS MMSN staff are responding to stranded marine mammals. If any protected species is present at the time of response, they could be temporarily displaced during response activities.

Potential disturbance to ESA-listed marine species under NMFS jurisidiction were considered in a 2015 biological and conference opinion analyzing MMSN activities. Effects to manatees under USFWS are covered by an existing permit for MMSN activities. See section D for more information on existing consultations/permits. Effects on other ESA-listed species under USFWS jurisdiction are dicussed below.

Sea Turtles (terrestrial): Loggerhead, green, and Kemp's ridley sea turtles could be present in the area. Existing sea turtle nests would be avoided during project activities. Nesting sea turtles could be

temporarily disturbed by increased human presence during response activities. However, every effort would be made to avoid disturbances to nesting sea turtles. Best Practices will be implemented to minimize any potential effects to sea turtles and include the following measures: 1) If a sea turtle (either adult or hatchling) is observed, maintain at least 200 feet between the turtle and personnel, equipment, or machinery and notify the sea turtle monitoring program. Allow the turtle to leave the area of its own volition. 2) Existing nests would be avoided by at least 10 feet.

Gulf Sturgeon (riverine/freshwater): Sturgeon are highly mobile and can avoid any disturbances in that area by swimming away.

Piping Plover and Red Knot: Piping plover and red knot individuals near the stranding response area would be disturbed by increased human, vessel, and/or vehicle presence during response activities but can return once response activities are complete. Existing bird nests would be avoided during project activities. Birds could be temporarily disturbed by increased human presence during response activities. However, every effort would be made to avoid disturbances to piping plover and red knot. Best Practices will be implemented to minimize any potential effects to piping plover and red knot and include the following measure: 1) Provide all individuals working on restoration activities associated with the project with information in support of general awareness of piping plover or red knot presence and means to avoid birds and their critical or otherwise important habitats.

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 (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.*

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

- ☐ **USFWS Standard Manatee In Water Conditions**
- ☐ **NMFS Sea Turtle and Smalltooth Sawfish Construction Conditions**[7]
- ☐ **NMFS Measures for Reducing the Entrapment Risk to Protected Species**[1]
- ☐ **NFMS Vessel Strike Avoidance Measures and Reporting for Mariners**[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- 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)

[7] Documents can be found here: http://sero.nmfs.noaa.gov/protected_resources/section_7/guidance_docs/index.html

Click here to enter text.

J. 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.

Loggerhead sea turtle nesting critical habitat occurs along the southern shores of Horn and Petit Bois islands of the project area. Piping plover critical habitat occurs throughout the action area. Project activities include responding to stranding events on the shoreline and shallow water areas adjacent to the shoreline the along Mississippi Sound coast and barrier islands. The area that would be impacted would be the area immediately adjacent to the stranded individual or individuals, and would likely be a very small area (likely less than 0.10 acre per event) within critical habitat areas. There would be no effect on critical habitat.

This project would not alter the primary constituent elements of any critical habitat

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.

K. 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 ar 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

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[8]
☐	NMFS Sea Turtle and Smalltooth Sawfish Construction Conditions[9]
☐	NMFS Measures for Reducing the Entrapment Risk to Protected Species[3]

☐	NFMS Vessel Strike Avoidance Measures and Reporting for Mariners[3]
☐	Reproducing and posting outreach signs: Dolphin Friendly Fishing Tips sign, Don't Feed Wild Dolphins sign[3]

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

[8] Documents can be found here: http://sero.nmfs.noaa.gov/protected_resources/outreach_and_education/index.html

[9] Documents can be found here: http://sero.nmfs.noaa.gov/protected_resources/section_7/guidance_docs/index.html

Emergency response for entangled or out-of-habitat cetaceans may occur under this project. Response activities for entanglements are targeted to assess the entanglement and identify the most appropriate action to take to remove the gear (if warranted), increasing the chance of survival for the individual animal and therefore it continuing as a future functioning member of the population. These response actions may sometimes include the targeted use of nets to temporarily encircle and capture the entanglement cetacean to allow trained responders to disentangle the animal. All conditions and BMPs from existing biological opinions and permits would be implemented during response activities.

L. 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

M. 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**

N. 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

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): Mississippi Department of Environmental Quality, National Oceanic and Atmospheric Administration

Contact Name: Valerie Alley, MDEQ Program Management Division Chief

Phone: 601 961-5182 Email: valley@mdeq.ms.gov

Project Name: Maintaining Enhanced Sea Turtle Stranding Network Capacity and Diagnostic Capabilities

DIVER ID# Click to enter text TIG: Mississippi TIG Restoration Plan # 3

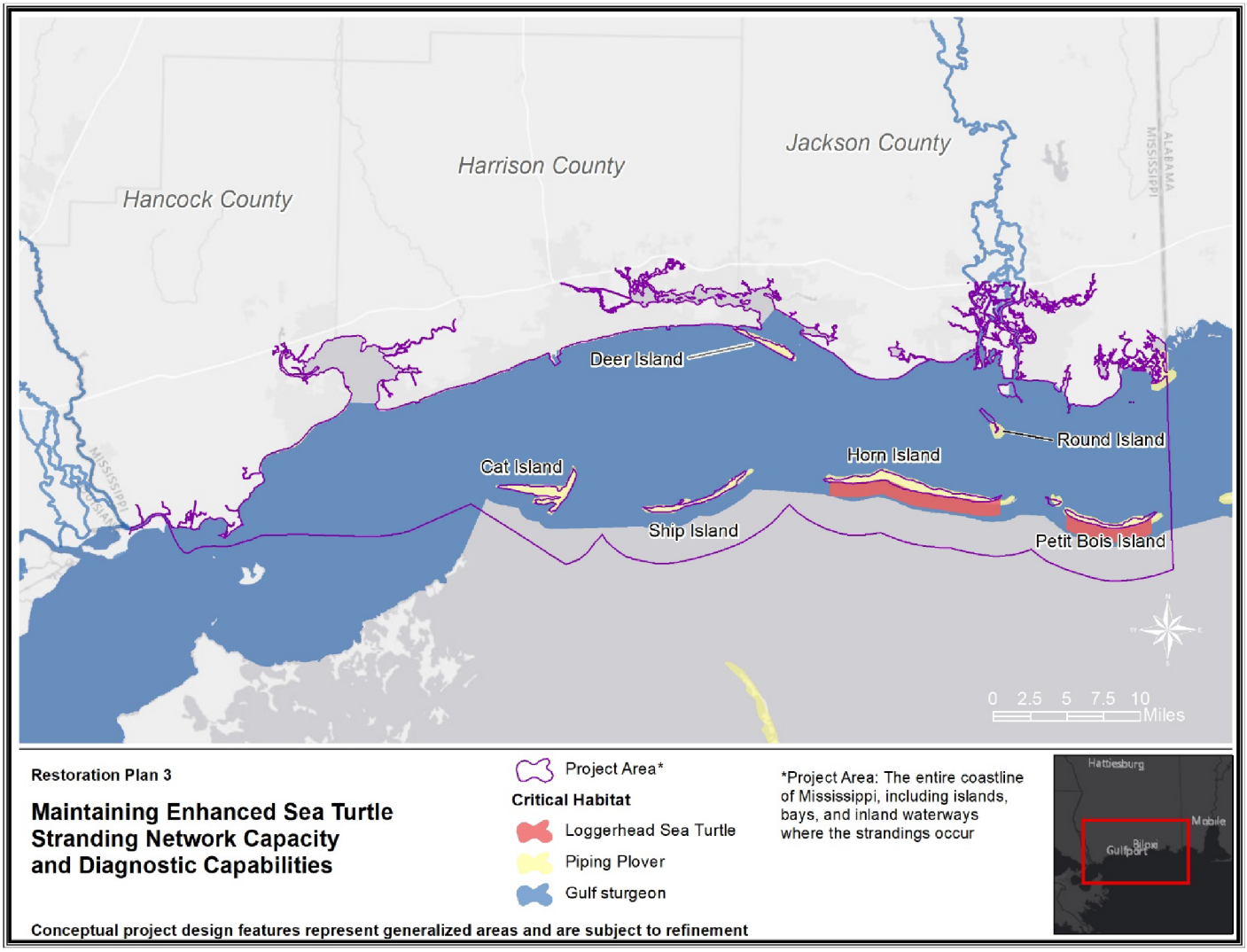
B. Project Phase and Supporting Documentation

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

Planning/Conceptual ☐ Construction/Implementation ☒ 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.



Supporting Documentation

Please attach any maps, aerial photographs, or design drawings that will support the information in 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

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 – Project Area

C. Project Location

I. State and County/Parish of action area

Mississippi, Harrison and Jackson counties

The project will occur in Mississippi coastal waters and adjacent bays and estuaries in the state of Mississippi. The Mississippi Sound, which encompasses approximately 213,000 hectares or 758 square miles, provides essential habitat for several endangered and threatened species including Kemp's ridley (*Lepidochelys kempii*), loggerhead sea turtle (*Caretta caretta*), and green sea turtle (*Chelonia mydas*).

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]

N/A

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: Yes, USFWS Permit #TE12392A-3 issued to IMMS

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:

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.

Activities would be conducted by IMMS and MSU. These two entities are authorized participants of the STSSN and they hold the proper permits/authorizations from NMFS and USFWS to do stranding response and rehab work (USFWS Permit #TE12392A-3 issued to IMMS).

Draft MS TIG RP3/EA (to be released in December 2021) will include a NEPA analysis for this project.

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

Name of Person Completing this Form: Alane Young
Name of Project Lead: Tina Nations
Date Form Completed: 10-8-2021
Date Form Updated: 1-31-22

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 CH is not designated in the area, then describe any suitable habitat in the area

Click or tap here to enter text.
The project will focus on sea turtles that become stranded along the Mississippi Coast. The action area will include Mississippi coastal waters, bays, estuaries, and adjacent shorelines and beaches in the state of Mississippi where the strandings occur.

The Mississippi Sound, which encompasses approximately 213,000 hectares or 758 square miles, is a marine system composed of an array of habitat types that support a large number of species and many different life stages. The Mississippi Sound and adjacent waters of the north Gulf of Mexico provide vital habitat for several endangered and threatened species including Kemp's ridley, loggerhead, and green sea turtles and the Mississippi Sound stock of bottlenose dolphins (*Tursiops truncatus*).

The action area also includes shorelines of two large, estuarine embayments, St. Louis Bay and Biloxi Bay. The bays range in depth from one to ten feet, except in minor channel segments where the depth reaches 30 feet. The textures of bottom substrates range from muddy sand to sandy mud. Bays are partially-mixed to well-mixed systems, depending on the season and experience tidal surges of one to one and one-half feet on average, but occasionally reach four feet. Salinity levels are in a constant state of flux depending on the ebb and flow of the tides and weather systems impacting the region and season. The muddy bottoms support a diverse group of benthic life forms, mainly polychaetes, mollusks, insects and crustaceans, many of which prefer the bays over other estuarine areas. Numerous species inhabit the coastal bay waters, and the most economically important are menhaden, sea trout, redfish, flounder, shrimp, and blue crabs.

a. Waterbody

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 Mississippi Sound: Depths within the Mississippi Sound are highly variable, but generally shallow. The northern and western parts of the Sound can be described as shallow, with depths ranging from 3 to 9 feet. Greater depths are found in the east, central, and southern portions of the Sound, with a mean depth of about 13 feet. In the vicinity of
Pascagoula, natural depths in the Sound are generally less than 13 feet, whereas the Sound deepens toward the Gulf to approximately 20 feet. Waters in the Mississippi Sound are influenced by saline gulf waters flowing into the Sound between the barrier islands, as well as freshwater drainage from 20,000 square miles of mainland watersheds. Larger rivers draining into the Mississippi Sound include the Pearl, Pascagoula River, and Mobile Rivers. The mix of freshwater and saline conditions has created a dynamic estuarine environment. Hydrologic characteristics of the Mississippi Sound are strongly influenced by wind-driven currents in combination with tidal influences of the Gulf of Mexico. Tides within the Sound are diurnal, with an average range of up to 2 feet. The tides are strongly influenced by local bathymetry, local river discharges, and winds.

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.

The project location includes the Mississippi Sound and adjacent bays and estuaries and Gulf of Mexico waters with the State boundaries.

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.

Mississippi coastal waters contain three submergent bed types: barrier island seagrass, widgeon grass and American wildcelery (tapegrass) beds. The types can be distinguished by differences in species composition, habitat requirements and location within the estuary. Barrier island seagrass beds originally contained three species of seagrasses: shoalweed, turtle, and manatee grasses. Several of these have become very rare or have disappeared altogether. The beds, now composed almost entirely of shoalweed, occur in less turbid, moderately saline habitats of the nearshore zone north of the barrier islands with a couple of nearshore mainland exceptions, including Grand Bay National Estuarine Research Reserve. The barrier island pond/lagoon areas are often dominated by wigeon grass and contain trapped fresh or brackish water. Widgeon grass beds occur in shallow and moderately turbid waters that are lower in salinity. The beds are found in bays, along bayous, on submerged mudflats and occasionally in barrier island ponds.

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. 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

In the course of carrying out sea turtle stranding activities, stranding partners may encounter and carry out stranding network response activities with marine mammals.

h. Soils and Sediments

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

N/A

i. Land Use

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

N/A

j. Essential Fish Habitat

If applicable. Describe any designated Essential Fish Habitat within the project area

Strandings usually occur on shorelines or in shallow waters adjacent to shorelines or in bays and estuaries which are designated as Essential Fish Habitat (EFH) for a large number of fishery species managed by the Gulf of Mexico Fishery Management Council and Highly Migratory Species managed by NOAA. Given the as-yet unknown locations of strandings, identification of Federally managed species having EFH in the project area is difficult. It is unlikely that the project implementation would have an adverse impact on any category of EFH in the study area due to the small areas of potential response within EFH. The table below lists EFH species, substrates, and life stages within the study area.

EFH Species Table

Species	Habitats Utilized	Life stages within the Aquatic areas of the Study Area
Red Drum (*Scianops ocellatus*)	SAVs, soft bottom, hard bottom, sand/shell, emergent marsh	Larvae, post larvae, juvenile, adult, spawning adults
Mutton Snapper (*Lutjanus analis*)	SAVs	Juvenile, adult
Cubera Snapper (*Lutjanues cyanopterus*)	SAVs, emergent marsh	juvenile
Gray Snapper (*Lutjanus griseus*)	SAVs, soft bottom, sand/shell, emergent marsh	Post larvae, juvenile, adult,
Lane Snapper (*Lutjanus synagris*)	SAVs, soft bottom, sand/shell	Post larvae, juvenile
Yellowtail Snapper (*Ocyurus chrysurus*)	SAVs, soft bottom	juvenile
Goliath Grouper (*Epinephelus itajara*)	SAVs, hard bottom	juvenile
Red Grouper (*Epinephelus morio*)	SAVs, hard bottom	juvenile
Black Grouper (*Mycteroperca bonaci*)	SAVs	juvenile
Species	**Habitats Utilized**	**Life stages within the Aquatic areas of the Study Area**
Spanish Mackerel (*Scomberomorus maculatus*)	pelagic	Juvenile, adult

Brown Shrimp (*Penaeus aztecus*)	SAVs, soft bottom, sand/shell, emergent marsh, oyster reef	Post larvae, juvenile
White Shrimp (*Penaeus setiferus)*	emergent marsh, soft bottom	Post larvae, juvenile

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.*

To address the injury, this proposed project would focus on maintaining the enhanced capacity of the Mississippi sea turtle stranding network in order to provide an improved ability to respond to stranded, sick, injured, or deceased sea turtles. If the response is to a deceased animal, it is also important to respond quickly because data from tissue samples are lost as the decomposition process occurs. These data are imperative to gaining essential information about life history, understanding environmental conditions, and in aiding to determine cause of illness and death. This proposed project would be a continuation of the NFWF-GEBF Mississippi Marine Mammal and Sea Turtle Conservation, Recovery, and Monitoring Program - Phase I that is anticipated to be completed in 2022.

The Implementing Trustee for this proposed project would be the Mississippi Department of Environmental Quality. The anticipated project duration is 3 years. The proposed project would be implemented under the three primary tasks described below

Activities would be conducted by IMMS and MSU. These two entities are authorized participants of the STSSN and they hold the proper permits/authorizations from NMFS and USFWS to do stranding response and rehab work.

<u>Maintain Enhanced Stranding Network Capacity for Sea Turtle Conservation</u>

This task would seek to continue the enhanced response and data collection efforts to further understand mortality, inform population studies, as well as enhance potential for species conservation

and recovery and rehabilitation. Stranding response and diagnostic follow-up of stranded animals maintained at the enhanced capacity would allow for current stranding response and data collection efforts in the Mississippi Restoration Area to be continued. The project may include funding multiple seasonal responders, per the appropriate need for Mississippi, based on a review of historic stranding and incidental capture response needs. Personnel would work to ensure efficient and timely response to sea turtle strandings during peak times are maintained. The organization-level stranding lead would ensure the enhanced coordination with the MS State Coordinator and fellow response organizations within the state are maintained. This task includes but is not limited to increases in stranding network personnel, equipment and supplies; and data enhancement and coordination. Specific enhancements that are currently on-going and would be maintained by this project include:

- Increased response above baseline for Mississippi- IMMS and MSU responding 7 to 10 times the number of dead and live strandings of sea turtles compared to pre-2010.
- Emergency 24/7 call; response times have been reduced compared to pre-2010.
- Searches using various platforms (ATVs, boats, and drones) in a variety of habitats to locate turtles in bays, bayous, islands and beaches.

Assessment of Health and Mortality Dynamics of Sea Turtles

This task would serve to maintain the timeliness, efficiency, and number of cases analyzed to provide more cause of death information. Having the state's more direct involvement in the stranding response team along with enhancing diagnostics and monitoring would continue to allow real time adaptation to changing conditions and the pursuit of diagnoses that would otherwise not be possible. This task includes but is not limited to: field and laboratory necropsies; histopathology examinations; toxicological, bacterial, viral, and parasitic exams; stomach content analysis; diagnostic imaging; and genetic analysis. The project would fund the continued participation of MSU veterinary staff per the current MSU/IMMS/NOAA Agreement, to continue to enhance MS sea turtle necropsy capacity. Specific enhancements that are currently on-going and would be maintained by this project include:

- Enhanced expertise to assess mortality trends: The program would enhance health and mortality assessment by using highly qualified board-certified veterinary pathologists and trained veterinary students to conduct necropsies.
- Enhanced tissue analysis to assess mortality trends. Tissue analysis includes toxicologic analysis, including polycyclic aromatic hydrocarbons and biological toxins, microplastics, and heavy metals. The tissue analyses during the GEBF-funded program, as well as data collected for this project would enable evaluation of mortality trends, especially as it relates to conditions in the Mississippi Sound.

Rehabilitation and Restoration

This task would seek to maintain the increased capacity to rehabilitate sea turtles as a result of stranding or incidental take and ultimately be returned to the Mississippi Sound. Any incidental take of sea turtles, whether by boat or hook and line from recreational piers, would be reported to the stranding network and would also allow for a greater chance of rehabilitation and return of those taken. Veterinary staff operating under USFWS and NOAA protocols for rehabilitation would allow for quicker diagnosis and rehabilitation of captured turtles. The decision to release immediately or admit for rehabilitation and possible future release would be made by an attending veterinarian. Specific enhancements that are currently on-going and would be maintained by this project include:

- Advanced veterinary care. Live sea turtles (incidental captures) brought for rehabilitation are provided care by veterinarians that are well experienced treating sea turtles and marine wildlife. The primary care veterinarians are supported by MSU CVM board-certified veterinary specialists (internal medicine, ophthalmology, radiology, and clinical pathology). These enhanced efforts resulted in an over 95% survival rate of rehabilitated turtles contributing to the restoration and recovery of the endangered species. To achieve this success rate, rehabilitation of sea turtles is often time consuming and expensive. Some animals have had to be rehabilitated for many months with multiple veterinary procedures and diagnostic testing. In the past 10-years, IMMS has rehabilitated and released over 1,000 Kemp's ridley sea turtles, that have contributed significantly to the restoration and recovery of the species.
- Enhanced diagnostics. The program would support enhanced diagnostic analysis of tissues and samples to inform veterinary care and identify trends affecting health of the animals (toxicology and microbiome analysis).
- Health status trends of sea turtles. Turtles brought into rehabilitation serve as a good sample of the Mississippi

  Sound population to monitor their health. Threats from both natural and anthropogenic factors continue to occur,

  which could affect the habitat and the sea turtle population.

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☒
Will fishing 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 Species & 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 G. and proceed to Section H.

☐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.

The STSSN partners listed here (IMMS and MSU) are authorized to carry out the work needed to respond to dead and injured sea turtles listed under the ESA and fall under the existing NMFS ESA consultation issued to the STSSN and its authorized partners.

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.

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.

Identify if Gulf sturgeon are in marine or in freshwater in your Species and/or Critical Habitat list to determine which federal agency will perform the analysis (e.g. Gulf sturgeon CH - marine). Identify if sea turtles are in water or on land in your Species and/or Critical Habitat list to determine which federal agency will perform the analysis (e.g. Loggerhead sea turtle CH - terrestrial).

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.	Select Most Appropriate	Select Most Appropriate
Choose an item.		Choose an item.	Select Most Appropriate	Select Most Appropriate
Choose an item.		Choose an item.	Select Most Appropriate	Select Most Appropriate
Choose an item.		Choose an item.	Select Most Appropriate	Select Most Appropriate
Choose an item.		Choose an item.	Select Most Appropriate	Select Most Appropriate
Choose an item.		Choose an item.	Select Most Appropriate	Select Most Appropriate
Choose an item.		Choose an item.	Select Most Appropriate	Select Most Appropriate
Choose an item.		Choose an item.	Select Most Appropriate	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

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.

Critical Habitat No Destruction = When the proposed action will not diminish the value of critical habitat.

H. USFWS Species & 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 G. and proceed to Section H.

☐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 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.

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.

Identify if Gulf sturgeon are in marine or in freshwater in your Species and/or Critical Habitat list to determine which federal agency will perform the analysis (e.g. Gulf sturgeon CH - marine). Identify if sea turtles are in water or on land in your Species and/or Critical Habitat list to determine which federal agency will perform the analysis (e.g. Loggerhead sea turtle CH - terrestrial).

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.	Covered by existing consultations	Select Most Appropriate
Loggerhead Sea Turtle CH	LOGG-N-35 LOGG-N-36	Terrestrial	Covered by existing consultations	Select Most Appropriate
Loggerhead Sea Turtle		Terrestrial	Covered by existing consultations	Select Most Appropriate
Leatherback Sea Turtle		Terrestrial	Covered by existing consultations	Select Most Appropriate
Kemp's RidleyKemp's Ridley		Terrestrial	Covered by existing consultations	Select Most Appropriate
Hawksbill Sea Turtle		Terrestrial	Covered by existing consultations	Select Most Appropriate
Green Sea Turtle		Terrestrial	Covered by existing consultations	Select Most Appropriate
Gulf Sturgeon		Riverine/Freshwater	No Effect	Species does not occur within action area
Gulf Sturgeon CH	Unit 2	Riverine/Freshwater	No Effect	Species does not occur within action area
Pearl Darter		Choose an item.	No Effect	Species does not occur within action area
Piping Plover		Choose an item.	May Affect, Not Likely to Adversely Affect	Select Most Appropriate
Piping Plover CH	MS-1 through MS-13	Choose an item.	May Affect, Not Likely to Adversely Affect	Select Most Appropriate
Red Knot		Choose an item.	May Affect, Not Likely to Adversely Affect	Select Most Appropriate
Inflated Heelsplitter		Choose an item.	No Effect	Species does not occur within action area
Eastern Black Rail		Choose an item.	No Effect	No suitable habitat action area
Mississippi Sandhill Crane		Choose an item.	No Effect	No suitable habitat i action area
Mississippi Sandhill Crane CH		Choose an item.	No Effect	No suitable habitat action area
Wood Stork		Choose an item.	No Effect	No suitable habitat action area

Alabama Red-bellied Turtle		Choose an item.	No Effect	No suitable habitat action area
Gopher Tortoise		Choose an item.	No Effect	No suitable habitat action area
Dusky Gopher Frog		Choose an item.	No Effect	No suitable habitat action area
Dusky Gopher Frog CH	Units 2, 3, 4, 5, 6, and 7	Choose an item.	No Effect	No suitable habitat action area
Louisiana Quillwort		Choose an item.	No Effect	No suitable habitat action area
Red-cockaded Woodpecker		Choose an item.	No Effect	No suitable habitat action area
Black Pine Snake		Choose an item.	No Effect	No suitable habitat action area
Black Pine Snake CH	Unit 5	Choose an item.	No Effect	No suitable habitat action area
Eastern Indigo Snake		Choose an item.	No Effect	No suitable habitat action area
Yellow-blotched Map Turtle		Choose an item.	No Effect	No suitable habitat action area
Ringed Map Turtle		Choose an item.	No Effect	No suitable habitat action area

Determination Definitions

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.

Critical Habitat No Destruction = When the proposed action will not diminish the value of critical habitat.

I. Effects of the proposed project to the species 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 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.

Activities include responding to stranding events on the shoreline and shallow water areas adjacent to the shoreline along the Mississippi Sound coast. The area where work would occur would be the area immediately adjacent to the stranded individual or individuals, and would likely be a very small area (likely less than 0.10 acre per event). If any protected species is present at the time of response, they could be temporarily displaced during response activities.

Disturbance to terrestrial ESA-listed species could occur in or near areas where MS STSSN staff are responding to stranded sea turtles. Potential disturbance to ESA-listed marine species (sea turtles, West Indian manatee, and Gulf sturgeon) would be negligible with the implementation of appropriate conservation measures. ESA-listed species that inhabit nearshore and coastal habitats where strandings occur (such as Gulf sturgeon and sea turtles) may experience temporary displacement related to response activities.

The project would result in an increase in STSSN activities which may result in disturbance to marine and estuarine fauna because of the potential for increased interactions with boats and vehicles. Boat operators would follow NOAA NMFS Southeast Region's *Vessel Strike Avoidance Measures and Reporting for Mariners*, which would minimize potential harm to marine mammals and sea turtles. There could be elevate noise levels and increased human activity from the stranding response. Below is a list of potential protected species that could occur at the project area and potential conservation measures that would be considered.

Marine Mammals: Marine mammals near the stranding response area would be disturbed by increased human, vessel, and/or vehicle presence during response activities but can return once response

activities are complete. Potential BMPs that would be considered during environmental compliance reviews include Vessel Strike Avoidance Measures and Reporting for Mariners.

Sea Turtles: Stranded sea turtles could experience short-term increased stress from response activities. However, these short-term stressors would be balanced with the long-term benefits (rehabilitation of live sea turtles recovered and additional data on causes of death from sea turtle carcasses that are necropsied) provided by an enhanced stranding network. Existing sea turtle nests would be avoided during project activities. Nesting sea turtles could be temporarily disturbed by increased human presence during response activities. However, every effort would be made to avoid disturbances to nesting sea turtles. Sea turtles near the stranding response area would be disturbed by increased human, vessel, and/or vehicle presence during response activities but can return once response activities are complete. Potential BMPs that would be considered during environmental compliance reviews include Vessel Strike Avoidance Measures and Reporting for Mariners. Best Practices will be implemented to minimize any potential effects to sea turtles and include the following measures: 1) If a sea turtle (either adult or hatchling) is observed, maintain at least 200 feet between the turtle and personnel, equipment, or machinery and notify the sea turtle monitoring program. Allow the turtle to leave the area of its own volition. 2) Existing nests would be avoided by at least 10 feet.

Gulf Sturgeon: Sturgeon are highly mobile and can avoid any disturbances in that area by swimming away. Potential BMPs that will be implemented include Protected Species Construction Conditions (NMFS 2021), and Measures for Reducing the Entrapment Risk to Protected Species.

Piping Plover and Red Knot: Piping plover and red knot individuals near the stranding response area would be disturbed by increased human, vessel, and/or vehicle presence during response activities but can return once response activities are complete. Existing bird nests would be avoided during project activities. Birds could be temporarily disturbed by increased human presence during response activities. However, every effort would be made to avoid disturbances to piping plover and red knot. Best Practices will be implemented to minimize any potential effects to piping plover and red knot and include the following measure: 1) Provide all individuals working on restoration activities associated with the project with information in support of general awareness of piping plover or red knot presence and means to avoid birds and their critical or otherwise important habitats.

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 (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.*

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

☒ **USFWS Standard Manatee In Water Conditions**

☒ **NMFS Sea Turtle and Smalltooth Sawfish Construction Conditions**[1]

☒ **NMFS Measures for Reducing the Entrapment Risk to Protected Species**[1]

☒ **NFMS Vessel Strike Avoidance Measures and Reporting for Mariners**[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- 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.

J. 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.

Loggerhead sea turtle nesting critical habitat occurs along the southern shores of Horn and Petit Bois islands of the project area. Piping plover critical habitat occurs throughout the action area. Project activities include responding to stranding events on the shoreline and shallow water areas adjacent to the shoreline the along Mississippi Sound coast and barrier islands. The area that would be impacted would be the area immediately adjacent to the stranded individual or individuals, and would likely be a very small area (likely less than 0.10 acre per event) within critical habitat areas. There would be no effect on critical habitat.

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.

K. 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 ar 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

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[10]
☐	NMFS Sea Turtle and Smalltooth Sawfish Construction Conditions[11]
☐	NMFS Measures for Reducing the Entrapment Risk to Protected Species[3]

☐	NFMS Vessel Strike Avoidance Measures and Reporting for Mariners[3]
☐	Reproducing and posting outreach signs: Dolphin Friendly Fishing Tips sign, Don't Feed Wild Dolphins sign[3]

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

L. 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

M. 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

[10] Documents can be found here: http://sero.nmfs.noaa.gov/protected_resources/outreach_and_education/index.html
[11] Documents can be found here: http://sero.nmfs.noaa.gov/protected_resources/section_7/guidance_docs/index.html

"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**

N. 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