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 Protect 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.

A. Project Identification

Federal Action Agency: U.S. Fish and Wildlife Service

Additional Federal Action Agency: National Marine Fisheries Service

Agency Contact(s)

USFWS: Ashley Mills at 812-756-2712 and Ashley_Mills@fws.gov
NMFS: Christy Fellas at 727-551-5714 and Christina.Fellas@noaa.gov

I. *Implementing Trustee(s)*: Louisiana Department of Wildlife and Fisheries

II. *Contact Person*: Brady Carter

III. *Phone*:

Email: bcarter@wlf.la.gov

IV. *Project Name and ID# (Official name of project and ID number assigned by Trustees in DIVER)*: Atchafalaya Delta Wildlife Management Area Campgrounds

V. *NMFS Office (Choose appropriate office based on project location)*: NMFS Southeast Regional Office

USFWS Office (Choose or write in appropriate office based on project location): Louisiana Ecological Services Field Office (Lafayette)

VI. *Project Type #1*: Enhance Recreational Experiences

Project Type #2, if helpful: Enhance Public Access to Natural Resources for Recreational

VII. *TIG*: Louisiana TIG

Restoration Plan: Recreational Use

B. Project Location

I. Physical Address of action area (If applicable): N/A

II. *State & County/Parish of action area*: Louisiana, St. Mary Parish

III. *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])*: 29.537719°N, 91.436987°W NAD83

IV. Township, range and section of the action area: Township 17 South, Range 10 East, Section 27

C. 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:
-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

Have any federal permits been applied for but not yet obtained, if so which ones and what is the permit number(s)? ☐ Yes ☑ No

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.

Deepwater Horizon Oil Spill Louisiana Trustee Implementation Group Restoration Plan and Environmental Assessment #4: Nutrient Reduction (Nonpoint Source) and Recreational Use

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

Name of Person Completing this Form:	Nicole Smolensky
Name of Project Lead:	
Date Form Completed:	01/23/2018
Date Form Updated:	04/23/2018

D. Description of Action Area

Attach a separate map delineating where the action will occur and where critical habitat, if any, is located. Map or describe all areas that may be directly or indirectly affected by the action. 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). If CH is not designated in the area, then map or describe any suitable habitat in the area.

The Atchafalaya Delta Wildlife Management Area (WMA) is located at the mouths of the Atchafalaya River and the Wax Lake Outlet, within the Atchafalaya Basin in St. Mary Parish. Within the bay, two deltas, Main Delta and Wax Lake Delta, have formed from the accretion of sediments from the Atchafalaya River and from dredge materials deposited by the U.S. Army Corps of Engineers (USACE). The WMA is 137,695 acres and is managed primarily for hunting and fishing. The Main Delta area has approximately 15,000 acres of marsh and scrubby habitat; the Wax Lake Delta has approximately 12,000 acres of marsh. The Proposed Project action area is located within the Wax Lake Delta in the northwest portion of the Atchafalaya Delta WMA.

The Proposed Project is located in the Mississippi Alluvial Plain (73) Level III ecoregion and the Deltaic Coastal Marshes and Barrier Islands (73o) Level IV ecoregion (Daigle et al. 2006). The following information was obtained from Daigle et al. 2006 unless indicated otherwise. The Mississippi Alluvial Plain is mostly a broad, flat alluvial plain with river terraces, swales, and levees providing the main elements of relief. Elevation ranges from 0 to 15 feet above mean sea level and local relief ranges from 0 to 10 feet. Winters are mild, and summers are hot with minimum/maximum temperatures of 44˚F/64 ˚F and 72 ˚F/92˚F respectively. Mean annual precipitation ranges from 64 to 66 inches. The ecoregion historically comprised bottomland deciduous forest with extensive wetlands, but much of it was cleared for cultivation. Brackish and saline marshes dominate the Deltaic Coastal Marshes and Barrier Islands ecoregion. The region supports vegetation tolerant of brackish or saline water, including saltmarsh cordgrass, marshhay cordgrass, black needlerush, and coastal saltgrass. Black mangrove occurs in a few areas, and some live oak is found on remnant natural ridges or old spoil banks. Extensive organic deposits lie mainly below sea level in permanently flooded settings resulting in the development of mucky surfaced Histosols. Entisols may also be present. Soil series include Allemands, Kenner, Larose, Clovelly, Lafitte, Bancker, Scatlake, Timbalier, Bellpass. Sediments of silts, clays, and peats contain large amounts of methane, oil, and hydrogen sulfide gas. Inorganic sediments found within the ecoregion are soft and have high water contents and shrink dramatically upon draining. The wetlands and marshes in the region act as a buffer to help moderate flooding and tidal inundation during storm events.

The Proposed Project is located in the Atchafalaya River Basin in the central part of the coastal zone, which is approximately 3,981,346.64 acres (U.S. Geological Survey [USGS] 2018). The Atchafalaya River Basin is unique among the Louisiana basins because it has a growing delta system with nearly stable wetlands. The region contains approximately 58,400 acres of wetlands, but most of the area consists of open water (Coastal Wetlands Planning, Protection and Restoration Act [CWPPRA] 2017). The Atchafalaya River is a distributary of the Red, Black, and Mississippi Rivers presently carrying approximately 30% of the Mississippi's flow. The basin is defined by levee systems on the north, east, and west sides and serves as a major floodway for the Mississippi River floodwaters, The area is predominantly wooded lowland and cypress-tupelo swamp with sporadic freshwater marshes located in the lower distributary area. This region contains the largest fresh water swamp in the United States (Louisiana Department of Environmental Quality [LDEQ] 2016).

Water quality issues identified in the FINAL 2016 Louisiana Water Quality Inventory: Integrated Report (305(b)/303(d)) within the Proposed Project general vicinity include mercury in fish tissue and fecal coliform. These issues hinder recreational swimming, boating, and fishing in the general area (LDEQ 2016).

Although there is designated critical habitat (LA-2) for piping plover within St. Mary Parish, it is located approximately 0.5 mile southeast of the Proposed Project. The designated critical habitat is not considered to be included in the Proposed Project action area because of the absence of primary constituent elements and the localized activities of the proposed actions.

Designated essential fish habitat (EFH) for coastal migratory pelagic resources, red drum, reef fish, and shrimp is present within the Proposed Project (National Oceanic and Atmospheric Administration [NOAA] 2018). See the attached map illustrating designated EFH.

a. *Waterbody*

If applicable. Name the body of water, including wetlands (freshwater or estuarine), on which the project is located. If the location is in a river or estuary, please approximate the navigable distance from the project location to the marine environment.

The Proposed Project action area is located within the Wax Lake Delta of the Atchafalaya River, approximately 4.6 miles from estuarine or marine environments. According to the National Wetland Inventory (NWI), the Proposed Project is located within a freshwater riverine system, with associated adjacent freshwater emergent wetlands (U.S. Fish and Wildlife Service [USFWS] 2017). Please see attachment map illustrating the NWI dataset.

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.

The Proposed Project is an existing campground with pit-restrooms on-site and two wooden, floating docks. Within the Proposed Project action area, a small island located immediately adjacent to the campground is used to moor boathouses (currently, approximately 20 boathouses are moored here) (Google Earth Imagery 2016).

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.

The Proposed Project action area is located within freshwater systems that lack suitable environments for seagrass and other marine vegetation (Google Earth Imagery 2016) and is located outside of mapped distributions of submerged aquatic vegetation (Love et al. 2013; NOAA 2018). Therefore, surveys for seagrass are not scheduled for the Proposed Project.

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.

The Proposed Project action area is surrounded by freshwater systems that lack suitable environments for mangroves (Google Earth Imagery 2016) and is located outside of mapped distributions of mangroves (Love et al. 2013; NOAA 2018). Therefore, surveys for mangroves are not scheduled for the Proposed Project.

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.

The Proposed Project action area is surrounded by freshwater systems that lack suitable environments for corals (Google Earth Imagery 2016) and is located outside of mapped distributions (Love et al. 2013; NOAA 2018). Therefore, surveys for these resources have not been conducted for this area, nor are they scheduled for the Proposed Project.

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.).

The Proposed Project action area is within freshwater riverine systems. Adjacent upland habitat is scrubby and marsh habitats.

g. *Marine Mammals*

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

The West Indian manatee has the potential to occur within the general area of the Proposed Project. The Proposed Project action area occurs within freshwater riverine systems that might contain suitable habitats; however, available data indicate no suitable submerged aquatic vegetation exists within the vicinity (Love et al. 2013; NOAA 2018) and no occurrences have been recorded in this area (Louisiana Department of Wildlife and Fisheries [LDWF] 2018). SARs indicate a common bottlenose dolphin stock for the Vermilion Bay, West Cote Blanche Bay, and Atchafalaya Bay (NOAA 2016b).

E. Project Description

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

The construction start date and duration will be determined by the LDWF during final design, but would not take place between November and January.

II. *Describe the Proposed Action: 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. 3. 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.*

LDWF is proposing to install two jetties and a bulkhead at the campground. The two jetties would be located at the far east end of the campground where water flow is the strongest (southerly flow from Wax Lake toward the Gulf of Mexico). The jetties would function as a breakwater and the material used for the jetties defends the riverbank and the bulkhead by training the active channel away from the campground. One jetty (west) would be 85 feet in length and the other jetty (east) would be 120 feet long. The jetties would be parallel, and approximately 50 feet apart from each other. Materials used for the jetties would be determined during final design by the engineer, but would likely either be rock, soils, and gravel or timbers and vinyl, from approved sources.

The bulkhead would be installed to follow the contour of the shoreline following the entire length of the campground (approximately be 1,200 linear feet). The east end of the bulkhead would be installed approximately 30 feet from the shoreline, and 2,376 cubic yards of backfill with local sediment would be needed behind the new bulkhead to restore the footprint of the campground. The bulkhead is designed so that boats may dock or moor to the bulkhead or two new 40-foot docks, offering direct and safe access to the campground. The jetties and bulkhead would provide stronger, safer streambanks at the campground that would be less susceptible to existing and future erosion.

Details of the bulkhead construction may vary after the design is finalized, though it is likely that bulkhead installations would include interlocking steel sheet piles driven directly into the sediment that are approximately 12-14 inches wide, totaling 1,028 to 1,200 sheet piles that would be driven for the bulkhead. An approximate total of 600 treated timber tie-backs with 8 x 8 inch dimensions would be driven into the substrate behind the sheet pile wall, connected to the sheet piles with steel tie-back cables, and covered with associated backfill material. Because the sheet piling would be installed in water, typical installation would likely occur from a boat- or barge-mounted large impact hammer system. An impact hammer system is anticipated rather than a vibratory hammer as it is likely that the sheet pile and timber tie-back driving will entail soil displacement by piles during driving. Duration of pile driving activities can vary widely based on a number of site-specific variables, though it is likely, given a standard rate of 60 feet per day for large impact pile drivers, that approximately 51 to 60 sheet piles could be driven within an assumed 480 minute workday of hammer operation. At this rate, sheet and timber pile installation for the bulkhead would take approximately 30 days of sequential pile driving activity.

The number of strikes per pile varies widely (up to an order of magnitude) based on a number environmental variables, and particularly, the type of impact hammer being used. A hammer with a standard energy rating of 52,000 ft-lbs on a silt/mud substrate type would produce approximately 200 strikes per sheet pile. Despite a wide variance in the number of strikes possible from impact pile hammers, it is expected that an average of 6-7 piles would be installed per hour of workday.

In-water work and upland work are expected because the construction for the jetties and bulkhead would take place both within the water and along the immediate shoreline. A floating bucket dredge would be used to excavate, place, and compact material. Minor upland activity may include hand digging and loading. Typical construction equipment used for this type of project includes a crane, boom, set of leads, pile hammer, helmet, pile gate, and pile monkey. Some associated equipment can be staged either onshore at the campground or on a barge in the waterway.

Some backfilling with local sediment would be needed behind the new bulkhead. Backfill would use local materials (e.g., sedimentation build-up) and would not create new materials pits or holes. The bulkhead would be installed with a crane and impact hammer pile, but would also require hand crews on the upland (i.e., the campground) portions of the Proposed Project.

The NRCS Soil Survey for St. Mary Parish, Louisiana (U.S. Department of Agriculture [USDA] 2018) identifies one soil map unit where construction would occur within the Proposed Project area: Aquents, dredged, 1 to 5 percent slopes, occasionally flooded (ATB). This substrate is composed of alluvial parent material and exhibits very poor natural drainage.

Please see the attached map of the Proposed Project.

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

a. *If applicable, Overwater Structures (Place your answers to the following questions in the box below.)*

i. *Is the proposed use of this structure for a docking facility or an observation platform?*

ii. *If no, is this a fishing pier? Public or Private? How many people are expected to fish per day? How do you plan to address hook and line captures?*

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 (sqft)?*

The Proposed Project includes a bulkhead approximately be 1,200 linear feet with 2 40-foot docks. Details of the dock construction may vary until the design is finalized but assumed to be oriented parallel to the shoreline approximately NNE, and comprised of 8x8 inch timber piles.

b. *Pilings & Sheetpiles (What type of material is the piling or sheetpiles? What size and how many will be used? Method used to install: impact hammer, vibratory hammer, jetting, etc.?)*

The bulkhead would be installed to follow the contour of the shoreline following the entire length of the campground (approximately be 1,200 linear feet). The east end of the bulkhead would be installed approximately 30 feet from the shoreline, and 2,376 cubic yards of backfill with local sediment would be needed behind the new bulkhead to restore the footprint of the campground. Steel sheet piles would be approximately 12-14" wide, requiring an approximate total of 1,028-1,200 sheet piles to complete the bulkhead. Roughly 600 8x8 timber tie-backs would be driven into the substrate behind the sheet pile wall, connected to the sheet piles with steel tie-back cables, and covered with associated backfill. A hammer with a standard energy rating of 52,000 ft-lbs on a silt/mud substrate type would produce approximately 200 strikes per sheet pile. The bulkhead would be installed with a crane and impact hammer pile, but would also require hand crews on the upland (i.e., the campground) portions of the Proposed Project. Please see the attachment map of the Proposed Project.

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.)*

No marinas or boat slips are proposed.

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.)*

This Proposed Project would not involve public or private boat ramp work.

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.*

The two jetties would be located at the far east end of the campground where water flow is the strongest (southerly flow from Wax Lake toward the Gulf of Mexico). The jetties would function as a breakwater and the material used for the jetties defends the riverbank and the bulkhead by training the active channel away from the campground. One jetty (west) would be 85 feet in length and the other jetty (east) would be 120 feet long. The jetties would be parallel, and approximately 50 feet apart from each other. Materials used for the jetties would be determined during final design by the engineer, but would likely either be rock, soils, and gravel or timbers and vinyl, from approved sources. Please see the attachment map of the Proposed Project.

f. *Dredging or digging (Provide details about dredge type (hopper, cutterhead, clamshell, etc.), maximum depth of dredging, area (ft^2) to be dredged, volume of material (yd^3) 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.*

In-water work and upland work are expected because the construction for the jetties and bulkhead would take place both within the water and along the immediate shoreline. A floating bucket dredge would be used to excavate, place, and compact material. Minor upland activity may include hand digging and loading. Typical construction equipment used for this type of project includes a crane, boom, set of leads, pile hammer, helmet, pile gate, and pile monkey. Some associated equipment can be staged either onshore at the campground or on a barge in the waterway. Dredged material will be moved via dragline.

Some backfilling with local sediment would be needed behind the new bulkhead. Backfill would use local materials (e.g., sedimentation build-up) and would not create new materials pits or holes. The bulkhead would be installed with a crane and impact hammer pile, but would also require hand crews on the upland (i.e., the campground) portions of the Proposed Project.

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.)*

No blasting would be necessary or allowed during construction.

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), 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.*

No artificial reefs are present (LDWF 2013) nor proposed for the Proposed Project

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)).*

The Proposed Project would enhance access and opportunities for fishing within the Atchafalaya Delta WMA. This would include line and hook from boats or banks within the WMA.

F. NOAA Species & Critical Habitat and Effects Determination Requested

1. *List all species, critical habitat, proposed species and proposed critical habitat that may be found in the action area.*

2. *Attach a separate map identifying species/critical habitat locations within the action area.*

For information on species and critical habitat under 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)	**DETERMINATION** (see definitions below)
Green Sea Turtle (T)		Marine	No Effect
Loggerhead Sea Turtle (T)		Marine	No Effect
Hawksbill Sea Turtle (E)		Marine	No Effect
Leatherback Sea Turtle (E)		Marine	No Effect
Kemp's Ridley Sea Turtle (E)		Marine	No Effect
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
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Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate

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 = 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 = 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.

Critical Habitat Destruction or Adverse Modification = Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.

G. USFWS Species & Critical Habitat and Effects Determination Requested

1. *List all species, critical habitat, proposed species and proposed critical habitat that may be found in the action area.*
2. *Attach a separate map identifying species/critical habitat locations within the action area.*

For information on species and critical habitat under USFWS jurisdiction, visit http://www.fws.gov/endangered/species/.

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)	**DETERMINATION** (see definitions below)
Pallid sturgeon		Riverine/freshwater	May Affect, Not Likely to Adversely Affect
Hawksbill sea turtle		Terrestrial	No Effect
Kemp's Ridley		Terrestrial	No Effect
Leatherback sea turtle		Terrestrial	No Effect
Loggerhead sea turtle		Terrestrial	No Effect
Piping plover		Select One	No Effect
Red knot		Select One	No Effect
West Indian manatee		Select One	May Affect, Not Likely to Adversely Affect
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
		Select One	Select Most Appropriate
		Select One	Select Most Appropriate

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 = 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 = 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.

Critical Habitat Destruction or Adverse Modification = Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.

H. Effects of the proposed project to the species and habitats

I. *Explain the potential beneficial and adverse effects to each species listed above (Describe what, when, and how the species will be impacted and the likely response to the impact. Be sure to include direct, indirect, and cumulative impacts and where possible, quantify effects. If species are present (or potentially present) and will not be adversely affected describe your rationale. If species are unlikely to be present in the general area or action area, explain why. This justification provides documentation for your administrative record, avoids the need for additional correspondence regarding the species, and helps expedite review.)*

The Proposed Project is anticipated to have No Effect on the following species: both marine and terrestrial life stages of the hawksbill, Kemp's Ridley, leatherback, and loggerhead sea turtles; the marine life stage of the green sea turtle; and the piping plover and red knot. This is based on the assumption that these species will not occur in the Proposed Project action area because of the absence of suitable aquatic foraging habitat, lack of suitable nesting habitat, or lack of suitable wintering foraging/roosting/loafing habitat (for the piping plover and red knot) (GoogleEarth Imagery 2017; NOAA 2018; Love et al. 2013; NatureServe 2016).

The Proposed Project May Affect, Not Likely to Adversely Affect the the pallid sturgeon and the West Indian manatee.

The pallid sturgeon is found in large, turbid, free-flowing riverine habitats including the Mississippi River and the Atchafalaya watershed (NatureServe 2016). The Proposed Project action area is located at the coastal end of the Atchafalaya Delta in tidally influenced riverine waters. The Proposed Project's activities will involve in-water work including use of a floating bucket dredge for excavation, and impact hammer for bulkhead installation, and shoreline armoring (jetties). These activities within the Proposed Project action area could result in temporary increases in turbidity and construction noise that would be localized and temporary. The jetty would reduce sediment erosion. The turbidity and construction noise may result in localized temporary avoidance of the Proposed Project action area by the pallid sturgeon. Although the Proposed Project activities may temporarily increase local turbidity, increased turbidity is not anticipated to adversely affect this species due to the habitat preferences of this species (i.e., relatively turbid riverine waters). The Proposed Project activities do not involve obstruction of riverine paths, nor will there be significant modification of upstream hydrologic flows of the Atchafalaya River. Entrainment is anticipated to be avoided or minimized due use of bucket dredge methods, and pallid sturgeon BMPs listed in the attachment will be implemented and enforced by the implementing trustee to minimize and avoid any potential impacts to this species within the Proposed Project action area.

Please refer to the attachment for continued discussion.

II. *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 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 Proposed Project action area is located outside designated critical habitat; therefore, no effects to critical habitat would occur.

I. Actions to Reduce Adverse Effects

I. *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.)*

Species-specific best management practices (BMPs) from the Final PDARP/PEIS (DWH Trustees 2016:Section 6, Appendix A) that would be incorporated into the Proposed Project are included as an attachment.

Additionally, all individuals (such as construction workers) working on the Proposed Project would be provided with information on general awareness of any federally protected species that have the potential to occur in the Proposed Project action area. Seasonal avoidance measures will be implemented when practicable. If work must be conducted when these species are present, certain activities may be restricted or modified to reduce disturbance of these species (see attached BMPs).

The Implementing Trustee will implement and enforce approved BMPs listed in the attachment to avoid and minimize impacts to species listed in Sections F and G. Continued coordination of BMPs will occur during the final design phase.

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.)*

Designated critical habitat is not present within the Proposed Project. Therefore, no impacts to critical habitat would occur as a result of the proposed construction of recreational features, and no additional conservation measures are proposed other than the construction BMPs listed in the attachment.

J. 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

Is your activity likely to impact 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	
☑	☐	*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) *Building or enhancing areas for water-related recreational use or fishing opportunities (e.g. fishing piers, bridges, boat ramps, marinas)*
☑	☐	*f) Aquaculture*
☐	☑	*g) Dredging or in-water construction activities to change hydrologic conditions or connectivity, create breakwaters and living shorelines, etc.*
☑	☐	*h) Restoration of barrier islands, levee construction or similar projects*
☑	☐	*i) Fresh-water river diversions*

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

Please refer to Section E Project Description for construction details of the Proposed Project. The in-water activities involve dredging and bulkhead installation using a vibratory hammer system that may generate some noise. The NOAA Technical Guidance classifies vibratory hammer systems as non-impulsive sound source that may be less injurious relative to impulsive sound sources. Acoustic frequencies of the vibratory hammer systems implemented in the Proposed Project are unknown. Thus the Proposed Project may or may not result in temporary shifts in species behaviors (NOAA Fisheries 2016).

IV. Are any measures planned to mitigate potential impacts to marine mammals? If yes, provide text in box below. ☐ NO ☑ YES

The implementing trustee will implement and enforce the Standard Manatee Conditions BMPs, NMFS's Measures for Reducing Entrapment Risk to Marine Mammals, and NMFS's Vessel Strike Avoidance Measures as listed in the attachment to avoid and minimize impacts to manatees and bottlenose dolphins. Continued coordination of BMPs will occur during the final design phase.

K. 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**

L. Migratory Birds

Identify the species anticipated in the action area and behaviors (breeding, roosting, foraging) anticipated during project implementation. You may list similar species on a single line and categorize by type (e.g., Wading birds - great blue heron, snowy egret, reddish egret). If species are present and impacts to individuals or habitat could occur, identify avoidance and minimization measures to prevent incidental take.
Incidental take of Migratory Birds cannot be authorized. Use additional tables on the next page if needed.

I.

Species/Species Group	Behavior	Species/Habitat Impacts and Conservation Measures to Minimize Impacts
American Golden-Plover	non breeder	The Proposed Project area is located within a region that includes the following birds of conservation concern (USFWS 2018). During the Proposed Project design phase, coordination with the USFWS and the state trust resource agency will occur to site and design Proposed Project features to avoid or minimize impacts to migratory bird nesting habitats or important feeding and loafing areas. If vegetation clearing is required, it would take place outside of the migratory bird nesting season (approximately mid-February through mid-September) or a qualified biologist would inspect the area for active nests. If no active nests are found, vegetation may be removed. If active nests are found, vegetation may be removed after the nestlings successfully fledge. If Proposed Project activities must occur during this time-frame and breeding, nesting, and fledging birds are present, the state trust resource agency would be contracted to obtain the most recent guidance to protect nesting birds or rookeries, and their recommendations would be implemented.
Bald Eagle	breeder	
Black Skimmer	breeder	
Bonaparte's Gull	non breeder	
Brown Pelican	breeder	
Buff-Breasted Sandpiper	non breeder	
Clapper Rail	breeder	
Common Loon	non breeder	
Double-Crested Cormorant	breeder	
Gull-Billed Tern	breeder	
Herring Gull	breeder	
Kentucky Warbler	breeder	
King Rail	breeder	
Le Conte's Sparrow	non breeder	
Least Tern	breeder	
Lesser Yellowlegs	non breeder	
Prothonotary Warbler	breeder	
Red-Breasted Merganser	non breeder	
Ring-Billed Gull	non breeder	
Royal Tern	breeder	
Rusty Blackbird	non breeder	
Swallow-Tailed Kite	breeder	
Willet	breeder	
Wood Thrush	breeder	

M. Migratory Birds

Continuation page if needed.

II.	SPECIES/SPECIES GROUP	BEHAVIOR	SPECIES/HABITAT IMPACTS and CONSERVATION MEASURES TO MINIMIZE IMPACTS

N. Best Practices

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 pratices you'll be using in your project.

PDARP/PEIS best practices that would be incorporated into the Proposed Project are attached.

O. Submitting the BE Form

NMFS ESA § 7 Consultation

We request that all ESA §7 consultation requests/packages be submitted electronically to: **Christina.Fellas@noaa.gov**

Questions about consultation status may be directed to the email address above or

by phone: Christy Fellas: 727-551-5714

USFWS ESA § 7 Consultation

We request that all consultation requests/packages to USFWS be submitted electronically to: **Ashley_Mills@fws.gov**.

You will be notified when we receive your Biological Evaluation. 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 send your Biological Evaluation to the appropriate Field Office to conduct consultation.

Questions about consultation status may be directed to the email address above or by phone:
Ashley Mills: 812-756-2712

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.

Are you using this form to request approval for use of NMFS PDCs for this project? ○ Yes ◉ No

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

- ☐ Project is designed to avoid techniques and locations listed in the oyster reef creation and enhancement PDCs 1.a-1.e.
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Construction Conditions (PDC 2.a)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.b)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.c)
- ☐ In Gulf sturgeon critical habitat, oyster reef creation and enhancement occurs only on existing shell substrata or relic reef locations (PDC 2.d)
- ☐ Cultch material is free of debris and contaminants (PDC 2.e)
- ☐ Fresh shell has been properly aged or quarantined before being deployed (PDC 2.f)
- ☐ Cultch material is placed in a manner to minimize disturbance of sediment (PDC 2.g)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDC 2.h)
- ☐ Plan/drawings for intermittent breaks between oyster reef segment has been provided (2.i)
- ☐ Spill prevention and response plan has been developed (2.j)
- ☐ Design and materials used avoid entanglement and entrapment risks for ESA-listed species (2.k)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Marine Debris Removal ○ Yes ◉ No

- ☐ This project is designed to avoid techniques and locations listed in the marine debris removal PDCs 1.a-1.c
- ☐ All on-water operations shall take place during daylight hours (PDC 2.a)
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Conditions (PDC 2.b)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.c)
- ☐ Project personnel have been notified of procedures if approached by a marine mammal or sea turtle (PDC 2.d)
- ☐ Trash and debris will be disposed of at an upland location (PDCs 2.e)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Construction of Living Shorelines

○ Yes ◉ No

- ☐ This project is designed to avoid techniques and locations listed in the living shoreline PDCs 1.a-1.h
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Conditions (PDC 2.a)
- ☐ All in-water work activities will conducted during daylight hours (PDC 2.b)
- ☐ Piles for navigation of public safety purposes are less than 24" diameter and non-metal if impact hammer used (PDC 2.c)
- ☐ Spill prevention and response plan has been developed (2.d)
- ☐ Fill material is not sourced using hopper dredge or from sea turtle, Gulf sturgeon or smalltooth sawfish critical habitat and in-water borrow sites do not impact turtle nesting beaches (PDC 2.e)
- ☐ Design and materials do not create entrapment or entanglement risks to ESA-listed species and do not block migration (PDC 2.f)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.g)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDC 2.h)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.i)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Marsh Creation and Enhancement

○ Yes ◉ No

- ☐ Project is designed to avoid techniques and locations listed in the marsh creation PDCs 1.a-1.f
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Conditions (PDC 2.a)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.b)
- ☐ All in-water work activities will be conducted during daylight hours (PDC 2.c)
- ☐ Spill prevention and response plan has been developed (PDC 2.d)
- ☐ Fill material is not sourced using hopper dredge or from sea turtle, Gulf sturgeon or smalltooth sawfish critical habitat and in-water borrow sites do not impact turtle nesting beaches (PDC 2.e)
- ☐ Design and materials do not create entrapment or entanglement risks to ESA-listed species and do not block migration (PDC 2.f)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.g)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDCs 2.h)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Construction of Non-Fishing Piers

◯ Yes ◉ No

- ☐ This project is designed to avoid locations listed in the non-fishing piers PDCs 1.a
- ☐ Spill prevention and response plan has been developed (PDC 2.a)
- ☐ Design and materials do not create entrapment or entanglement risks to ESA-listed species and do not block migration (PDC 2.b)
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Construction Conditions (PDC 2.c)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.d)
- ☐ Follow Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat (PDC 2.e)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.f)
- ☐ Follows methods and timing for pile driving (2.g)
- ☐ Follows construction sequencing and avoids propwashing (PDC 2.h)
- ☐ Water depth will not be altered (PDC 2.i)
- ☐ Lighting specifications are incorporated for piers on or adjacent to sea turtle nesting beaches (PDC 2.j)
- ☐ Follows educational and fishing signage requirements (PDC 2.k)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDC 2.l)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

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

Name of person(s) completing this form:

Date form completed:

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

BIOLOGICAL EVALUATION FORM ATTACHMENTS

BIOLOGICAL EVALUATION FORM CONTINUATION SHEET

Section H.I. Effects of the Proposed Project to the species and habitat (continued)

The Proposed Project is located in a parish where the West Indian manatee may occur (LDWF 2018). The same localized, temporary impacts of turbidity and noise are anticipated from the bulkhead installation (via impact hammer and excavation via bucket dredge), and these impacts may result in the manatee's temporary avoidance of the Proposed Project action area. To reduce these potential impacts the implementing trustee will implement and enforce BMPs for this species (i.e. *Standard Manatee Condition* BMP). This project does not involve explosives that would emit acoustic impacts that may affect marine mammals (NOAA 2016). Freshwater tidal channels in Proposed Project action area do not harbor extensive sea grass beds that may be used as foraging habitats, thus habitat loss is not an expected impact. Injury and collisions are not anticipated due to implementation of the *Standard Manatee Condition* BMP listed in the attachment.

AD WMA CAMPGROUNDS

PROJECT DETAIL MAP
ST MARY PARISH, LOUISIANA

Proposed Alternative

Bulkhead

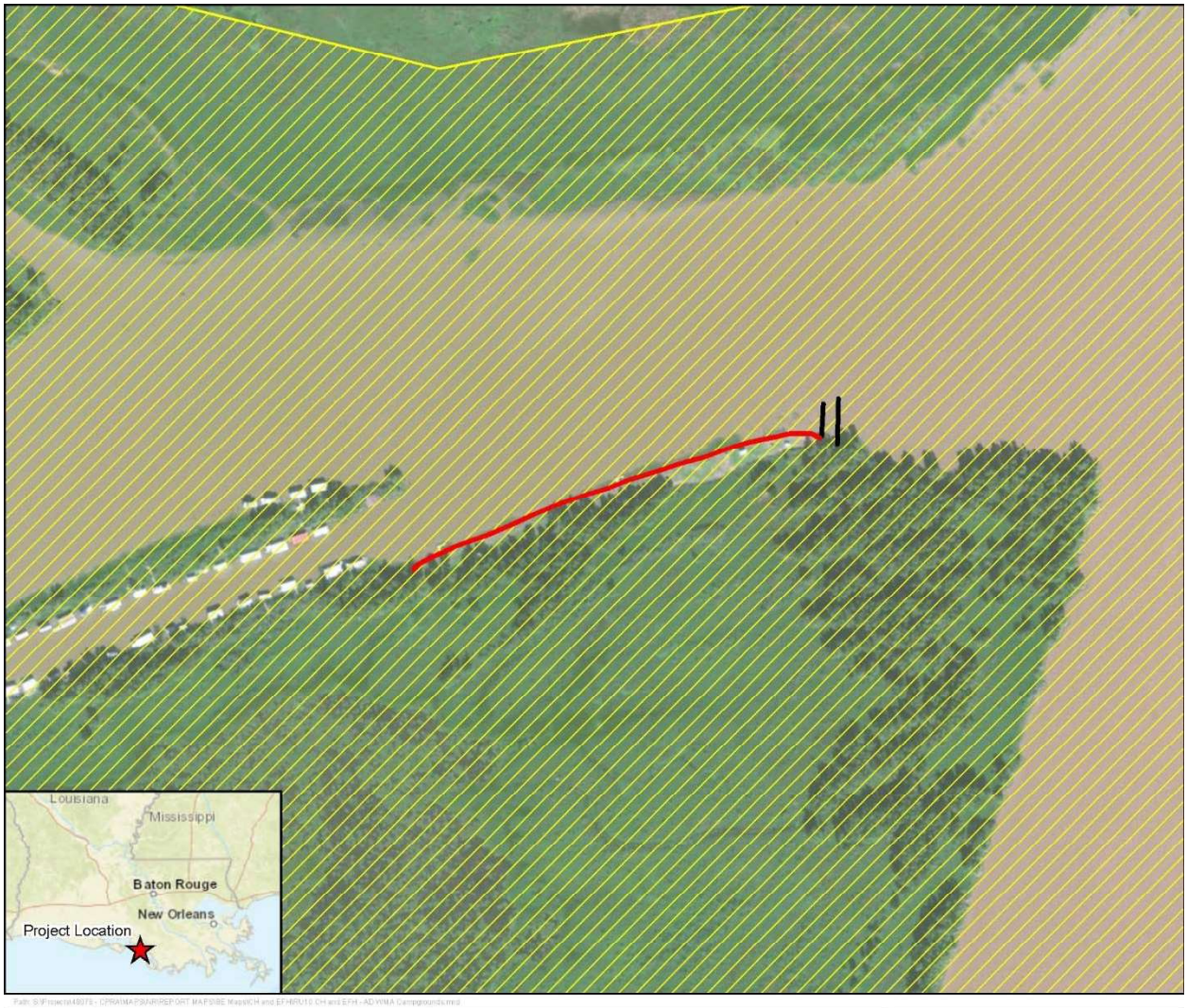
Rock Jetty

1:6,000

Created By: JS
Project Number: 48078
Date: 3/19/2018
NAD 1983 StatePlane Louisiana South FIPS 1702 Feet

0 350 700 Feet

0 230 460 690 Feet



AD WMA CAMPGROUNDS
ESSENTIAL FISH HABITAT AND
USFWS CRITICAL HABITAT MAP
ST MARY PARISH, LOUISIANA

Proposed Alternative

Bulkhead

Rock Jetty

Habitat Designation

Essential Fish Habitat

1:6,000

Created By: JS
Project Number: 48078
Date: 4/20/2018
NAD 1983 StatePlane Louisiana South FIPS 1702 Feet

0 350 700 Feet

0 230 460 690 Feet

AD WMA CAMPGROUNDS
NWI MAP
ST MARY PARISH, LOUISIANA

Proposed Alternative

Bulkhead

Rock Jetty

NWI Designation

Emergent Wetland

Freshwater Waterbody

1:6,000

Created By: JS
Project Number: 48078
Date: 4/20/2018
NAD 1983 StatePlane Louisiana South FIPS 1702 Feet

0 350 700 Feet

0 230 460 690 Feet

BEST PRACTICES FROM THE PDARP/PEIS

The following section is a direct excerpt from Section 6, Appendix A in Deepwater Horizon oil spill: Final Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental Impact Statement (DWH Trustees 2016).

Birds

Migratory Birds

Use care to avoid birds when operating machinery or vehicles near birds.

During the project design phase, coordinate with the USFWS and the state trust resource agency to site and design projects to avoid or minimize impacts to migratory bird nesting habitats or important feeding/loafing areas.

Avoid working in migratory bird nesting habitats during breeding, nesting, and fledging (approximately mid-February through late August). If project activities must occur during this timeframe and breeding, nesting, or fledging birds are present, contact the state trust resource agency to obtain the most recent guidance to protect nesting birds or rookeries, and their recommendations will be implemented.

Conservation areas may already be marked to protect bird nesting areas. Stay out of existing marked areas.

If vegetation clearing is necessary, clear vegetation outside the migratory bird nesting season (approximately mid-February through late August) or have a qualified biologist inspect for active nests. If no active nests are found, vegetation may be removed. If active nests are found, vegetation may be removed after the nest successfully fledges.

Avoid driving over the natural organic material ("wrack") line or areas of dense seaweed, as these habitats may contain hatchlings and chicks that are difficult to see

Mammals

Manatee

In Louisiana, follow the most recent version of the *Standard Manatee Conditions for In-water Activities*:

During in-water work in areas that potentially support manatees all personnel associated with the project should be instructed about the potential presence of manatees, manatee speed zones, and the need to avoid collisions with and injury to manatees. All personnel should be advised that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973. Additionally, personnel should be instructed not to attempt to feed or otherwise interact with the animal, although passively taking pictures or video would be acceptable.

All on-site personnel are responsible for observing water-related activities for the presence of manatee(s). We recommend the following to minimize potential impacts to manatees in areas of their potential presence:

- All work, equipment, and vessel operation should cease if a manatee is spotted within a 50-foot radius (buffer zone) of the active work area. Once the manatee has left the buffer zone on its own accord (manatees must not be herded or harassed into leaving), or after 30 minutes have passed without additional sightings of manatee(s) in the buffer zone, in-water work can resume under careful observation for manatee(s).

- If a manatee(s) is sighted in or near the project area, all vessels associated with the project should operate at "no wake/idle" speeds within the construction area and at all times while in waters where the draft of the vessel provides less than a four-foot clearance from the bottom. Vessels should follow routes of deep water whenever possible.

- If used, siltation or turbidity barriers should be properly secured, made of material in which manatees cannot become entangled, and be monitored to avoid manatee entrapment or impeding their movement.

- Temporary signs concerning manatees should be posted prior to and during all in-water project activities and removed upon completion. Each vessel involved in construction activities should display at the vessel control station or in a prominent location, visible to all employees operating the vessel, a temporary sign at least 8½ " X 11" reading language similar to the following: "CAUTION BOATERS: MANATEE AREA/ IDLE SPEED IS REQUIRED IN CONSRUCTION AREA AND WHERE THERE IS LESS THAN FOUR FOOT BOTTOM CLEARANCE WHEN MANATEE IS PRESENT". A second temporary sign measuring 8½ " X 11" should be posted at a location prominently visible to all personnel engaged in water-related activities and should read language similar to the following: "CAUTION: MANATEE AREA/ EQUIPMENT MUST BE SHUTDOWN IMMEDIATELY IF A MANATEE COMES WITHIN 50 FEET OF OPERATION".

Collisions with, injury to, or sightings of manatees should be immediately reported to the Service's Louisiana Ecological Services Office (337/291-3100) and the Louisiana Department of Wildlife and Fisheries, Natural Heritage Program (225/765-2821). Please provide the nature of the call (i.e., report of an incident, manatee sighting, etc.); time of incident/sighting; and the approximate location, including the latitude and longitude coordinates, if possible.

Bottlenose Dolphin

For projects with any in-water construction activities, dredging, or wetland/barrier island creation and nourishment, follow the most current version of the NMFS Southeast Region's Measures for Reducing Entrapment Risk to Protected Species.

For projects that enhance recreational fishing opportunities (e.g., fishing pier enhancement / development), visibly post the NMFS Southeast Region's Dolphin-Friendly Fishing Tips and Don't Feed Wild Dolphins signs and other applicable protected species educational signs.

To reduce the risk associated with vessel strikes of protected species or related disturbance, follow the most current version of NMFS Southeast Region's Vessel Strike Avoidance Measures and Reporting for Mariners, revised February 2008.

For projects that enhance recreational and commercial vessel based activities, follow NMFS's Southeast

U.S. Marine Mammal and Sea Turtle Viewing Guidelines.

Fish

Pallid Sturgeon

In areas inhabited by the pallid sturgeon, we offer the following recommendations for any work using a cutterhead/suction dredge (Louisiana Ecological Service Field Office 2018):

1. The cutterhead shall remain completely buried in the bottom material during dredging operations. If pumping water through the cutterhead is necessary to dislodge material or to clean the pumps or cutterhead, etc., the pumping rate should be reduced to the lowest rate possible until the cutterhead is at mid-depth, where the pumping rate can then be increased

2. During dredging, the pumping rates should be reduced to the slowest speed feasible while the cutterhead is descending to the channel bottom.

Invasive Species

Develop and implement a Hazard Analysis and Critical Control Points (HACCP) plan to prevent and control invasive species. Use (ASTM E2590−08) or other version of HACCP or other similar planning tool.

Implement an Integrated Pest Management (IPM) approach to facility design, sanitation, and maintenance to prevent and control invasive and pest species.

Inspect sites, staging, and buffer areas for common invasive species prior to the onset of work. Map any invasive species detected and note qualitative or quantitative measures regarding abundance.

Implement a control plan, if necessary, to ensure these species do not increase in distribution or abundance at a site due to project implementation. Inspect sites periodically to identify and control new colonies/individuals of an invasive species not previously observed prior to construction.

Prior to bringing any equipment (including personal gear, machinery, vehicles, or vessels) to the work site, inspect each item for mud or soil, seeds, and vegetation. If present, clean the equipment, vehicles, or personal gear until they are free from mud, soil, seeds, and vegetation. Inspect the equipment, vehicles, and personal gear each time they are being prepared to go to a site or prior to transferring between sites to avoid spreading exotic, nuisance species.

Place and maintain predator-proof waste receptacles in strategic locations during project implementation to prevent an increase in predator abundance. For projects designed to enhance or increase visitor use, maintain predator-proof waste receptacles for the life of the project.

Have the appropriate state agency inspect any equipment or construction materials for invasive species prior to use.

Inspect and certify propagated or transplanted vegetation as pest and disease free prior to planting in restoration project areas.

General Construction Measures

Protected Species

Provide all individuals working on a project with information in support of general awareness of and means to avoid impacts to protected species and their habitats present at the specific project site.

Site Maintenance and Conduct

Use the nearest, existing staging, access and egress areas, travel corridors, pathways, and roadways (including those provided by the state, local governments, land managers, trustee, or private property owner, with proper permissions) and do not create new staging areas, access (except dune walkovers) or egress, or travel corridors through dune habitats.

Limit driving on the beach for construction to the minimum necessary within the designated travel corridor–established just above or just below the primary "wrack" line. Avoid driving on the upper beach whenever possible, and never drive over any dunes or beach vegetation.

Minimize construction noise to the maximum extent practicable when working near protected species and their habitats.

Maintain or improve all lighting regimes. Methods include working during daylight hours only, prohibiting lighting on dune walkovers, and using wildlife-friendly lighting where lighting is necessary for human safety.

Post signs at kiosks, ramps, and piers to provide visitors with information to avoid and minimize impacts to protected species and their habitats while recreating. Develop signs in coordination with NMFS, USFWS, and the local state trust resource agency.

Supply and maintain containers for waste fishing gear to avoid fish and wildlife entanglement.

Land and Vegetation Protection

Develop and implement an erosion control plan to minimize erosion during and after construction and where possible use vegetative buffers (100 feet or greater), revegetate with native species or annual grasses, and conduct work during dry seasons.

Develop and implement a spill prevention and response plan, including conducting daily inspections of all construction and related equipment to ensure there are no leaks of antifreeze, hydraulic fluid, or other substances and cleaning and sealing all equipment that would be used in the water to rid it of chemical residue. Develop a contract stipulation to disallow use of any leaking equipment or vehicles.

Prohibit use of hazardous materials, such as lead paint, creosote, pentachlorophenol, and other wood preservatives during construction in, over or adjacent to, sensitive sites during construction and routine maintenance.

Wetland and Aquatic Resource Protection

Avoid and minimize, to the maximum extent practicable, placement of dredged or fill material in wetlands and other aquatic resources.

Design construction equipment corridors to avoid and minimize impacts to wetlands and other aquatic resources to the maximum extent practicable.

To the maximum extent possible, implement the placement of sediment to minimize impacts to existing vegetation or burrowing organisms.

When local conditions indicate the likely presence of contaminated soils and sediments, test soil samples for contaminant levels and take precautions to avoid disturbance of, or provide for proper disposal of, contaminated soils and sediments. Evaluate methods prior to dredging to reduce the potential for impacts from turbidity or tarballs.

Perform maintenance of generators, cranes, and any other stationary equipment operated within 150 feet of any natural or wetland area, as necessary, to prevent leaks and spills from entering the water.

Upon completion of construction activities, restore all disturbed areas as necessary to allow habitat functions to return. Create and manage public access developments to enhance recreational experience and educational awareness to minimize effects to habitat within wetland and shallow water areas and to the long-term health of related biological communities.

Use silt fencing where appropriate to reduce increased turbidity and siltation in the project vicinity. This would apply to both on land and in water work.

Make all efforts to reduce the peak sound level and exposure levels of fish to reduce the potential impact of sound on fish present in the project areas.

Use a vibratory hammer whenever possible to reduce peak sound pressure levels in the aquatic environment.

Use sound attenuation devices where practicable for pulse noise (impact hammers) to reduce peak sound pressure levels in the aquatic environment.

Stipulate the timing of activities to avoid impacts to spawning fish and eggs/larvae.

Use best practices to reduce turbidity, such as turbidity blankets, to reduce the potential impact of turbidity on finfish.

Screen water withdrawal pipes to minimize potential entrainment of fish from the withdrawal area. Have project proponents coordinate with NMFS to create an intake screen that would minimize potential impingement of fish.

FUTURE BEST PRACTICES

Best Practices for EFH Under MSFCMA

At time of publication, practices to avoid and minimize effects to EFH were under development. Please check the following webpage for EFH best practices that may be developed: http://sero.nmfs.noaa.gov/habitat_conservation/documents/sero_hazmat_efh_consultation_bmps_ver201612.pdf

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Marine Mammal Mitigation Measures for:
Atchafalaya Delta Wildlife Management Area Campgrounds project

NOAA NMFS, Southeast Regional Office
June 8, 2018

The title project is included in the Louisiana Trustee Resource Implementation Team's fourth Restoration Plan to enhance public access to natural resources for recreation following the *Deepwater Horizon* oil spill event. The project entails installing two jetties (85 and 120 feet in length) and a bulkhead (1,200 linear feet) at the campground. Impact hammer driving will be used for construction of the bulkhead using interlocking steel sheet piles. Sheet piles are estimated to measure 12-14 inches in width, with the total number of piles needed between 1,028 and 1,200. Based on a hammer energy rating of 52,000 ft-lb, the number of strikes is assumed to be approximately 200 strikes per sheet. Assuming a standard rate of 60 feet per day using an impact hammer, approximately 60 piles may be driven per day for 30 days total of sequential pile driving activity.

The following are preventative measures to help minimize the potential for bottlenose dolphin behavioral harassment (i.e. *take*) from in-water work associated with impact hammer pile driving activities the title project. We recommend these best practices to minimize the potential for taking bottlenose dolphins during these activities; however, we recognize use of these measures cannot guarantee behavioral harassment will not occur. Implementation of these measures does not constitute compliance with the Marine Mammal Protection Act (MMPA). In the event of an unanticipated take, you should contact NMFS Office of Protected Resources immediately to provide notification of the incident and to work through the necessary steps to ensure MMPA compliance moving forward. It is NMFS' practice to support the continuation of ongoing activities, contingent upon implementation of agreed-upon avoidance measures, while NMFS acts on any such request; however, NMFS final recommendation will be dependent upon the nature and context of the incident. Please make sure the entire crew and construction team have read and understand these measures.

Preventative Mitigation Measures

1. Monitor within a 100 meter zone (e.g. shutdown zone) around impact hammer pile driving activities, <u>both</u> before and during pile driving, to help prevent behavioral harassment. Monitoring may be conducted by construction personnel, however, the personnel monitoring should have no other assigned tasks during monitoring periods. Pile driving activities include the time to install or remove a single pile or series of piles, as long as the time elapsed between uses of pile driving activity is no more than 30 minutes.
    a. <u>Pre-activity monitoring:</u> monitoring should take place at least 15 minutes prior to initiation of pile driving activity. Pile driving may start at the end of the 15 minutes if the observer has determined that the 100 meter shutdown zone is clear of marine mammals. A determination that the shutdown zone is clear should be made during a period of good visibility (i.e., the entire shutdown zone and surrounding waters is visible to the naked eye).

b. If a bottlenose dolphin(s) enters the shutdown zone during pile driving activities or pre-monitoring, all pile driving activities at that location should be halted or delayed, respectively. If activity is halted or delayed, it should not be resumed until either the: (1) animal has voluntarily left and has been visually confirmed beyond the shutdown zone; or (2) an additional 15 minutes of pre-monitoring is conducted without re-detection of the animal.

2. Before commencing impact pile driving activities, use soft start techniques to alert animals to the forthcoming activities.
    a. Soft start entails an initial set of strikes at reduced energy, followed by a 30 second waiting period, then two subsequent reduced energy strike sets.
    b. Soft start should be implemented at the start of each day's impact pile driving and any time following cessation of pile driving activities for 30 minutes or longer.

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 Protect 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.

A. Project Identification

Federal Action Agency: U.S. Fish and Wildlife Service

Additional Federal Action Agency: National Marine Fisheries Service

Agency Contact(s)

USFWS: Ashley Mills at 812-756-2712 and Ashley_Mills@fws.gov
NMFS: Christy Fellas at 727-551-5714 and Christina.Fellas@noaa.gov

I. *Implementing Trustee(s)*: Louisiana Department of Wildlife and Fisheries

II. *Contact Person*: Brady Carter

III. *Phone*: (225) 763-5504

Email: Brady.Carter@la.gov

IV. *Project Name and ID# (Official name of project and ID number assigned by Trustees in DIVER)*: Middle Pearl

V. *NMFS Office (Choose appropriate office based on project location)*: NMFS Southeast Regional Office

USFWS Office (Choose or write in appropriate office based on project location): Louisiana Ecological Services Field Office (Lafayette)

VI. *Project Type #1*: Enhance Recreational Experiences

Project Type #2, if helpful: Enhance Public Access to Natural Resources for Recreational

VII. *TIG*: Louisiana TIG

Restoration Plan: Recreational Use

B. Project Location

I. Physical Address of action area (If applicable)

US 90
Slidell, Louisiana 70461

II. *State & County/Parish of action area*: Louisiana, St. Tammany Parish

III. *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])*: 30.235278°N, 89.639167°W NAD83

IV. Township, range and section of the action area: Township 9 South, Range 15 East, Section 25

C. 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:
-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

Have any federal permits been applied for but not yet obtained, if so which ones and what is the permit number(s)? ☐ Yes ☑ No

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.

Deepwater Horizon Oil Spill Louisiana Trustee Implementation Group Restoration Plan and Environmental Assessment #4: Nutrient Reduction (Nonpoint Source) and Recreational Use

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

Name of Person Completing this Form:	Nicole Smolensky
Name of Project Lead:	
Date Form Completed:	01/23/2018
Date Form Updated:	04/23/2018

D. Description of Action Area

Attach a separate map delineating where the action will occur and where critical habitat, if any, is located. Map or describe all areas that may be directly or indirectly affected by the action. 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). If CH is not designated in the area, then map or describe any suitable habitat in the area.

The Proposed Project is located in St. Tammany Parish, approximately 9 miles east of Slidel, Louisiana. The Proposed Project is located in the Southern Coastal Plain (75) Level III ecoregion and the Gulf Barrier Islands and Coastal Marshes (75k) Level IV ecoregion (Daigle et al. 2006). The following information was obtained from Daigle et al. (2006) unless otherwise indicated. The Southern Coastal Plain is mostly flat plains with barrier islands, coastal lagoons, marshes, and swampy lowlands along the Gulf and Atlantic coasts. Elevation ranges from 0 to 25 feet above mean sea level (amsl) and local relief ranges from 5 to 15 feet amsl. Winters are mild and summers are hot with minimum/maximum temperatures of 41˚F/60 ˚F and 72˚F/90˚F respectively. Mean annual precipitation ranges from 60 to 64 inches. The ecoregion was historically composed of longleaf pine flatwoods and savannas but is now mostly slash and loblolly pine, often mixed with various hardwoods and bottomland hardwood forest in some low-lying areas. The Gulf Barrier Islands and Coastal Marshes are dominated by salt and brackish marshes, dunes, beaches, barrier islands, and tidal freshwater marshes. Potential natural vegetation includes live oak forests with sea oats for ground cover and herbaceous plains of cordgrass, saltgrass, and rushes Soils are very poorly drained Histosols and Entisols with mucky surfaces. Soil series include Levy, Lafitte, Axis, Duckston, Fripp, and Newhan (Daigle et al. 2006).

The Proposed Project action area is located within the Pearl Basin, which is approximately 5,561,000 acres (U.S. Geological Survey [USGS] 2018). The Pearl River Basin is the most unaffected of all the state's river basins, however future development pressures and changes in land use practices could seriously degrade the habitat in this basin. Main channel and side channel habitats throughout the basin are threatened by the operation of dams or reservoirs. Previous water quality inventory reports by the Louisiana Department of Environmental Quality (LDEQ) have listed suspected sources of water quality problems as metals, nutrients, fecal coliform bacteria, organic enrichment and low concentration of dissolved oxygen, pH levels, and turbidity. The suspected sources of the water quality problems include: home sewage systems, agriculture (particularly pasturelands), silviculture, urban storm water runoff, and surface mining (Louisiana Department of Wildlife and Fisheries [LDWF] 2015). Based on the FINAL 2016 Louisiana Water Quality Inventory: Integrated Report (305(b)/303(d)) (LDEQ 2016), the Middle Pearl River (Subsegment LA090207_00), which includes the Proposed Project, is listed as fully supporting the designated use for primary and secondary contact recreation, while also being listed as not supporting fish and wildlife propagation. The suspected causes of impairment include chloride, mercury in fish tissue, dissolved oxygen, sulfates, total dissolved solids, and turbidity.

The Proposed Project abuts the Middle Pearl River, which is an approximately 12.7-mile-long perennial freshwater river which connects the West Pearl River to the Old Pearl River. Much of the land adjacent to the bayou is mapped as undeveloped palustrine emergent and forest wetlands. The Proposed Project consists of mostly palustrine emergent wetlands with some herbaceous uplands while also reaching into freshwater stream habitat (U.S. Fish and Wildlife Service [USFWS] 2017).

Designated critical habitat for the Gulf sturgeon and dusky gopher frog are present within St. Tammany Parish, approximately 5 miles northwest and 4 miles southeast of the Proposed Project, respectively. Dusky gopher frog designated critical habitat applies to historic breeding habitat located within natural ephemeral ponds and wetland habitat (USFWS 2017). Gulf sturgeon designated critical habitat applies to non-breeding habitats located in eastern Lake Pontchartrain, Lake Borgne, and their connecting waters (USFWS 2018).

Designated essential fish habitat (EFH) for coastal migratory pelagic resources, red drum, reef fish, and shrimp is present within the Proposed Project (National Oceanic and Atmospheric Administration [NOAA] 2018). See the attached map illustrating designated EFH.

a. *Waterbody*

If applicable. Name the body of water, including wetlands (freshwater or estuarine), on which the project is located. If the location is in a river or estuary, please approximate the navigable distance from the project location to the marine environment.

The Proposed Project abuts the western bank of the Middle Pearl River. The Proposed Project is approximately 9.6 river miles from Lake Borgne via the Middle Pearl River. The Proposed Project includes palustrine emergent wetlands. Please see attachment map illustrating the NWI dataset (U.S. Fish and Wildlife Service [USFWS] 2017).

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.

Currently, an unimproved ramp approximately 50 feet in width, an approximately 18- × 150-foot-long access road, an approximately 23,000-square-foot parking area, and an approximately 40- × 145-foot staging area that has silted in over the past 5 years, exist within the Proposed Project.

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.

The Proposed Project action area is surrounded by freshwater systems that lack suitable environments for seagrass and other marine vegetation (Google Earth Imagery 2016) and is located outside of mapped distributions of submerged aquatic vegetation (Love et al. 2013; NOAA 2018). Freshwater submerged aquatic vegetation may be present as indicated on aerial imagery, however this is not likely to be seagrass nor marine, thus surveys for these vegetation types are not scheduled for the Proposed Project.

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.

The Proposed Project action area is surrounded by freshwater systems that lack suitable environments for mangroves (Google Earth Imagery 2016) and is located outside of mapped distributions of mangroves (Love et al. 2013; NOAA 2018). Thus surveys for mangroves are not scheduled for the Proposed Project.

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.

The Proposed Project action area is surrounded by freshwater systems that lack suitable environments for corals (Google Earth Imagery 2016) and is located outside mapped distributions (Love et al. 2013; NOAA 2018). Therefore, surveys for these resources have not been conducted for this area nor are they scheduled for the Proposed Project.

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.).

The Proposed Project contains a portion of herbaceous uplands and along the bank of the Middle Pearl River.

g. *Marine Mammals*

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

Although the Proposed Project action area includes riverine habitats, it lacks suitable foraging habitat for the West Indian manatee, and observations of this species are very rare in this parish. Dolphins may occasionally travel upriver, thus the bottlenose dolphin stock from the MS Sound Estuarine stock is listed for this Proposed Project action area (LDWF 2018; Love et al. 2013; NatureServe 2016; NOAA Fisheries 2016a).

E. Project Description

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

The Proposed Project is expected to take approximately 12 months to complete, subject to approval of permits and environmental review. Preliminary planning and commencement activities are anticipated to take approximately 3 months. Engineering and design are anticipated to take approximately 5 months. Contracting and pre-construction activities are anticipated to take approximately 3 months. Construction is anticipated to take approximately 2 months.

II. *Describe the Proposed Action: 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. 3. 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.*

The Proposed Project would provide public access to the surrounding waterways and the Pearl River WMA for various recreational activities such as fishing, hunting, trapping, frogging, skiing, recreational boating, swimming, and sightseeing. The Proposed Project would include improvement of the existing boat launch on the west bank of the Middle Pearl River. The Proposed Project would accommodate parking for approximately 20 vehicles hitched to trailers, as well as on-site parking for additional single cars without trailers. In addition, the Proposed Project would include signage, lighting, boardwalks/docks around the perimeter of the parking area, and an access road from Louisiana Highway 90. Potential additional Proposed Project elements include increased parking area, a boardwalk/dock on the river frontage, and dredging of the staging slip as budget allows. For planning purposes, it is assumed that the Proposed Project would permanently impact the entire 1-acre site.

The new launch facility would include construction of the following:
• One approximately 200-foot-long × 20-foot-wide access road for boat ramp traffic from Louisiana Highway 90 to the parking lot
• One crushed limestone parking area with up to 20 spaces large enough to accommodate a vehicle with a trailer as well as additional single car spaces
• One 65-foot-long × 45-foot-wide concrete boat launch ramp with room for two lanes
• Three 60-foot-long × 6-foot-wide (1,080-square-foot total) floating docks constructed of treated wood
• One 150-foot-long × 40-foot-wide staging slip, as budget allows
• One 200-foot-long × 6-foot-wide (1,200-square-foot) boardwalk constructed of treated wood to access the staging slip, as budget allows
• One 100-foot-long × 6-foot-wide boardwalk along the riverfront, as budget allows
• Dredging of staging slip, as budget allows

The Proposed Project includes several features that would require vegetation removal, excavation, and grading. Roadways and parking areas would be surfaced with 6 to 8 inches of crushed limestone. Minor grading of the existing shell/limestone access and parking area would be necessary to improve drainage and prepare the site. The 2,925-square-foot concrete boat launch would have concrete sidewalls covered along the sides of the boat ramp to prevent erosion and to provide long-term stability, typically by vinyl sheet pile. In-water work would consist of the removal of broken concrete and riprap, with minor grading to accommodate the new ramp; no riparian vegetation would require removal. Three floating docks made of treated wood are proposed for the boat ramp, one on each side and one in the center. The floating docks would provide access to the Proposed Project from the waterside and could be used by small watercraft to tie-up (e.g., kayaks, pirogues, paddle boards). A 1,200-square-foot boardwalk made of treated wood would be installed around the parking area and along the staging slip. The docks and boardwalk could also provide pedestrian access from the upland parking area as part of the overall water-oriented recreational enjoyment, which may include bird and wildlife viewing and fishing.

To construct the three 6-foot-wide × 60-foot-long floating docks, no riparian vegetation would need to be removed. Floating docks are typically secured to the river bottom using anchoring weights. The 200-foot-long, 6-foot-wide (1,200-square-foot) wooden boardwalk proposed south of the parking area and the 100-foot-long, 6-foot-wide (600-square-foot) wooden boardwalk proposed along the riverfront would also require a vinyl sheet pile bulkhead that would run parallel to the boardwalk along the shoreline to prevent erosion and to provide stability to the boardwalk. Timber piles would be necessary to support the boardwalk and would be driven into the substrate. Timber piling is typically used to construct piers, docks buildings, walkways, and decks in and above-aquatic environments. Pressure-treated wood products are manufactured and installed in a manner that minimizes any potential for adverse impacts to aquatic environments. The piles would be driven using an impact hammer pile (vibratory hammers are not typically used on timber piles) with standard equipment (e.g., crane, boom, set of leads, pile hammer, helmet, pile gate, and pile monkey). The crane and associated equipment can be staged either onshore or on a barge in the waterway.

The NRCS Soil Survey for St. Tammany Parish, Louisiana (U.S. Department of Agriculture [USDA] 2018) identifies one soil map unit, Aquents, dredged (ATA), within the Proposed Project area. This soil variety is a low-sloping (0 to 1 percent) substrate with alluvial parent material and very poor natural drainage.

Other materials used for the parking lots and access road would include concrete wheel stoppers and improvements to lighting.
Please see the attachment map of the Proposed Project.

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

a. *If applicable, Overwater Structures (Place your answers to the following questions in the box below.)*

i. *Is the proposed use of this structure for a docking facility or an observation platform?*

ii. *If no, is this a fishing pier? Public or Private? How many people are expected to fish per day? How do you plan to address hook and line captures?*

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 (sqft)?*

The Proposed Project includes the construction of a boat launch ramp, floating docks, staging slip, and boardwalks. In-water work is unavoidable due to the construction of the boat launch ramp (approximately 2,925 square feet; 0.07 acre), floating docks (approximately 1,080 square feet; 0.04 acre), staging slip (approximately 6,000 square feet; 0.14 acre), and boardwalks (approximately 1,800 square feet; 0.04 acre) that total approximately 11,805 square feet (0.27 acre) of over-water area. The docks and boardwalks are expected to have moderate levels of localized hook and line fishing because it is publicly accessible. Best management practices (BMPs) presented in the attachment below discuss minimization and avoidance of effects to protected the species that may occur within the Proposed Project action area. The Proposed Project action area does not contain sea grass vegetation, and thus, the Proposed Project will use standard construction methods for the construction discussed above.

b. *Pilings & Sheetpiles (What type of material is the piling or sheetpiles? What size and how many will be used? Method used to install: impact hammer, vibratory hammer, jetting, etc.?)*

Vinyl sheet pile bulkhead is proposed that would run parallel to the boardwalk along the shoreline to prevent erosion and to provide stability to the boardwalk. Timber piles would be necessary to support the boardwalk and would be driven into the substrate. Timber piles are typically used to construct piers, docks buildings, walkways, and decks in aquatic and above-aquatic environments. Pressure-treated wood products are manufactured and installed in a manner that minimizes any potential for adverse impacts to aquatic environments. The piles would be driven using a hammer pile (vibratory hammers are not typically used on timber piles) with standard equipment (crane, boom, set of leads, pile hammer, helmet, pile gate, and pile monkey). The crane and associated equipment can be staged either onshore or on a barge in the waterway.

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.)*

The Proposed Project would include one 150-foot-long × 40-foot-wide staging wet slip south of the boat launch, as the budget allows.

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.)*

The Proposed Project would include one two-lane public concrete boat ramp covering approximately 2,925 square feet with three floating mooring piers, two surrounding the ramp and one separating the lanes. Twenty spaces are proposed for boat trailer parking.

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.*

No shoreline armoring is proposed.

f. *Dredging or digging (Provide details about dredge type (hopper, cutterhead, clamshell, etc.), maximum depth of dredging, area (ft^2) to be dredged, volume of material (yd^3) 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.*

Clearing, grubbing, excavation, and filling will be performed to construct the access road and parking lot areas. Dredging is proposed to construct the approximately 6,000-square-foot slip south of the boat launch, as budget allows.

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.)*

No blasting would be necessary or allowed during construction.

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), 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.*

No artificial reefs are present (LDWF 2013) or proposed for the Proposed Project.

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)).*

The Proposed Project is intended to enhance recreational activities within the Proposed Project action area, including the construction of docks and boardwalks anticipated to enhance shore-based fishing opportunities that may result in additional hook and line gear in the Proposed Project action area. The docks are expected to have moderate levels of localized fishing using hook and line gear because the docks are publicly accessible.

F. NOAA Species & Critical Habitat and Effects Determination Requested

1. *List all species, critical habitat, proposed species and proposed critical habitat that may be found in the action area.*

2. *Attach a separate map identifying species/critical habitat locations within the action area.*

For information on species and critical habitat under 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)	**DETERMINATION** (see definitions below)
Gulf Sturgeon (T)		Marine	May Affect, Not Likely to Adversely Affect
Green Sea Turtle (T)		Marine	No Effect
Loggerhead Sea Turtle (T)		Marine	No Effect
Hawksbill Sea Turtle (E)		Marine	No Effect
Leatherback Sea Turtle (E)		Marine	No Effect
Kemp's Ridley Sea Turtle (E)		Marine	No Effect
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate

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 = 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 = 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.

Critical Habitat Destruction or Adverse Modification = Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.

G. USFWS Species & Critical Habitat and Effects Determination Requested

1. *List all species, critical habitat, proposed species and proposed critical habitat that may be found in the action area.*
2. *Attach a separate map identifying species/critical habitat locations within the action area.*

For information on species and critical habitat under USFWS jurisdiction, visit http://www.fws.gov/endangered/species/.

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)	**DETERMINATION** (see definitions below)
Inflated (or Alabama) heelsplitter		Select One	No Effect
Gulf sturgeon		Riverine/freshwater	May Affect, Not Likely to Adversely Affect
Gopher tortoise		Select One	May Affect, Not Likely to Adversely Affect
Hawksbill sea turtle		Terrestrial	No Effect
Kemp's Ridley		Terrestrial	No Effect
Leatherback sea turtle		Terrestrial	No Effect
Loggerhead sea turtle		Terrestrial	No Effect
Ringed map turtle		Select One	May Affect, Not Likely to Adversely Affect
Red-cockaded woodpecker		Select One	No Effect
West Indian manatee		Select One	May Affect, Not Likely to Adversely Affect
Louisiana quillwort		Select One	No Effect
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
		Select One	Select Most Appropriate
		Select One	Select Most Appropriate

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 = 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 = 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.

Critical Habitat Destruction or Adverse Modification = Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.

H. Effects of the proposed project to the species and habitats

I. *Explain the potential beneficial and adverse effects to each species listed above (Describe what, when, and how the species will be impacted and the likely response to the impact. Be sure to include direct, indirect, and cumulative impacts and where possible, quantify effects. If species are present (or potentially present) and will not be adversely affected describe your rationale. If species are unlikely to be present in the general area or action area, explain why. This justification provides documentation for your administrative record, avoids the need for additional correspondence regarding the species, and helps expedite review.)*

The Proposed Project actions are anticipated to have No Effect on the following species: marine life stage of the green sea turtle, marine and terrestrial life stages of the hawksbill, Kemp's ridely, leatherback, and loggerhead sea turtles, red-cockaded woodpecker, the inflated heelsplitter, and Louisiana quillwort. This is based on the assumption that these species will not occur in the Proposed Project action area based on the absence of suitable marine or terrestrial, foraging, sheltering, or nesting habitats for these species (NatureServe 2016) or the fact that the species has been extirpated from the watershed (e.g., inflated heelsplitter) (Brown and Daniel 2014). The Proposed Project is not anticipated to yield direct nor indirect impacts to these species at broader spatial and temporal scales within and beyond the Proposed Project action area due to the localized and temporary nature of the proposed activities and the existing infrastructure surrounding the Proposed Project.

The Proposed Project actions May Affect, Not Likely to Adversely Affect the following species: Gulf sturgeon, West Indian manatee, gopher tortoise, and ringed map turtle.

The Gulf sturgeon can occur in river systems and nearshore bays and estuaries depending upon the life stage of the species and season (NOAA Fisheries 2016a). In Louisiana, the Gulf sturgeon is found in the Pearl, Bouge Chitto and Tchefuncte rivers in St. Tammany and Washington Parishes and is suspected to also occur in any large river in the Lake Pontchartrain drainage (LDWF 2018). The freshwater habitats within the Proposed Project action area contain gradual banks and do not provide suitable spawning habitat for this species. Thus direct impacts to this species via habitat loss, fragmentation, or mortality are not anticipated to occur. Indirect impacts including as downstream turbidity, pollution, or habitat loss are not anticipated due to the localized and temporary nature of the Proposed Project activities and the construction BMPs presented in the attachment below. Although the Proposed Project activities are intended to enhance recreation including fishing, direct impacts from fishing on the Gulf sturgeon are expected to be low given the low likelihood the species would occur in the area based on lack of preferred habitat.
Please refer to the attachment for the remainder of Section H.I.

II. *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 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 Proposed Project action area is outside designated critical habitat; therefore, no effects to critical habitat would occur.

I. Actions to Reduce Adverse Effects

I. *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.)*

Species-specific BMPs from the PDARP/EIS (DWH Trustees 2016) that would be incorporated into the Proposed Project are included as an attachment.

Additionally all individuals (such as construction workers) working on the proposed project would be provided with information on general awareness of any federally protected species that have the potential to occur in the Proposed Project action area. Seasonal avoidance measures will be implemented when practicable. If work must be conducted when these species are present, certain activities may be restricted or modified to reduce disturbance of these species (see attached BMPs).

The implementing trustee will implement and enforce approved BMPs listed in the attachment to avoid and minimize impacts to species listed in Sections F and G. Continued coordination of BMPs will occur during the final design phase.

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.)*

Designated critical habitat is not present within the Proposed Project. Therefore, no impacts to critical habitat would occur as a result of the proposed construction of recreational features, and no additional conservation measures are proposed other than the construction BMPs listed in the attachment.

J. 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

Is your activity likely to impact 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	
☐	☐	*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) *Building or enhancing areas for water-related recreational use or fishing opportunities (e.g. fishing piers, bridges, boat ramps, marinas)*
☐	☐	*f) Aquaculture*
☐	☐	*g) Dredging or in-water construction activities to change hydrologic conditions or connectivity, create breakwaters and living shorelines, etc.*
☐	☐	*h) Restoration of barrier islands, levee construction or similar projects*
☐	☐	*i) Fresh-water river diversions*

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. Are any measures planned to mitigate potential impacts to marine mammals? If yes, provide text in box below. NO ☐ YES ☑

The implementing trustee will implement and enforce the Standard Manatee Conditions BMPs, NMFS's Measures for Reducing Entrapment Risk to Marine Mammals, and NMFS's Vessel Strike Avoidance Measures as listed in the attachment to avoid and minimize impacts to manatees and bottlenose dolphins. Continued coordination of BMPs will occur during the final design phase.

K. 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**

L. Migratory Birds

Identify the species anticipated in the action area and behaviors (breeding, roosting, foraging) anticipated during project implementation. You may list similar species on a single line and categorize by type (e.g., Wading birds - great blue heron, snowy egret, reddish egret). If species are present and impacts to individuals or habitat could occur, identify avoidance and minimization measures to prevent incidental take.
Incidental take of Migratory Birds cannot be authorized. Use additional tables on the next page if needed.

I.

Species/Species Group	Behavior	Species/Habitat Impacts and Conservation Measures to Minimize Impacts
American Golden-Plover	non breeder	The Proposed Project area is located within a region that includes the following birds of conservation concern (USFWS 2018). During the project design phase, coordination with the USFWS and the state trust resource agency would occur to site and design project features to avoid or minimize impacts to migratory bird nesting habitats or important feeding and loafing areas. If vegetation clearing is required, it would take place outside of the migratory bird nesting season (approximately mid-February through mid-September) or a qualified biologist would inspect for active nests. If no active nests are found, vegetation may be removed. If active nests are found, vegetation may be removed after the nestlings successfully fledge. If project activities must occur during this time-frame and breeding, nesting, and fledging birds are present, the state trust resource agency would be contracted to obtain the most recent guidance to protect nesting birds or rookeries, and their recommendations would be implemented.
Bachman's Sparrow	breeder	
Bald Eagle	breeder	
Black Scoter	non breeder	
Black Skimmer	breeder	
Bonaparte's Gull	non breeder	
Bridled Tern	non breeder	
Brown Pelican	breeder	
Buff-Breasted Sandpiper	non breeder	
Cerulean Warbler	breeder	
Clapped Rail	breeder	
Common Loon	non breeder	
Common Tern	non breeder	
Double-Crested Cormorant	breeder	
Eastern Whip-Poor-Will	non breeder	
Great Shearwater	non breeder	
Gull-Billed Tern	breeder	
Henslow's Sparrow	non breeder	
Herring Gull	breeder	
Kentucky Warbler	breeder	
King Rail	breeder	
Le Conte's Sparrow	non breeder	
Least Tern	breeder	
Lesser Yellowlegs	non breeder	
Long-Tailed Duck	non breeder	
Magnificent Frigatebird	non breeder	
Marbled Godwit	non breeder	
Nelson's Sparrow	non breeder	

M. Migratory Birds

Continuation page if needed.

II.	SPECIES/SPECIES GROUP	BEHAVIOR	SPECIES/HABITAT IMPACTS and CONSERVATION MEASURES TO MINIMIZE IMPACTS
	Prairie Warbler	breeder	
	Prothonotary Warbler	breeder	
	Red-Breasted Merganser	non breeder	
	Red-Headed Woodpecker	breeder	
	Ring-Billed Gull	non breeder	
	Royal Tern	breeder	
	Rusty Blackbird	non breeder	
	Seaside Sparrow	breeder	
	Semiplamated Sandpiper	non breeder	
	Short-Billed Dowitcher	non breeder	
	Sooty Tern	breeder	
	Surf Scoter	non breeder	
	Swallow-Tailed Kite	breeder	
	White-Winged Scoter	non breeder	
	Willet	breeder	
	Wood Thrush	breeder	

N. Best Practices

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 pratices you'll be using in your project.

BMPS from the PDARP/EIS that would be incorporated into the Proposed Project are included as an attachment.

O. Submitting the BE Form

NMFS ESA § 7 Consultation

We request that all ESA §7 consultation requests/packages be submitted electronically to: **Christina.Fellas@noaa.gov**

Questions about consultation status may be directed to the email address above or

by phone: Christy Fellas: 727-551-5714

USFWS ESA § 7 Consultation

We request that all consultation requests/packages to USFWS be submitted electronically to: **Ashley_Mills@fws.gov**.

You will be notified when we receive your Biological Evaluation. 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 send your Biological Evaluation to the appropriate Field Office to conduct consultation.

Questions about consultation status may be directed to the email address above or by phone:
Ashley Mills: 812-756-2712

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.

Are you using this form to request approval for use of NMFS PDCs for this project? ○ Yes ◉ No

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

- ☐ Project is designed to avoid techniques and locations listed in the oyster reef creation and enhancement PDCs 1.a-1.e.
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Construction Conditions (PDC 2.a)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.b)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.c)
- ☐ In Gulf sturgeon critical habitat, oyster reef creation and enhancement occurs only on existing shell substrata or relic reef locations (PDC 2.d)
- ☐ Cultch material is free of debris and contaminants (PDC 2.e)
- ☐ Fresh shell has been properly aged or quarantined before being deployed (PDC 2.f)
- ☐ Cultch material is placed in a manner to minimize disturbance of sediment (PDC 2.g)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDC 2.h)
- ☐ Plan/drawings for intermittent breaks between oyster reef segment has been provided (2.i)
- ☐ Spill prevention and response plan has been developed (2.j)
- ☐ Design and materials used avoid entanglement and entrapment risks for ESA-listed species (2.k)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Marine Debris Removal ○ Yes ◉ No

- ☐ This project is designed to avoid techniques and locations listed in the marine debris removal PDCs 1.a-1.c
- ☐ All on-water operations shall take place during daylight hours (PDC 2.a)
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Conditions (PDC 2.b)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.c)
- ☐ Project personnel have been notified of procedures if approached by a marine mammal or sea turtle (PDC 2.d)
- ☐ Trash and debris will be disposed of at an upland location (PDCs 2.e)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Construction of Living Shorelines

○ Yes ◉ No

- ☐ This project is designed to avoid techniques and locations listed in the living shoreline PDCs 1.a-1.h
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Conditions (PDC 2.a)
- ☐ All in-water work activities will conducted during daylight hours (PDC 2.b)
- ☐ Piles for navigation of public safety purposes are less than 24" diameter and non-metal if impact hammer used (PDC 2.c)
- ☐ Spill prevention and response plan has been developed (2.d)
- ☐ Fill material is not sourced using hopper dredge or from sea turtle, Gulf sturgeon or smalltooth sawfish critical habitat and in-water borrow sites do not impact turtle nesting beaches (PDC 2.e)
- ☐ Design and materials do not create entrapment or entanglement risks to ESA-listed species and do not block migration (PDC 2.f)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.g)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDC 2.h)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.i)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Marsh Creation and Enhancement

○ Yes ◉ No

- ☐ Project is designed to avoid techniques and locations listed in the marsh creation PDCs 1.a-1.f
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Conditions (PDC 2.a)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.b)
- ☐ All in-water work activities will be conducted during daylight hours (PDC 2.c)
- ☐ Spill prevention and response plan has been developed (PDC 2.d)
- ☐ Fill material is not sourced using hopper dredge or from sea turtle, Gulf sturgeon or smalltooth sawfish critical habitat and in-water borrow sites do not impact turtle nesting beaches (PDC 2.e)
- ☐ Design and materials do not create entrapment or entanglement risks to ESA-listed species and do not block migration (PDC 2.f)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.g)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDCs 2.h)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Construction of Non-Fishing Piers

◯ Yes ◉ No

- ☐ This project is designed to avoid locations listed in the non-fishing piers PDCs 1.a
- ☐ Spill prevention and response plan has been developed (PDC 2.a)
- ☐ Design and materials do not create entrapment or entanglement risks to ESA-listed species and do not block migration (PDC 2.b)
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Construction Conditions (PDC 2.c)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.d)
- ☐ Follow Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat (PDC 2.e)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.f)
- ☐ Follows methods and timing for pile driving (2.g)
- ☐ Follows construction sequencing and avoids propwashing (PDC 2.h)
- ☐ Water depth will not be altered (PDC 2.i)
- ☐ Lighting specifications are incorporated for piers on or adjacent to sea turtle nesting beaches (PDC 2.j)
- ☐ Follows educational and fishing signage requirements (PDC 2.k)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDC 2.l)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

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

Name of person(s) completing this form:

Date form completed:

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

BIOLOGICAL EVALUATIONS FORM ATTACHMENTS

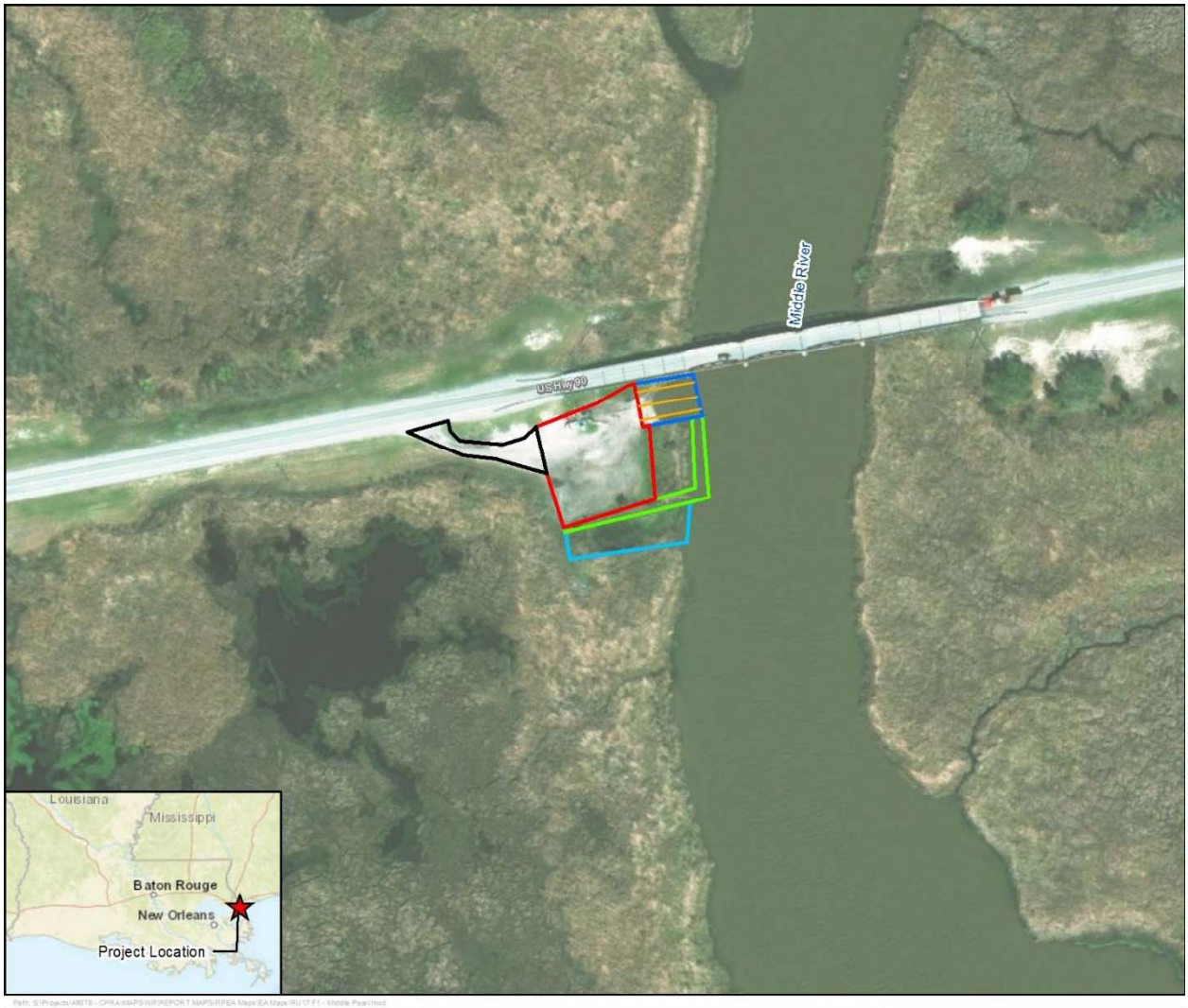
BIOLOGICAL EVALUATION FORM CONTINUATION SHEET

Section H.I. Effects of the proposed project to the species and habitats (continued)

The West Indian manatee occurs in warm shallow estuarine waters adjacent to a freshwater source and with seagrass or other submerged or emergent vegetation for forage. Sightings of manatees in Louisiana riverine habitats are rare and likely occur in areas where submerged or emergent aquatic vegetation is available for forage (LDWF 2018). The Proposed Project action area lacks submerged or aquatic vegetation thus West Indian manatee is unlikely to occur in the vicinity of the Proposed Project. In the unlikely event that a manatee is present during the Proposed Project activities, direct impacts may include disturbance via noise from impact pile driving. Other direct impacts including habitat loss, fragmentation, and mortality are not anticipated to occur due to the lack of suitable foraging and breeding habitat for this species, the already established infrastructure present in the area, and the minimization and avoidance measures outlined in the BMPs presented in the attachment below. Indirect impacts such as downstream turbidity, pollution, or habitat loss are not anticipated due to the localized and temporary nature of the Proposed Project activities and the construction BMPs presented in the attachment below.

The gopher tortoise can potentially occur in herbaceous habitats as a non-migrant, terrestrial tortoise known to burrow in upland habitats and can tolerate burrowing in disturbed areas as long as access to herbaceous ground cover is sufficient for foraging (NatureServe2016). The disturbed herbaceous upland habitat within the Proposed Project action area contains potential burrowing habitat for this species. However, the abutting dense marsh vegetation inhibits the available amount of herbaceous ground cover required for foraging, and the saturated marsh substrate is too wet for digging burrows (Bonin 2006). In the unlikely event that an individual is present in the Proposed Project action area direct impacts may include disturbance from noise and human presence. Other direct impacts such as habitat loss or mortality are not anticipated to occur given the habitat is not suitable for burrowing. Indirect impacts including preferred habitat loss are not anticipated due to the localized and temporary nature of the Proposed Project activities and the construction BMPs presented in the attachment below.

The ringed map turtle is abundant in streams with moderate to fast current, numerous basking logs, and within a channel wide enough to allow the sun to reach the basking logs (Bonin 2006; NatureServe 2016). The extension of the Proposed Project action area into the Middle Pearl River contains potential freshwater riverine habitat required for basking. However, with the dominance of surrounding palustrine emergent wetlands, it is unlikely that the significant basking habitat is present within the waterbody. In the unlikely event that an individual is present in the Proposed Project action area direct impacts may include disturbance from noise and intentional or unintentional contact with humans, either from fishing or boating activities. Other direct impacts to this species via habitat loss, fragmentation, or mortality are not anticipated to occur given the low likelihood of occurrence in the Proposed Project. Indirect impacts including as downstream turbidity, pollution, or habitat loss are not anticipated due to the localized and temporary nature of the Proposed Project activities and the construction BMPs presented in the attachment below.



MIDDLE PEARL

PROJECT DETAIL MAP
ST TAMMANY PARISH, LOUISIANA

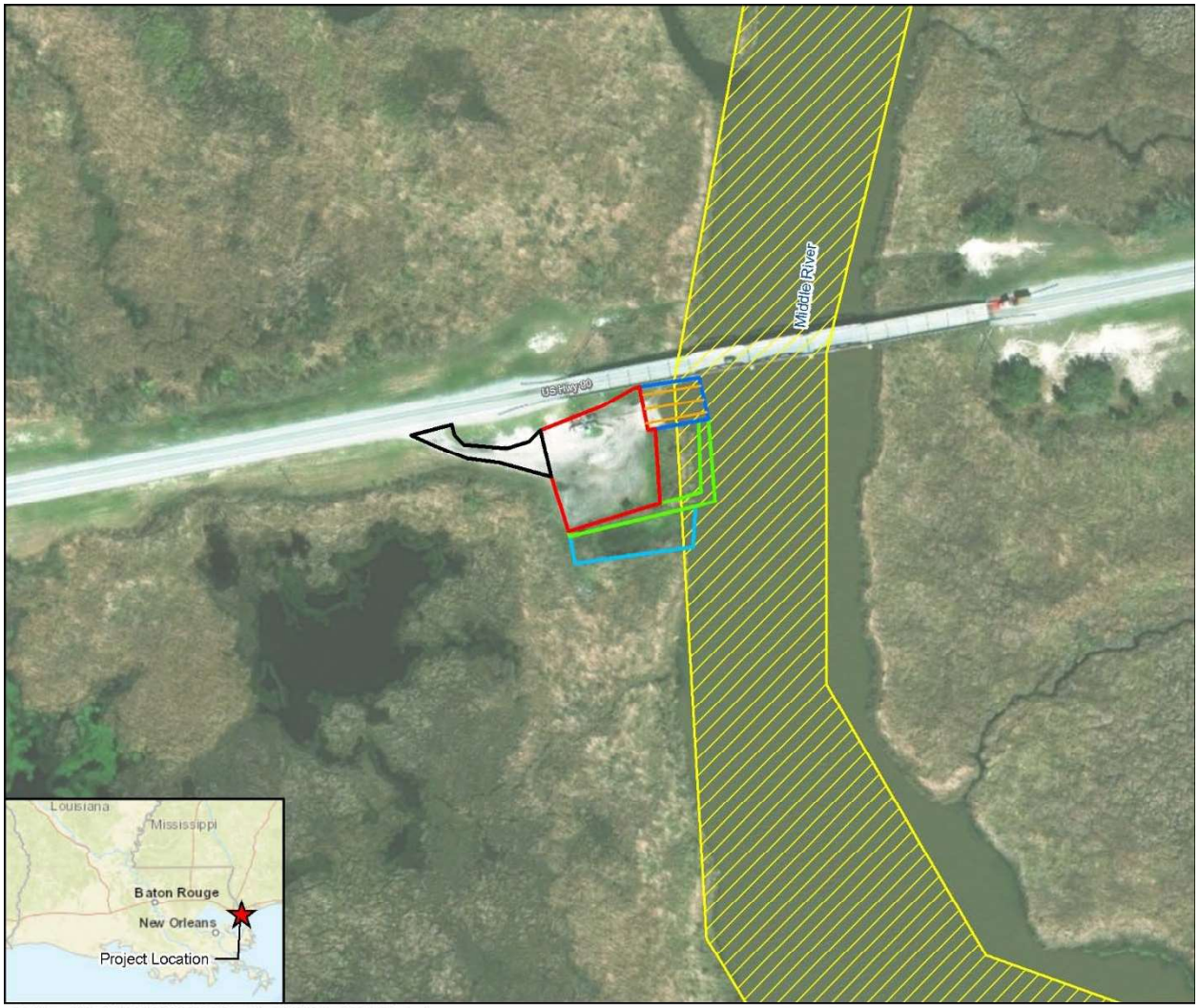
Proposed Alternative

- Floating Docks
- Access Road
- Boardwalk
- Boart Launch
- Parking Lot
- Staging Slip

1:3,000

Created By: JS
Project Number: 48078
Date: 3/19/2018
NAD 1983 StatePlane Louisiana South FIPS 1702 Feet

0 175 350 Feet
0 110 220 330 Feet



MIDDLE PEARL
ESSENTIAL FISH HABITAT AND
USFWS CRITICAL HABITAT MAP
ST TAMMANY PARISH, LOUISIANA

Habitat Designation

Essential Fish Habitat

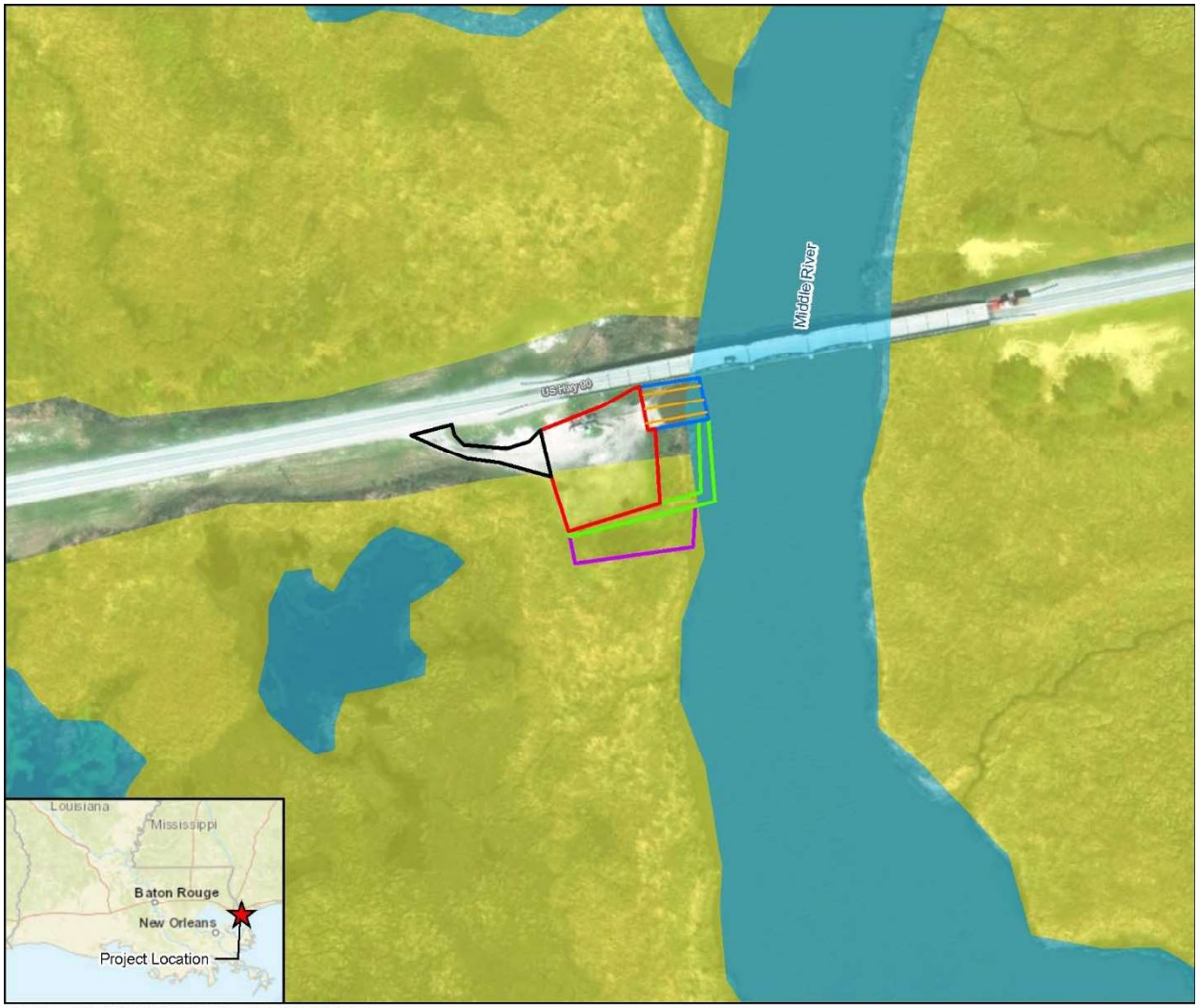
Proposed Alternative

Floating Docks
Access Road
Boardwalk
Boart Launch
Parking Lot
Staging Slip

1:3,000

Created By: JS
Project Number: 48078
Date: 4/20/2018
NAD 1983 StatePlane Louisiana South FIPS 1702 Feet

0 175 350 Feet
0 110 220 330 Feet



MIDDLE PEARL
NWI MAP
ST TAMMANY PARISH, LOUISIANA

Proposed Alternative
- Floating Docks
- Access Road
- Boardwalk
- Boart Launch
- Parking Lot
- Staging Slip

NWI Designation
- Emergent Wetland
- Freshwater Waterbody

1:3,000

Created By: JS
Project Number: 48078
Date: 4/20/2018
NAD 1983 StatePlane Louisiana South FIPS 1702 Feet

0 175 350 Feet
0 110 220 330 Feet

BEST PRACTICES FROM THE PDARP/PEIS

The following section is a direct excerpt from Section 6, Appendix A in Deepwater Horizon Oil Spill: Final Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental Impact Statement (DWH Trustees 2016)

Birds

Bald Eagles

If bald eagle breeding or nesting behaviors are observed or a nest is discovered or known, have all activities 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. Maintain this avoidance distance from the onset of breeding/courtship behaviors until any eggs have hatched and eaglets have fledged (approximately 6 months).

If a similar activity (such as driving on a roadway) is closer than 660 feet to a nest, maintain a distance buffer as close to the nest as the existing tolerated activity. 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 maintain a distance buffer as close to the nest as the existing tolerated activity.

In some instances activities conducted within 660 feet of a nest may result in disturbance, particularly for the eagles occupying the Mississippi barrier islands. If an activity appears to cause initial disturbance, stop the activity and move all individuals and equipment away until the eagles are no longer displaying disturbance behaviors. Contact the USFWS's Migratory Bird Permit Office to determine how to avoid impacts or if a permit may be needed.

Migratory Birds

Use care to avoid birds when operating machinery or vehicles near birds.

During the project design phase, coordinate with the USFWS and the state trust resource agency to site and design projects to avoid or minimize impacts to migratory bird nesting habitats or important feeding/loafing areas.

Avoid working in migratory bird nesting habitats during breeding, nesting, and fledging (approximately mid-February through late August). If project activities must occur during this timeframe and breeding, nesting, or fledging birds are present, contact the state trust resource agency to obtain the most recent guidance to protect nesting birds or rookeries, and their recommendations will be implemented.

Conservation areas may already be marked to protect bird nesting areas. Stay out of existing marked areas.

If vegetation clearing is necessary, clear vegetation outside the migratory bird nesting season (approximately mid-February through late August) or have a qualified biologist inspect for active nests. If no active nests are found, vegetation may be removed. If active nests are found, vegetation may be removed after the nest successfully fledges.

Avoid driving over the natural organic material ("wrack") line or areas of dense seaweed, as these habitats may contain hatchlings and chicks that are difficult to see.

Install pointy, white piling caps on exposed pilings to prevent bird roosting on piers, docks, and marinas.

Mammals

Manatee

In Louisiana, follow the most recent version of the *Standard Manatee Conditions for In-water Activities*:

During in-water work in areas that potentially support manatees all personnel associated with the project should be instructed about the potential presence of manatees, manatee speed zones, and the need to avoid collisions with and injury to manatees. All personnel should be advised that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973. Additionally, personnel should be instructed not to attempt to feed or otherwise interact with the animal, although passively taking pictures or video would be acceptable.

All on-site personnel are responsible for observing water-related activities for the presence of manatee(s). We recommend the following to minimize potential impacts to manatees in areas of their potential presence:

- All work, equipment, and vessel operation should cease if a manatee is spotted within a 50-foot radius (buffer zone) of the active work area. Once the manatee has left the buffer zone on its own accord (manatees must not be herded or harassed into leaving), or after 30 minutes have passed without additional sightings of manatee(s) in the buffer zone, in-water work can resume under careful observation for manatee(s).

- If a manatee(s) is sighted in or near the project area, all vessels associated with the project should operate at "no wake/idle" speeds within the construction area and at all times while in waters where the draft of the vessel provides less than a four-foot clearance from the bottom. Vessels should follow routes of deep water whenever possible.

- If used, siltation or turbidity barriers should be properly secured, made of material in which manatees cannot become entangled, and be monitored to avoid manatee entrapment or impeding their movement.

- Temporary signs concerning manatees should be posted prior to and during all in-water project activities and removed upon completion. Each vessel involved in construction activities should display at the vessel control station or in a prominent location, visible to all employees operating the vessel, a temporary sign at least 8½ " X 11" reading language similar to the following: "CAUTION BOATERS: MANATEE AREA/ IDLE SPEED IS REQUIRED IN CONSRUCTION AREA AND WHERE THERE IS LESS THAN FOUR FOOT BOTTOM CLEARANCE WHEN MANATEE IS PRESENT". A second temporary sign measuring 8½ " X 11" should be posted at a location prominently visible to all personnel engaged in water-related activities and should read language similar to the following: "CAUTION: MANATEE AREA/ EQUIPMENT MUST BE SHUTDOWN IMMEDIATELY IF A

MANATEE COMES WITHIN 50 FEET OF OPERATION".

- Collisions with, injury to, or sightings of manatees should be immediately reported to the Service's Louisiana Ecological Services Office (337/291-3100) and the Louisiana Department of Wildlife and Fisheries, Natural Heritage Program (225/765-2821). Please provide the nature of the call (i.e., report of an incident, manatee sighting, etc.); time of incident/sighting; and the approximate location, including the latitude and longitude coordinates, if possible.

Bottlenose Dolphin

For projects with any in-water construction activities, dredging, or wetland/barrier island creation and nourishment, follow the most current version of the NMFS Southeast Region's Measures for Reducing Entrapment Risk to Protected Species.

For projects that enhance recreational fishing opportunities (e.g., fishing pier enhancement / development), visibly post the NMFS Southeast Region's Dolphin-Friendly Fishing Tips and Don't Feed Wild Dolphins signs and other applicable protected species educational signs.

To reduce the risk associated with vessel strikes of protected species or related disturbance, follow the most current version of NMFS Southeast Region's Vessel Strike Avoidance Measures and Reporting for Mariners, revised February 2008.

For projects that enhance recreational and commercial vessel based activities, follow NMFS's Southeast

U.S. Marine Mammal and Sea Turtle Viewing Guidelines.

Tortoises/Turtles

Gopher Tortoise

If suitable habitat is present, have a qualified biologist conduct surveys to identify any gopher tortoise burrows. If burrows are within the project area and cannot be avoided through establishing a protective buffer (size determined by USFWS and the state trust resource agency), implement standard procedures to relocate the tortoise within the project site but away from the areas of construction or restoration or consider conservation banks. A Candidate Conservation Agreement with Assurances may be appropriate for project sites within the nonlisted range of the species.

Fish

Gulf Sturgeon

Avoid work in riverine critical habitats when Gulf sturgeon are likely to be present (April to October). Do not dredge in spawning areas when Gulf sturgeon are likely to be present.

During project implementation, maintain riparian buffers of at least 100 feet around critical habitat. Install silt fencing to prevent sedimentation or erosion into streams and rivers.

Operate dredge equipment in a manner to avoid risks to Gulf sturgeon (e.g., disengage pumps when the cutter head is not in the substrate; avoid pumping water from the bottom of the water column). Implement NMFS's *Sea Turtle and Smalltooth Construction Conditions* (revised March 23, 2006) and NMFS's *Measures for Reducing Entrapment Risk to Protected Species* (revised May 22, 2012), as they are protective of Gulf sturgeon as well.

Invasive Species

Develop and implement a Hazard Analysis and Critical Control Points (HACCP) plan to prevent and control invasive species. Use (ASTM E2590−08) or other version of HACCP or other similar planning tool.

Implement an Integrated Pest Management (IPM) approach to facility design, sanitation, and maintenance to prevent and control invasive and pest species.

Inspect sites, staging, and buffer areas for common invasive species prior to the onset of work. Map any invasive species detected and note qualitative or quantitative measures regarding abundance.

Implement a control plan, if necessary, to ensure these species do not increase in distribution or abundance at a site due to project implementation. Inspect sites periodically to identify and control new colonies/individuals of an invasive species not previously observed prior to construction.

Prior to bringing any equipment (including personal gear, machinery, vehicles, or vessels) to the work site, inspect each item for mud or soil, seeds, and vegetation. If present, clean the equipment, vehicles, or personal gear until they are free from mud, soil, seeds, and vegetation. Inspect the equipment, vehicles, and personal gear each time they are being prepared to go to a site or prior to transferring between sites to avoid spreading exotic, nuisance species.

Place and maintain predator-proof waste receptacles in strategic locations during project implementation to prevent an increase in predator abundance. For projects designed to enhance or increase visitor use, maintain predator-proof waste receptacles for the life of the project.

Have the appropriate state agency inspect any equipment or construction materials for invasive species prior to use.

Inspect and certify propagated or transplanted vegetation as pest and disease free prior to planting in restoration project areas.

General Construction Measures

Guidelines

Bubble Curtain Specifications for Pile Driving, as contained in the Florida Statewide Programmatic Opinion on page 270.

Piling Installation

Push pilings into soft, bottom substrate to reduce noise from installation; do not drive and hammer pilings into bottom substrate unless necessary for proper construction.

Protected Species

Provide all individuals working on a project with information in support of general awareness of and means to avoid impacts to protected species and their habitats present at the specific project site.

Site Maintenance and Conduct

Use the nearest, existing staging, access and egress areas, travel corridors, pathways, and roadways (including those provided by the state, local governments, land managers, trustee, or private property owner, with proper permissions) and do not create new staging areas, access (except dune walkovers) or egress, or travel corridors through dune habitats.

Minimize construction noise to the maximum extent practicable when working near protected species and their habitats.

Maintain or improve all lighting regimes. Methods include working during daylight hours only, prohibiting lighting on dune walkovers, and using wildlife-friendly lighting where lighting is necessary for human safety.

Post signs at kiosks, ramps, and piers to provide visitors with information to avoid and minimize impacts to protected species and their habitats while recreating. Develop signs in coordination with NMFS, USFWS, and the local state trust resource agency.

Supply and maintain containers for waste fishing gear to avoid fish and wildlife entanglement.

Land and Vegetation Protection

Develop and implement an erosion control plan to minimize erosion during and after construction and where possible use vegetative buffers (100 feet or greater), revegetate with native species or annual grasses, and conduct work during dry seasons.

Develop and implement a spill prevention and response plan, including conducting daily inspections of all construction and related equipment to ensure there are no leaks of antifreeze, hydraulic fluid, or other substances and cleaning and sealing all equipment that would be used in the water to rid it of chemical residue. Develop a contract stipulation to disallow use of any leaking equipment or vehicles.

Prohibit use of hazardous materials, such as lead paint, creosote, pentachlorophenol, and other wood preservatives during construction in, over or adjacent to, sensitive sites during construction and routine maintenance.

Where landscaping is necessary or desired, use native plants from local sources. If non-native species must be used, ensure they are noninvasive and use them in container plantings.

Wetland and Aquatic Resource Protection

Complete an engineering design and post-construction inspection for projects where geomorphic elevations are restored in wetlands, marshes, and shallow water habitats to ensure the success of the restoration project. Manage elevation of fill material to ensure projected consolidation rates are accomplished and that habitat suitable for wetland and marsh vegetation is developed.

Avoid and minimize, to the maximum extent practicable, placement of dredged or fill material in wetlands and other aquatic resources.

Design construction equipment corridors to avoid and minimize impacts to wetlands and other aquatic resources to the maximum extent practicable.

To the maximum extent possible, implement the placement of sediment to minimize impacts to existing vegetation or burrowing organisms.

Apply herbicide in accordance with the direction and guidance provided on the appropriate U.S. Environmental Protection Agency (EPA) labels and state statutes during land-based activities.

When local conditions indicate the likely presence of contaminated soils and sediments, test soil samples for contaminant levels and take precautions to avoid disturbance of, or provide for proper disposal of, contaminated soils and sediments. Evaluate methods prior to dredging to reduce the potential for impacts from turbidity or tarballs.

Perform maintenance of generators, cranes, and any other stationary equipment operated within 150 feet of any natural or wetland area, as necessary, to prevent leaks and spills from entering the water.

Designate a vehicle staging area removed from any natural surface water resource or wetland to perform fueling, maintenance, and storage of construction vehicles and equipment. Inspect vehicles and equipment daily prior to leaving the storage area to ensure that no petroleum or oil products are leaking.

Upon completion of construction activities, restore all disturbed areas as necessary to allow habitat functions to return. Create and manage public access developments to enhance recreational experience and educational awareness to minimize effects to habitat within wetland and shallow water areas and to the long-term health of related biological communities.

Use silt fencing where appropriate to reduce increased turbidity and siltation in the project vicinity. This would apply to both on land and in water work.

Make all efforts to reduce the peak sound level and exposure levels of fish to reduce the potential impact of sound on fish present in the project areas.

Use a vibratory hammer whenever possible to reduce peak sound pressure levels in the aquatic environment.

Use sound attenuation devices where practicable for pulse noise (impact hammers) to reduce peak sound pressure levels in the aquatic environment.

Stipulate the timing of activities to avoid impacts to spawning fish and eggs/larvae.

Use best practices to reduce turbidity, such as turbidity blankets, to reduce the potential impact of turbidity on finfish.

Screen water withdrawal pipes to minimize potential entrainment of fish from the withdrawal area. Have project proponents coordinate with NMFS to create an intake screen that would minimize potential impingement of fish.

FUTURE BEST PRACTICES

Best Practices for EFH Under MSFCMA

At time of publication, practices to avoid and minimize effects to EFH were under development. Please check the following webpage for EFH best practices that may be developed: http://sero.nmfs.noaa.gov/habitat_conservation/documents/sero_hazmat_efh_consultation_bmps_ver201612.pdf

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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 Protect 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.

A. Project Identification

Federal Action Agency: U.S. Fish and Wildlife Service

Additional Federal Action Agency: National Marine Fisheries Service

Agency Contact(s)

USFWS: Ashley Mills at 812-756-2712 and Ashley_Mills@fws.gov
NMFS: Christy Fellas at 727-551-5714 and Christina.Fellas@noaa.gov

I. *Implementing Trustee(s)*: Louisiana Department of Wildlife and Fisheries

II. *Contact Person*: Brady Carter

III. *Phone*: (225) 763-5504

Email: bcarter@wlf.la.gov

IV. *Project Name and ID# (Official name of project and ID number assigned by Trustees in DIVER)*: Atchafalaya Delta Wildlife Management Area Access

V. *NMFS Office (Choose appropriate office based on project location)*: NMFS Southeast Regional Office

USFWS Office (Choose or write in appropriate office based on project location): Louisiana Ecological Services Field Office (Lafayette)

VI. *Project Type #1*: Enhance Recreational Experiences

Project Type #2, if helpful: Enhance Public Access to Natural Resources for Recreational

VII. *TIG*: Louisiana TIG

Restoration Plan: Recreational Use

B. Project Location

I. Physical Address of action area (If applicable): N/A

II. *State & County/Parish of action area*: Louisiana, St. Mary Parish

III. *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])*: 29.477524°N, 91.284911°W NAD83

IV. Township, range and section of the action area: Township 18 South, Range 11 East, Section 13. Township 18 South, Range 12 East, Section 18.

C. 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:
-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

Have any federal permits been applied for but not yet obtained, if so which ones and what is the permit number(s)? ☐ Yes ☑ No

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.

Deepwater Horizon Oil Spill Louisiana Trustee Implementation Group Restoration Plan and Environmental Assessment #4: Nutrient Reduction (Nonpoint Source) and Recreational Use

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

Name of Person Completing this Form:	Nicole Smolensky
Name of Project Lead:	
Date Form Completed:	01/23/2018
Date Form Updated:	4/23/2018

D. Description of Action Area

Attach a separate map delineating where the action will occur and where critical habitat, if any, is located. Map or describe all areas that may be directly or indirectly affected by the action. 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). If CH is not designated in the area, then map or describe any suitable habitat in the area.

The Atchafalaya Delta Wildlife Management Area (WMA) is located at the mouths of the Atchafalaya River and the Wax Lake Outlet, within the Atchafalaya Basin in St. Mary Parish. Within the bay, two deltas, Main Delta and Wax Lake Delta, have formed from the accretion of sediments from the Atchafalaya River and from dredge materials deposited by the U.S. Army Corps of Engineers (USACE). The WMA is 137,695 acres and is managed primarily for hunting and fishing. The Main Delta area has approximately 15,000 acres of marsh and scrubby habitat; the Wax Lake Delta has approximately 12,000 acres of marsh. The Proposed Project action area includes approximately 3,120 feet of the Breaux Pass and approximately 4,000 feet of the Cul-de-sac Pass located in the northeast portion of the Atchafalaya Delta WMA.

The Proposed Project is located in the Mississippi Alluvial Plain (73) Level III ecoregion and the Deltaic Coastal Marshes and Barrier Islands (73o) Level IV ecoregion (Daigle et al. 2006). The following information was obtained from Daigle et al. 2006 unless indicated otherwise. The Mississippi Alluvial Plain is mostly a broad, flat alluvial plain with river terraces, swales, and levees providing the main elements of relief. Elevation ranges from 0 to 15 feet above mean sea level and local relief ranges from 0 to 10 feet. Winters are mild, and summers are hot with minimum/maximum temperatures of 44˚F/64 ˚F and 72 ˚F/92˚F respectively. Mean annual precipitation ranges from 64 to 66 inches. The ecoregion historically comprised bottomland deciduous forest with extensive wetlands, but much of it was cleared for cultivation. Brackish and saline marshes dominate the Deltaic Coastal Marshes and Barrier Islands ecoregion. The region supports vegetation tolerant of brackish or saline water, including saltmarsh cordgrass, marshhay cordgrass, black needlerush, and coastal saltgrass. Black mangrove occurs in a few areas, and some live oak is found on remnant natural ridges or old spoil banks. Extensive organic deposits lie mainly below sea level in permanently flooded settings resulting in the development of mucky surfaced Histosols. Entisols may also be present. Soil series include Allemands, Kenner, Larose, Clovelly, Lafitte, Bancker, Scatlake, Timbalier, Bellpass. Sediments of silts, clays, and peats contain large amounts of methane, oil, and hydrogen sulfide gas. Inorganic sediments found within the ecoregion are soft and have high water contents and shrink dramatically upon draining. The wetlands and marshes in the region act as a buffer to help moderate flooding and tidal inundation during storm events (Daigle et al. 2006).

The Proposed Project is located in the Atchafalaya River Basin in the central part of the coastal zone, which is approximately 3,981,346.64 acres (U.S. Geological Survey [USGS] 2018). The Atchafalaya River Basin is unique among the Louisiana basins because it has a growing delta system with nearly stable wetlands. The region contains approximately 58,400 acres of wetlands, but most of the area consists of open water (Coastal Wetlands Planning, Protection and Restoration Act [CWPPRA] 2017). The Atchafalaya River is a distributary of the Red, Black, and Mississippi Rivers presently carrying approximately 30% of the Mississippi's flow. The basin is defined by levee systems on the north, east, and west sides and serves as a major floodway for the Mississippi River floodwaters, The area is predominantly wooded lowland and cypress-tupelo swamp with sporadic freshwater marshes located in the lower distributary area. This region contains the largest fresh water swamp in the United States (Louisiana Department of Environmental Quality [LDEQ] 2016).

Water quality issues identified in the FINAL 2016 Louisiana Water Quality Inventory: Integrated Report (305(b)/303(d)) within the Proposed Project general vicinity include mercury in fish tissue and fecal coliform. These issues hinder recreational swimming, boating, and fishing in the general area (LDEQ 2016).

Although there is designated critical habitat (LA-2) for piping plover within St. Mary Parish, it is located approximately 0.5 mile southeast of the Proposed Project. The designated critical habitat is not considered to be included in the Proposed Project action area because of the absence of primary constituent elements and the localized activities of the proposed actions. See the attachment map illustrating designated critical habitat relative to the location of the Proposed Project.

Designated essential fish habitat (EFH) for coastal migratory pelagic resources, red drum, reef fish, and shrimp is present within the Proposed Project (National Oceanic and Atmospheric Administration [NOAA] 2018). See the attached map illustrating designated EFH.

a. *Waterbody*

If applicable. Name the body of water, including wetlands (freshwater or estuarine), on which the project is located. If the location is in a river or estuary, please approximate the navigable distance from the project location to the marine environment.

The Proposed Project action area is located within the Main Delta of the Atchafalaya River, approximately 2.6 miles from estuarine or marine environments. According to the National Wetland Inventory (NWI), the Proposed Project is located within a freshwater riverine system, with associated freshwater emergent wetland and freshwater forested/shrub wetland (U.S. Fish and Wildlife Service [USFWS] 2017). Please see attachment map illustrating the NWI dataset.

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.

There are currently no structures within the Proposed Project action area.

c. *Seagrasses & Other Marine Vegetation*

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

The Proposed Project action area is located within freshwater systems that lack suitable environments for seagrass and other marine vegetation (Google Earth Imagery 2016) and is located outside of mapped distributions of submerged aquatic vegetation (Love et al. 2013; NOAA 2018). Therefore, surveys for seagrass and other marine vegetation are not scheduled for the Proposed Project.

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.

The Proposed Project action area is surrounded by freshwater systems that lack suitable environments for mangroves (Google Earth Imagery 2016) and is located outside of mapped distributions of mangroves (Love et al. 2013; NOAA 2018). Therefore, surveys for mangroves are not scheduled for the Proposed Project.

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.

The Proposed Project action area is surrounded by freshwater systems that lack suitable environments for corals (Google Earth Imagery 2016) and is located outside of mapped distributions (Love et al. 2013; NOAA 2018). Therefore, surveys for these resources have not been conducted for this area, nor are they scheduled for the Proposed Project.

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.).

The Proposed Project action area is within freshwater riverine systems. Adjacent upland habitat is scrubby and marsh habitats.

g. *Marine Mammals*

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

The West Indian manatee has the potential to occur within the general area of the Proposed Project. The Proposed Project action area occurs within freshwater riverine systems that might contain suitable habitats; however, available data indicate no suitable submerged aquatic vegetation exists within the vicinity (Love et al. 2013; NOAA 2018) and no occurrences have been recorded in this area (Louisiana Department of Wildlife and Fisheries [LDWF] 2018). SARs indicate a common bottlenose dolphin stock for the Atchafalaya Bay (NOAA 2016b).

E. Project Description

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

The construction start date and duration will be determined by the LDWF during final design.

II. *Describe the Proposed Action: 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. 3. 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.*

LDWF is proposing to dredge Breaux Pass and Cul-de-sac Pass in order to enhance access for hunters, anglers, and wildlife viewers to the interior marsh. A floating bucket dredge would be used to excavate each pass, as follows:

• Dredging in Breaux Pass would include excavation of approximately 25,000 cubic yards of material (2,000 feet long, 80 feet wide, and 10 feet deep). Dredge materials from Breaux Pass would be placed along the south bank of the pass. The dredging and placement area footprints for Breaux Pass would not exceed approximately 15 acres of open/in-water areas.
• Dredging in Cul-de-sac Pass would include excavation of approximately 31,000 cubic yards of material (4,000 feet long, 50 feet wide, and 10 feet deep). Dredge spoils from Cul-de-sac Pass would be placed in alternate deposits along both banks of the pass. The dredging and dredge spoil footprints for Cul-de-sac Pass would not exceed approximately 8 acres of open/in-water areas.

Dredging at Breaux and Cul-de-sac Passes would result in deeper and wider passes than currently exist, allowing boats deeper draft space, which also would accommodate a greater diversity of boat types and sizes.

In-water work is expected exclusively because the construction for the access improvements would take place within the active channels of Breaux and Cul-de-sac Passes. The dredging and dredge spoil footprints for both passes would not exceed approximately 23 acres of substrate displacement in open/in-water areas.

The NRCS Soil Survey for St. Mary Parish, Louisiana (U.S. Department of Agriculture [USDA] 2018) identifies two soil map units likely to compose the channel substrate where dredging will occur within the Proposed Project area: Balize silt loam, very frequently flooded (BEA); and Larose muck, 0 to 0.5 percent slopes, tidal (LEA). These soil varieties are flat or gently-sloping soft substrates composed primarily of clay, silt, and muck with brackish conductivity measures.

Construction equipment for the access improvements would include a floating bucket. Staging would take place on a floating barge.

Please see the attachment map of the Proposed Project.

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

a. *If applicable, Overwater Structures (Place your answers to the following questions in the box below.)*

i. *Is the proposed use of this structure for a docking facility or an observation platform?*

ii. *If no, is this a fishing pier? Public or Private? How many people are expected to fish per day? How do you plan to address hook and line captures?*

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 (sqft)?*

No overwater structures are proposed.

b. *Pilings & Sheetpiles (What type of material is the piling or sheetpiles? What size and how many will be used? Method used to install: impact hammer, vibratory hammer, jetting, etc.?)*

This Proposed Project does not include the use of pilings or sheet piles.

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.)*

No marinas or boat slips are proposed.

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.)*

This Proposed Project does not involve public or private boat ramp work.

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.*

This Proposed Project does not involve shoreline armoring.

f. *Dredging or digging (Provide details about dredge type (hopper, cutterhead, clamshell, etc.), maximum depth of dredging, area (ft^2) to be dredged, volume of material (yd^3) 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.*

Dredging in Breaux Pass would include excavation of approximately 25,000 cubic yards of material (2,000 feet long, 80 feet wide, and 10 feet deep). Dredge materials from Breaux Pass would be placed along the south bank of the pass. The dredging and placement area footprints for Breaux Pass would not exceed approximately 15 acres of open/in-water areas.

Dredging in Cul-de-sac Pass would include excavation of approximately 31,000 cubic yards of material (4,000 feet long, 50 feet wide, and 10 feet deep). Dredge spoils from Cul-de-sac Pass would be placed in alternate deposits along both banks of the pass. The dredging and dredge spoil footprints for Cul-de-sac Pass would not exceed approximately 8 acres of open/in-water areas.

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.)*

No blasting would be necessary or allowed during construction.

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), 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.*

No artificial reefs are present (LDWF 2013) nor proposed for the Proposed Project

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)).*

The Proposed Project would enhance access for fishing within the Atchafalaya Delta WMA. This would include line and hook from boats or banks within the WMA.

F. NOAA Species & Critical Habitat and Effects Determination Requested

1. *List all species, critical habitat, proposed species and proposed critical habitat that may be found in the action area.*

2. *Attach a separate map identifying species/critical habitat locations within the action area.*

For information on species and critical habitat under 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)	**DETERMINATION** (see definitions below)
Green Sea Turtle (T)		Marine	May Affect, Not Likely to Adversely Affect
Loggerhead Sea Turtle (T)		Marine	May Affect, Not Likely to Adversely Affect
Hawksbill Sea Turtle (E)		Marine	No Effect
Leatherback Sea Turtle (E)		Marine	No Effect
Kemp's Ridley Sea Turtle (E)		Marine	May Affect, Not Likely to Adversely Affect
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate

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 = 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 = 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.

Critical Habitat Destruction or Adverse Modification = Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.

G. USFWS Species & Critical Habitat and Effects Determination Requested

1. *List all species, critical habitat, proposed species and proposed critical habitat that may be found in the action area.*
2. *Attach a separate map identifying species/critical habitat locations within the action area.*

For information on species and critical habitat under USFWS jurisdiction, visit http://www.fws.gov/endangered/species/.

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)	**DETERMINATION** (see definitions below)
Pallid sturgeon		Riverine/freshwater	May Affect, Not Likely to Adversely Affect
Hawksbill sea turtle		Terrestrial	No Effect
Kemp's Ridley		Terrestrial	No Effect
Leatherback sea turtle		Terrestrial	No Effect
Loggerhead sea turtle		Terrestrial	No Effect
Piping plover		Select One	No Effect
Red knot		Select One	No Effect
West Indian manatee		Select One	May Affect, Not Likely to Adversely Affect
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
		Select One	Select Most Appropriate
		Select One	Select Most Appropriate

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 = 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 = 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.

Critical Habitat Destruction or Adverse Modification = Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.

H. Effects of the proposed project to the species and habitats

I. *Explain the potential beneficial and adverse effects to each species listed above (Describe what, when, and how the species will be impacted and the likely response to the impact. Be sure to include direct, indirect, and cumulative impacts and where possible, quantify effects. If species are present (or potentially present) and will not be adversely affected describe your rationale. If species are unlikely to be present in the general area or action area, explain why. This justification provides documentation for your administrative record, avoids the need for additional correspondence regarding the species, and helps expedite review.)*

The Proposed Project is anticipated to have No Effect on the following species: both marine and terrestrial life stages of the hawksbill and leatherback sea turtles; the terrestrial stages of the Kemp's Ridley and loggerhead sea turtles; and the piping plover and red knot. This is based on the assumption that these species will not occur in the Proposed Project action area because of the absence of suitable aquatic foraging habitat (for the hawksbill and leatherback sea turtles), lack of suitable nesting habitat for all the sea turtles, and lack of wintering foraging/roosting/loafing habitat for the piping plover and red knot (GoogleEarth Imagery 2017; NOAA 2018; Love et al. 2013; NatureServe 2016).

The Proposed Project May Affect, Not Likely to Adversely Affect the following species: marine life stages of the green, Kemp's Ridley, and loggerhead sea turtles; the pallid sturgeon and the West Indian manatee.

These species of sea turtles are known to use large channels along the Gulf of Mexico (NOAA pers. comm. 2018) and thus may occur in the Proposed Project action area. The Proposed Project's activities will involve the use of a floating bucket dredge to widen the channel for increased access for recreation. Dredging activities within the Proposed Project action area could result in temporary increases in turbidity or construction noise that would be localized and temporary. The turbidity and construction noise may result in localized temporary avoidance of the Proposed Project action area. The freshwater tidal channels in Proposed Project action area do not harbor extensive sea grass beds that may be used as foraging habitats, thus foraging habitat loss is not an expected impact. The use of bucket dredging is anticipated to have minimal entrapment risk to sea turtles and thus not considered a significant direct impact. Fishing activities are anticipated to be dispersed and not significantly elevated nor concentrated to result in significant increase of turtle by-catch via hook and line fishing. BMPs listed in the attachment will be implemented and enforce by the implementing trustee to minimize and avoid any potential impacts within the Proposed Project action area.

Please refer to the attachment for continued discussion.

II. *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 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 Proposed Project action area is outside designated critical habitat; therefore, no effects to critical habitat would occur.

I. Actions to Reduce Adverse Effects

I. *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.)*

Species-specific best management practices (BMPs) from the Final PDARP/PEIS (DWH Trustees 2016:Section 6, Appendix A) that would be incorporated into the Proposed Project are included as an attachment.

Additionally, all individuals (such as construction workers) working on the Proposed Project would be provided with information on general awareness of any federally protected species that have the potential to occur in the Proposed Project action area. Seasonal avoidance measures will be implemented when practicable. If work must be conducted when these species are present, certain activities may be restricted or modified to reduce disturbance of these species (see attached BMPs).

The implementing trustee will implement and enforce approved BMPs listed in the attachment to avoid and minimize impacts to species listed in Sections F and G. Continued coordination of BMPs will occur during the final design phase.

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.)*

Designated critical habitat is not present within the Proposed Project. Therefore, no impacts to critical habitat would occur as a result of the proposed construction of recreational features, and no additional conservation measures are proposed other than the construction BMPs listed in the attachment.

J. 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

Is your activity likely to impact 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	
☑	☐	*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) *Building or enhancing areas for water-related recreational use or fishing opportunities (e.g. fishing piers, bridges, boat ramps, marinas)*
☑	☐	*f) Aquaculture*
☐	☑	*g) Dredging or in-water construction activities to change hydrologic conditions or connectivity, create breakwaters and living shorelines, etc.*
☑	☐	*h) Restoration of barrier islands, levee construction or similar projects*
☑	☐	*i) Fresh-water river diversions*

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

Please refer to Section E Project Description for construction details of the Proposed Project. The in-water construction activities involve dredging that may generate noise sources. The NOAA Technical Guidance on Acoustic Impacts does discuss marine mammal responses to dredging, thus the Proposed Project activity may or may not result in temporary shifts in species behaviors (NOAA Fisheries 2016).

IV. Are any measures planned to mitigate potential impacts to marine mammals? If yes, provide text in box below. NO ☐ YES ☑

The implementing trustee will implement and enforce the Standard Manatee Conditions BMPs, NMFS's Measures for Reducing Entrapment Risk to Marine Mammals, and NMFS's Vessel Strike Avoidance Measures as listed in the attachment to avoid and minimize impacts to manatees and bottlenose dolphins. Continued coordination of BMPs will occur during the final design phase.

K. 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**

L. Migratory Birds

Identify the species anticipated in the action area and behaviors (breeding, roosting, foraging) anticipated during project implementation. You may list similar species on a single line and categorize by type (e.g., Wading birds - great blue heron, snowy egret, reddish egret). If species are present and impacts to individuals or habitat could occur, identify avoidance and minimization measures to prevent incidental take.
Incidental take of Migratory Birds cannot be authorized. Use additional tables on the next page if needed.

I.

Species/Species Group	Behavior	Species/Habitat Impacts and Conservation Measures to Minimize Impacts
American Golden-Plover	non breeder	The Proposed Project area is located within a region that includes the following birds of conservation concern (USFWS 2018). During the Proposed Project design phase, coordination with the USFWS and the state trust resource agency will occur to site and design Proposed Project features to avoid or minimize impacts to migratory bird nesting habitats or important feeding and loafing areas. If vegetation clearing is required, it would take place outside of the migratory bird nesting season (approximately mid-February through mid-September) or a qualified biologist would inspect the area for active nests. If no active nests are found, vegetation may be removed. If active nests are found, vegetation may be removed after the nestlings successfully fledge. If Proposed Project activities must occur during this time-frame and breeding, nesting, and fledging birds are present, the state trust resource agency would be contracted to obtain the most recent guidance to protect nesting birds or rookeries, and their recommendations would be implemented.
Bald Eagle	breeder	
Black Skimmer	breeder	
Bonaparte's Gull	non breeder	
Brown Pelican	breeder	
Buff-Breasted Sandpiper	non breeder	
Clapper Rail	breeder	
Common Loon	non breeder	
Double-Crested Cormorant	breeder	
Gull-Billed Tern	breeder	
Herring Gull	breeder	
Kentucky Warbler	breeder	
King Rail	breeder	
Le Conte's Sparrow	non breeder	
Least Tern	breeder	
Lesser Yellowlegs	non breeder	
Prothonotary Warbler	breeder	
Red-Breasted Merganser	non breeder	
Ring-Billed Gull	non breeder	
Royal Tern	breeder	
Rusty Blackbird	non breeder	
Swallow-Tailed Kite	breeder	
Willet	breeder	
Wood Thrush	breeder	

M. Migratory Birds

Continuation page if needed.

II.	SPECIES/SPECIES GROUP	BEHAVIOR	SPECIES/HABITAT IMPACTS and CONSERVATION MEASURES TO MINIMIZE IMPACTS

N. Best Practices

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 pratices you'll be using in your project.

PDARP/PEIS best practices that would be incorporated into the Proposed Project are attached.

O. Submitting the BE Form

NMFS ESA § 7 Consultation

We request that all ESA §7 consultation requests/packages be submitted electronically to: **Christina.Fellas@noaa.gov**

Questions about consultation status may be directed to the email address above or

by phone: Christy Fellas: 727-551-5714

USFWS ESA § 7 Consultation

We request that all consultation requests/packages to USFWS be submitted electronically to: **Ashley_Mills@fws.gov**.

You will be notified when we receive your Biological Evaluation. 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 send your Biological Evaluation to the appropriate Field Office to conduct consultation.

Questions about consultation status may be directed to the email address above or by phone:
Ashley Mills: 812-756-2712

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.

Are you using this form to request approval for use of NMFS PDCs for this project? ○ Yes ◉ No

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

- ☐ Project is designed to avoid techniques and locations listed in the oyster reef creation and enhancement PDCs 1.a-1.e.
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Construction Conditions (PDC 2.a)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.b)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.c)
- ☐ In Gulf sturgeon critical habitat, oyster reef creation and enhancement occurs only on existing shell substrata or relic reef locations (PDC 2.d)
- ☐ Cultch material is free of debris and contaminants (PDC 2.e)
- ☐ Fresh shell has been properly aged or quarantined before being deployed (PDC 2.f)
- ☐ Cultch material is placed in a manner to minimize disturbance of sediment (PDC 2.g)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDC 2.h)
- ☐ Plan/drawings for intermittent breaks between oyster reef segment has been provided (2.i)
- ☐ Spill prevention and response plan has been developed (2.j)
- ☐ Design and materials used avoid entanglement and entrapment risks for ESA-listed species (2.k)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Marine Debris Removal ○ Yes ◉ No

- ☐ This project is designed to avoid techniques and locations listed in the marine debris removal PDCs 1.a-1.c
- ☐ All on-water operations shall take place during daylight hours (PDC 2.a)
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Conditions (PDC 2.b)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.c)
- ☐ Project personnel have been notified of procedures if approached by a marine mammal or sea turtle (PDC 2.d)
- ☐ Trash and debris will be disposed of at an upland location (PDCs 2.e)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Construction of Living Shorelines

○ Yes ◉ No

- ☐ This project is designed to avoid techniques and locations listed in the living shoreline PDCs 1.a-1.h
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Conditions (PDC 2.a)
- ☐ All in-water work activities will conducted during daylight hours (PDC 2.b)
- ☐ Piles for navigation of public safety purposes are less than 24" diameter and non-metal if impact hammer used (PDC 2.c)
- ☐ Spill prevention and response plan has been developed (2.d)
- ☐ Fill material is not sourced using hopper dredge or from sea turtle, Gulf sturgeon or smalltooth sawfish critical habitat and in-water borrow sites do not impact turtle nesting beaches (PDC 2.e)
- ☐ Design and materials do not create entrapment or entanglement risks to ESA-listed species and do not block migration (PDC 2.f)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.g)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDC 2.h)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.i)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Marsh Creation and Enhancement

○ Yes ◉ No

- ☐ Project is designed to avoid techniques and locations listed in the marsh creation PDCs 1.a-1.f
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Conditions (PDC 2.a)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.b)
- ☐ All in-water work activities will be conducted during daylight hours (PDC 2.c)
- ☐ Spill prevention and response plan has been developed (PDC 2.d)
- ☐ Fill material is not sourced using hopper dredge or from sea turtle, Gulf sturgeon or smalltooth sawfish critical habitat and in-water borrow sites do not impact turtle nesting beaches (PDC 2.e)
- ☐ Design and materials do not create entrapment or entanglement risks to ESA-listed species and do not block migration (PDC 2.f)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.g)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDCs 2.h)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Construction of Non-Fishing Piers

◯ Yes ◉ No

- ☐ This project is designed to avoid locations listed in the non-fishing piers PDCs 1.a
- ☐ Spill prevention and response plan has been developed (PDC 2.a)
- ☐ Design and materials do not create entrapment or entanglement risks to ESA-listed species and do not block migration (PDC 2.b)
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Construction Conditions (PDC 2.c)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.d)
- ☐ Follow Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat (PDC 2.e)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.f)
- ☐ Follows methods and timing for pile driving (2.g)
- ☐ Follows construction sequencing and avoids propwashing (PDC 2.h)
- ☐ Water depth will not be altered (PDC 2.i)
- ☐ Lighting specifications are incorporated for piers on or adjacent to sea turtle nesting beaches (PDC 2.j)
- ☐ Follows educational and fishing signage requirements (PDC 2.k)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDC 2.l)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

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

Name of person(s) completing this form:

Date form completed:

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

BIOLOGICAL EVALUATION FORM ATTACHMENTS

AD WMA ACCESS

PROJECT DETAIL MAP
ST MARY PARISH, LOUISIANA

Proposed Alternative

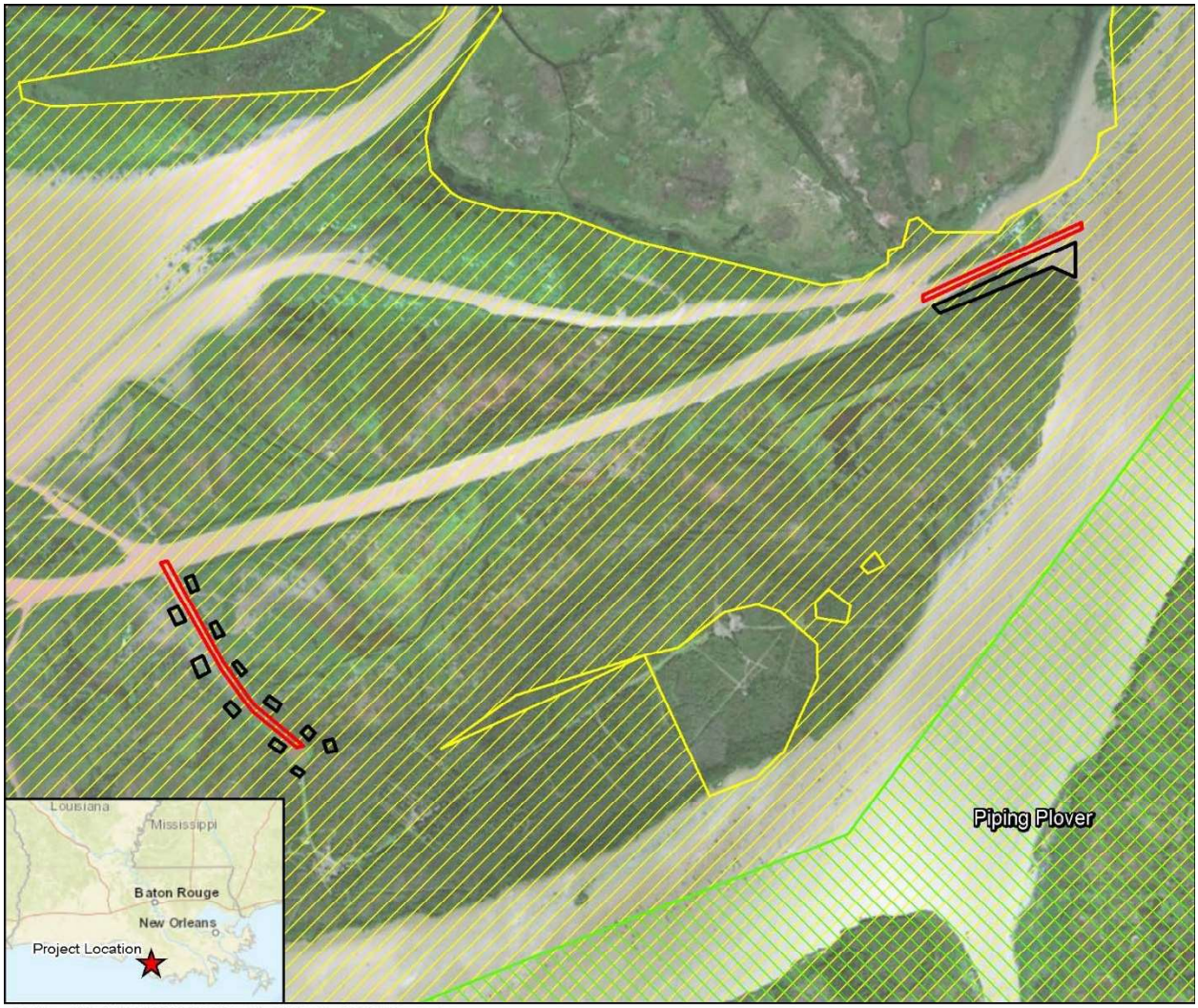
Dredge Location

Spoils Pile

1:36,000

Created By: JS
Project Number: 48078
Date: 3/19/2018
NAD 1983 StatePlane Louisiana South FIPS 1702 Feet

0 2,000 4,000 Feet
0 1,300 2,600 3,900 Feet



AD WMA ACCESS
ESSENTIAL FISH HABITAT AND
USFWS CRITICAL HABITAT MAP
ST MARY PARISH, LOUISIANA

Proposed Alternative
- Dredge Location
- Spoils Pile

Habitat Designation
- Piping Plover Critical Habitat
- Essential Fish Habitat

1:36,000

Created By: JS
Project Number: 48078
Date: 4/20/2018
NAD 1983 StatePlane Louisiana South FIPS 1702 Feet

0 2,000 4,000 Feet
0 1,300 2,600 3,900 Feet

AD WMA ACCESS
NWI MAP
ST MARY PARISH, LOUISIANA

Proposed Alternative
Dredge Location
Spoils Pile
NWI Designation
Emergent Wetland
Forested/Shrub Wetland
Freshwater Waterbody

1:36,000

Created By: JS
Project Number: 48078
Date: 4/20/2018
NAD 1983 StatePlane Louisiana South FIPS 1702 Feet

0 2,000 4,000 Feet
0 1,300 2,600 3,900 Feet

BIOLOGICAL EVALUATION FORM CONTINUATION SHEET

Section H.I. Effects of the Proposed Project to the species and habitat (continued)

The pallid sturgeon is found in large, turbid, free-flowing riverine habitats including the Mississippi River and the Atchafalaya watershed (NatureServe 2016). The Proposed Project action area is located at the coastal end of the Atchafalaya Delta in tidally influenced riverine waters. The same localized temporary impacts of turbidity and noise are anticipated for the pallid sturgeon. Although the Proposed Project activities may temporarily increase local turbidity, increased turbidity is not anticipated to adversely affect this species per the species prefer habitat (i.e., relatively turbid riverine waters). The Proposed Project dredging does not involve obstruction of riverine paths, nor will there be significant modification of upstream hydrologic flows of the Atchafalaya River. Entrainment is anticipated to be avoided or minimized due use of bucket dredge methods, and pallid sturgeon BMPs listed in the attachment will be implemented and enforce by the implementing trustee to minimize and avoid any potential impacts to this species within the Proposed Project action area.

The Proposed Project is located in a parish where the West Indian manatee may occur (LDWF 2018). The same localized temporary impacts of turbidity and noise are anticipated from the dredging activities are anticipated for the West Indian manatee; that may result in temporary avoidance of the Proposed Project action area. This project does not involve pile driving or explosives that would emit acoustic impacts that may affect marine mammals (NOAA 2016). Freshwater tidal channels in Proposed Project action area do not harbor extensive sea grass beds that may be used as foraging habitats, thus habitat loss is not an expected impact. Injury and collisions are not anticipated due to implementation of the *Standard Manatee Condition* BMP listed in the attachment.

BEST PRACTICES FROM THE PDARP/PEIS

The following section is a direct excerpt from Section 6, Appendix A in Deepwater Horizon oil spill: Final Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental Impact Statement, *Practices Included in Environmental Consequences Analysis in Chapter 6, Section 6.4* (DWH Trustees 2016).

Birds

Migratory Birds

Use care to avoid birds when operating machinery or vehicles near birds.

During the project design phase, coordinate with the USFWS and the state trust resource agency to site and design projects to avoid or minimize impacts to migratory bird nesting habitats or important feeding/loafing areas.

Avoid working in migratory bird nesting habitats during breeding, nesting, and fledging (approximately mid-February through late August). If project activities must occur during this timeframe and breeding, nesting, or fledging birds are present, contact the state trust resource agency to obtain the most recent guidance to protect nesting birds or rookeries, and their recommendations will be implemented.

Conservation areas may already be marked to protect bird nesting areas. Stay out of existing marked areas.

If vegetation clearing is necessary, clear vegetation outside the migratory bird nesting season (approximately mid-February through late August) or have a qualified biologist inspect for active nests. If no active nests are found, vegetation may be removed. If active nests are found, vegetation may be removed after the nest successfully fledges.

Avoid driving over the natural organic material ("wrack") line or areas of dense seaweed, as these habitats may contain hatchlings and chicks that are difficult to see.

Install pointy, white piling caps on exposed pilings to prevent bird roosting on piers, docks, and marinas.

Mammals

Manatee

In Louisiana, follow the most recent version of the *Standard Manatee Conditions for In-water Activities*:

During in-water work in areas that potentially support manatees all personnel associated with the project should be instructed about the potential presence of manatees, manatee speed zones, and the need to avoid collisions with and injury to manatees. All personnel should be advised that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973. Additionally, personnel should be instructed not to attempt to feed or otherwise interact with the animal, although passively taking pictures or video would be acceptable.

All on-site personnel are responsible for observing water-related activities for the presence of manatee(s). We recommend the following to minimize potential impacts to manatees in areas of their potential presence:

- All work, equipment, and vessel operation should cease if a manatee is spotted within a 50-foot radius (buffer zone) of the active work area. Once the manatee has left the buffer zone on its own accord (manatees must not be herded or harassed into leaving), or after 30 minutes have passed without additional sightings of manatee(s) in the buffer zone, in-water work can resume under careful observation for manatee(s).

- If a manatee(s) is sighted in or near the project area, all vessels associated with the project should operate at "no wake/idle" speeds within the construction area and at all times while in waters where the draft of the vessel provides less than a four-foot clearance from the bottom. Vessels should follow routes of deep water whenever possible.

- If used, siltation or turbidity barriers should be properly secured, made of material in which manatees cannot become entangled, and be monitored to avoid manatee entrapment or impeding their movement.

- Temporary signs concerning manatees should be posted prior to and during all in-water project activities and removed upon completion. Each vessel involved in construction activities should display at the vessel control station or in a prominent location, visible to all employees operating the vessel, a temporary sign at least 8½ " X 11" reading language similar to the following: "CAUTION BOATERS: MANATEE AREA/ IDLE SPEED IS REQUIRED IN CONSRUCTION AREA AND WHERE THERE IS LESS THAN FOUR FOOT BOTTOM CLEARANCE WHEN MANATEE IS PRESENT". A second temporary sign measuring 8½ " X 11" should be posted at a location prominently visible to all personnel engaged in water-related activities and should read language similar to the following: "CAUTION: MANATEE AREA/ EQUIPMENT MUST BE SHUTDOWN IMMEDIATELY IF A MANATEE COMES WITHIN 50 FEET OF OPERATION".

- Collisions with, injury to, or sightings of manatees should be immediately reported to the Service's Louisiana Ecological Services Office (337/291-3100) and the Louisiana Department of Wildlife and Fisheries, Natural Heritage Program (225/765-2821). Please provide the nature of the call (i.e., report of an incident, manatee sighting, etc.); time of incident/sighting; and the approximate location, including the latitude and longitude coordinates, if possible.

Bottlenose Dolphin

For projects with any in-water construction activities, dredging, or wetland/barrier island creation and nourishment, follow the most current version of the NMFS Southeast Region's Measures for Reducing Entrapment Risk to Protected Species.

For projects that enhance recreational fishing opportunities (e.g., fishing pier enhancement / development), visibly post the NMFS Southeast Region's Dolphin-Friendly Fishing Tips and Don't Feed Wild Dolphins signs and other applicable protected species educational signs.

To reduce the risk associated with vessel strikes of protected species or related disturbance, follow the most current version of NMFS Southeast Region's Vessel Strike Avoidance Measures and Reporting for Mariners, revised February 2008.

For projects that enhance recreational and commercial vessel based activities, follow NMFS's Southeast U.S. Marine Mammal and Sea Turtle Viewing Guidelines.

Tortoises/Turtles

Sea Turtles—In Water

Implement the following guidelines: NMFS's Sea Turtle and Smalltooth Sawfish Construction Conditions (revised March 23, 2006), NMFS's Measures for Reducing Entrapment Risk to Protected Species (revised May 22, 2012) and NMFS's Vessel Strike Avoidance Measures and Reporting for Mariners (revised February 2008).

Fish

Pallid Sturgeon

In areas inhabited by the pallid sturgeon, we offer the following recommendations for any work using a cutterhead/suction dredge (Louisiana Ecological Service Field Office 2018):

1. The cutterhead shall remain completely buried in the bottom material during dredging operations. If pumping water through the cutterhead is necessary to dislodge material or to clean the pumps or cutterhead, etc., the pumping rate should be reduced to the lowest rate possible until the cutterhead is at mid-depth, where the pumping rate can then be increased

2. During dredging, the pumping rates should be reduced to the slowest speed feasible while the cutterhead is descending to the channel bottom.

Invasive Species

Develop and implement a Hazard Analysis and Critical Control Points (HACCP) plan to prevent and control invasive species. Use (ASTM E2590−08) or other version of HACCP or other similar planning tool.

Implement an Integrated Pest Management (IPM) approach to facility design, sanitation, and maintenance to prevent and control invasive and pest species.

Inspect sites, staging, and buffer areas for common invasive species prior to the onset of work. Map any invasive species detected and note qualitative or quantitative measures regarding abundance.

Implement a control plan, if necessary, to ensure these species do not increase in distribution or abundance at a site due to project implementation. Inspect sites periodically to identify and control new colonies/individuals of an invasive species not previously observed prior to construction.

Prior to bringing any equipment (including personal gear, machinery, vehicles, or vessels) to the work site, inspect each item for mud or soil, seeds, and vegetation. If present, clean the equipment, vehicles, or personal gear until they are free from mud, soil, seeds, and vegetation. Inspect the equipment,

vehicles, and personal gear each time they are being prepared to go to a site or prior to transferring between sites to avoid spreading exotic, nuisance species.

Place and maintain predator-proof waste receptacles in strategic locations during project implementation to prevent an increase in predator abundance. For projects designed to enhance or increase visitor use, maintain predator-proof waste receptacles for the life of the project.

Have the appropriate state agency inspect any equipment or construction materials for invasive species prior to use.

Inspect and certify propagated or transplanted vegetation as pest and disease free prior to planting in restoration project areas.

General Construction Measures

Protected Species

Provide all individuals working on a project with information in support of general awareness of and means to avoid impacts to protected species and their habitats present at the specific project site.

Site Maintenance and Conduct

Use the nearest, existing staging, access and egress areas, travel corridors, pathways, and roadways (including those provided by the state, local governments, land managers, trustee, or private property owner, with proper permissions) and do not create new staging areas, access (except dune walkovers) or egress, or travel corridors through dune habitats.

Minimize construction noise to the maximum extent practicable when working near protected species and their habitats.

Maintain or improve all lighting regimes. Methods include working during daylight hours only, prohibiting lighting on dune walkovers, and using wildlife-friendly lighting where lighting is necessary for human safety.

Supply and maintain containers for waste fishing gear to avoid fish and wildlife entanglement.

Land and Vegetation Protection

Develop and implement a spill prevention and response plan, including conducting daily inspections of all construction and related equipment to ensure there are no leaks of antifreeze, hydraulic fluid, or other substances and cleaning and sealing all equipment that would be used in the water to rid it of chemical residue. Develop a contract stipulation to disallow use of any leaking equipment or vehicles.

Wetland and Aquatic Resource Protection

Avoid and minimize, to the maximum extent practicable, placement of dredged or fill material in wetlands and other aquatic resources.

Design construction equipment corridors to avoid and minimize impacts to wetlands and other aquatic resources to the maximum extent practicable.

To the maximum extent possible, implement the placement of sediment to minimize impacts to existing vegetation or burrowing organisms.

When local conditions indicate the likely presence of contaminated soils and sediments, test soil samples for contaminant levels and take precautions to avoid disturbance of, or provide for proper disposal of, contaminated soils and sediments. Evaluate methods prior to dredging to reduce the potential for impacts from turbidity or tarballs.

Perform maintenance of generators, cranes, and any other stationary equipment operated within 150 feet of any natural or wetland area, as necessary, to prevent leaks and spills from entering the water.

Designate a vehicle staging area removed from any natural surface water resource or wetland to perform fueling, maintenance, and storage of construction vehicles and equipment. Inspect vehicles and equipment daily prior to leaving the storage area to ensure that no petroleum or oil products are leaking.

Upon completion of construction activities, restore all disturbed areas as necessary to allow habitat functions to return. Create and manage public access developments to enhance recreational experience and educational awareness to minimize effects to habitat within wetland and shallow water areas and to the long-term health of related biological communities.

Use silt fencing where appropriate to reduce increased turbidity and siltation in the project vicinity. This would apply to both on land and in water work.

Make all efforts to reduce the peak sound level and exposure levels of fish to reduce the potential impact of sound on fish present in the project areas.

Stipulate the timing of activities to avoid impacts to spawning fish and eggs/larvae.

Use best practices to reduce turbidity, such as turbidity blankets, to reduce the potential impact of turbidity on finfish.

Screen water withdrawal pipes to minimize potential entrainment of fish from the withdrawal area. Have project proponents coordinate with NMFS to create an intake screen that would minimize potential impingement of fish.

FUTURE BEST PRACTICES

Best Practices for EFH Under MSFCMA

At time of publication, practices to avoid and minimize effects to EFH were under development. Please check the following webpage for EFH best practices that may be developed: http://sero.nmfs.noaa.gov/habitat_conservation/documents/sero_hazmat_efh_consultation_bmps_ver201612.pdf

1 NMFS Protected Resources Division Southeast Region 2015. Personal communication with Rachel Sweeney and Mike Tucker, August.

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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 Protect 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.

A. Project Identification

Federal Action Agency: U.S. Fish and Wildlife Service

Additional Federal Action Agency: National Marine Fisheries Service

Agency Contact(s)

USFWS: Ashley Mills at 812-756-2712 and Ashley_Mills@fws.gov
NMFS: Christy Fellas at 727-551-5714 and Christina.Fellas@noaa.gov

I. *Implementing Trustee(s)*: Louisiana Department of Wildlife and Fisheries

II. *Contact Person*: Brady Carter

III. *Phone*: (225) 763-5504

Email: bcarter@wlf.la.gov

IV. *Project Name and ID# (Official name of project and ID number assigned by Trustees in DIVER)*: Pass-a-Loutre Wildlife Management Area Crevasse Access

V. *NMFS Office (Choose appropriate office based on project location)*: NMFS Southeast Regional Office

USFWS Office (Choose or write in appropriate office based on project location): Louisiana Ecological Services Field Office (Lafayette)

VI. *Project Type #1*: Enhance Public Access to Natural Resources for Recreatior

Project Type #2, if helpful: Enhance Recreational Experiences

VII. *TIG*: Louisiana TIG

Restoration Plan: Recreational Use

B. Project Location

I. Physical Address of action area (If applicable): N/A

II. *State & County/Parish of action area*: Louisiana, Plaquemines Parish

III. *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])*: 29.137779°N, 89.214314°W NAD83

IV. Township, range and section of the action area: Township 18 South, Range 16 East, Section 1

C. 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:
-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

Have any federal permits been applied for but not yet obtained, if so which ones and what is the permit number(s)? ☐ Yes ☑ No

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.

Deepwater Horizon Oil Spill Louisiana Trustee Implementation Group Restoration Plan and Environmental Assessment #4: Nutrient Reduction (Nonpoint Source) and Recreational Use

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

Name of Person Completing this Form:	Nicole Smolensky
Name of Project Lead:	
Date Form Completed:	01/23/2018
Date Form Updated:	04/23/2018

D. Description of Action Area

Attach a separate map delineating where the action will occur and where critical habitat, if any, is located. Map or describe all areas that may be directly or indirectly affected by the action. 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). If CH is not designated in the area, then map or describe any suitable habitat in the area.

The Proposed Project is located in the Pass-a-Loutre Wildlife Management Area (WMA), Plaquemines Parish, Louisiana. The Proposed Project is located in the Mississippi Alluvial Plain (73) Level III ecoregion and the Deltaic Coastal Marshes and Barrier Islands (73o) Level IV ecoregion (Daigle et al. 2006). The following information was obtained from Daigle et al. (2006) unless otherwise indicated. The Mississippi Alluvial Plain is mostly a broad, flat alluvial plain with river terraces, swales, and levees providing the main elements of relief. Elevation ranges from 0 to 15 feet above mean sea level (amsl) and local relief ranges from 0 to 10 feet amsl. Winters are mild and summers are hot with minimum/maximum temperatures of 44˚F/64 ˚F and 72˚F/92˚F respectively. Mean annual precipitation ranges from 64 to 66 inches. The ecoregion was historically composed of bottomland deciduous forest with extensive wetlands but much of it was cleared for cultivation. The Deltaic Coastal Marshes and Barrier Islands are dominated by brackish and saline marshes with vegetation such as saltmarsh cordgrass, marshhay cordgrass, black needlerush, and coastal saltgrass. Black mangrove occurs in a few areas, and some live oak is found on Grand Isle and along old natural levees. Soils are fine textured and poorly drained although there are some areas of coarser, better-drained soils. Extensive organic deposits lie mainly below sea level in permanently flooded settings resulting in the development of mucky surfaced Histosols. Entisols may also be present. Soil series include Allemands, Kenner, Larose, Clovelly, Lafitte, Bancker, Scatlake, Timbalier, and Bellpass. Sediments of silts, clays, and peats contain large amounts of methane, oil, and hydrogen sulfide gas. Inorganic sediments found within the ecoregion are soft and have high water contents.

Pass-a-Loutre WMA, is located in the Mississippi River Delta Basin, Plaquemines Parish. The entire basin is approximately 521,000 acres (Coastal Wetlands Planning, Protection and Restoration Act [CWPPRA] 2017). Most of the basin (420,000 acres) is open water. The remaining area is composed of land characterized by low relief, natural channel banks, dredged spoils and freshwater, intermediate, and brackish coastal marshes.

The Mississippi River discharges the headwater flows of about 41% of the contiguous 48 states. On a long-term daily basis, discharges in the Mississippi River average 470,000 cubic feet per second (cfs). A peak discharge of approximately 1,250,000 cfs occurs on the average of once every 16 years downstream of New Orleans. The Louisiana Department of Environmental Quality (LDEQ) FINAL 2016 Louisiana Water Quality Inventory: Integrated Report (305(b)/303(d)) (LDEQ 2016) lists the waters (Subsegments LA070401_00 and LA070601_00) of this area as fully supporting the designated use for fish and wildlife propagation indicating few water quality problems.

Pass-a-Loutre WMA is composed of a multitude of passes, canals, cuts, and crevasses that bisect coastal marsh areas, and is located on an 115,000-acre area with the lands owned and managed by the Louisiana Department of Wildlife and Fisheries (LDWF). The WMA and adjacent lands are mostly undeveloped. Developments consists of a few scattered residences and mooring areas. The WMA is primarily made up of estuarine emergent and scrub-shrub wetland. Some of the scrub-shrub wetlands may be composed of black mangroves (LDWF 2015; Love et al. 2013). Most of the minor development occurs upstream along the bank of the Mississippi River.

The WMA and adjacent area is primarily used for recreation such as hunting and fishing. This WMA is widely regarded as a world-class public waterfowl destination which hosts approximately 20,000 visitors annually. Pass-a-Loutre WMA was the first WMA in the state and was established by an act of the state legislature on November 1, 1921, on the opening day of waterfowl season (LDWF 2014). Public access to this WMA is strictly by boat from one of the public boat launches throughout the parish; the nearest boat launch is located 10 miles north of the WMA in Venice. There are no roads onto or through this WMA. Hunters currently access the Pass-a-Loutre Limited Access Area (LAA) by way of unimproved passes, which are difficult for them to navigate. Accessibility challenges have influenced this Proposed Project.

Designated Critical Habitat for piping plover (Unit LA-6) is located along the shoreline of dredge spoil areas near East Bay and Garden Island Bay. These islands are between 5.5 and 8 miles from the Proposed Project action area. The primary constituent habitat elements for overwintering piping plovers include intertidal flats, including sand and/or mud flats with no or very sparse emergent vegetation. Adjacent unvegetated or sparsely vegetated sand, mud, or algal flats above high tide are also important, especially for roosting plovers. The designated critical habitat is not considered to be included in the Proposed Project action area due the habitats present in the action area (e.g., dense coastal marsh) and it lacks expansive shoreline habitat, mud, sand or algal flats and is thus not considered to be part of the localized activities of the Proposed Project.

Designated essential fish habitat (EFH) for coastal migratory pelagic resources, red drum, reef fish, and shrimp is present within the Proposed Project (National Oceanic and Atmospheric Administration [NOAA] 2018). See the attachment attached map illustrating designated EFH.

a. *Waterbody*

If applicable. Name the body of water, including wetlands (freshwater or estuarine), on which the project is located. If the location is in a river or estuary, please approximate the navigable distance from the project location to the marine environment.

The Pass-a-Loutre LAA is located in the Mississippi River delta. The Proposed Project action consists of six proposed crevasses located between 5 and 8 miles (by water) from the Garden Island Bay via Sawdust Bend Bayou, Cheniere, Dennis, Johnson, Loomis or Southeast Passes. The Proposed Project includes open water, palustrine emergent, and scrub-shrub wetlands (U.S. Fish and Wildlife Service [USFWS] 2017). Please see attachment map illustrating the NWI dataset.

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.

There are currently a few scattered residences, rustic campgrounds, and mooring areas within the Proposed Project.

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.

The Proposed Project action area is surrounded by freshwater and brackish waters that may contain seagrass and other marine vegetation as indicated by aerial imagery and mapped distributions conducted in 2006 by the U.S. Geological Survey (USGS) (Google Earth Imagery 2016; Love et al. 2013). However spatial data available from NOAA (2018) do not show seagrass in the Proposed Project action area. Thus surveys for seagrass and other marine vegetation are not scheduled for the Proposed Project.

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.

The Proposed Project action area is surrounded by freshwater and brackish waters that may contain black mangroves as indicated by aerial imagery and mapped distributions conducted in 2006 by USGS (Google Earth Imagery 2016; Love et al. 2013). However spatial data available from NOAA (2018) do not show mangroves in the Proposed Project action area. Thus surveys for mangroves are not scheduled for the Proposed Project.

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.

The Proposed Project action area is surrounded by shallow freshwater and brackish waters systems that lack suitable environments for corals (Google Earth Imagery 2016) and is located outside of mapped distributions (Love et al. 2013; NOAA 2018). Surveys for these resources have not been conducted for this area nor are they scheduled for the Proposed Project.

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.).

The Proposed Project contains one patch of cleared herbaceous and forested uplands located at the confluence between South Pass and Sawdust Bayou Bend. The remain area is composed of palustrine emergent and scrub-shrub wetlands. Please see attachment map illustrating the NWI dataset.

g. *Marine Mammals*

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

The Proposed Project action area includes freshwater and estuarine habitats and is adjacent to marine habitats that may be suitable for the common bottlenose dolphin and the West Indian manatee (LDWF 2018; Love et al. 2013; NOAA Fisheries 2016b).

E. Project Description

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

The Proposed Project construction schedule will be determined during final design. Proposed Project design is currently underway, and construction methods have yet to be finalized.

II. *Describe the Proposed Action: 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. 3. 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.*

The purpose of the Proposed Project is to increase access to the WMA for recreation via the creation of five new crevasses via dredging. The crevasses to be cleared would have various depths and widths depending upon site conditions.

The crevasses are described below:
• Southeast Pass Crevasse: This is a small, existing crevasse that opens into a large open water bay. The existing crevasse would be dredged to approximately 10 feet deep and widened to an average width of 100 feet for a length of approximately 1,550 feet.
• Small Downstream South Pass Crevasse: This crevasse would be a new feature created in an area of low vegetation density just off of South Pass Crevasse. This new crevasse would be dredged to 8 feet deep and widened to 40 feet for a length of 1,100 feet.
• Johnson Crevasse: This would be a newly constructed feature extending eastward from the open water of Johnson Pass and into a marsh area. The new crevasse would be dredged to 8 feet deep and widened to 30 feet for a length of approximately 250 feet.
• Cheniere Crevasse: This would be a newly constructed feature extending eastward from the open water of Cheniere Pass and into a marsh area. The new crevasse would be dredged to 8 feet deep and widened to 30 feet for a length of approximately 200 feet.
• Loomis Pass Crevasse: This would be a newly constructed feature extending southward from open water near Loomis Pass and into a marsh area. The new crevasse would be dredged to 8 feet deep and widened to 30 feet for a length of approximately 250 feet.

Dredging would be conducted using standard dredging methods, which typically include a bucket-style dredge or hydraulic dredge depending upon site conditions and amount of material to be moved. Dredge locations are not near dry land, so dredges are anticipated to be barge-mounted units.

The NRCS Soil Survey for Plaquemines Parish, Louisiana (U.S. Department of Agriculture [USDA] 2018) identifies one soil map unit likely to compose the channel substrate where dredging would occur within the Proposed Project area: Balize and Larose soils (BA). This soil association exhibits a low slope of less than 1 percent and is composed primarily of silt, clay and sand.

Sediment dredged for the Proposed Project would be placed on adjacent wetlands just above the tidal elevation to provide nesting habitat for a number of wetland species, such as secretive marsh birds and mottled ducks. This non-tidal habitat is lacking in this environment and believed to be one reason why the numbers of these wetland birds are in decline. It is important to note that crevasses are created within the WMA on a somewhat routine basis and are always considered self-mitigating. This type of project is designed to create new wetlands over time. A typical crevasse is designed to create between 10 and 300 acres of new wetland marsh over a 5- to 30-year life span, depending on location. They do so by diverting sediment-laden river water off the river, or passes of the river, into shallow bodies of calm water. Once in these bays or ponds, the sediment from the water column drops out and builds new land. These crevasses provide access to the interior marsh, which is highly attractive to fishermen and hunters that are unable to access the property otherwise.

Please see the attached map of the Proposed Project.

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

a. *If applicable, Overwater Structures (Place your answers to the following questions in the box below.)*

i. *Is the proposed use of this structure for a docking facility or an observation platform?*

ii. *If no, is this a fishing pier? Public or Private? How many people are expected to fish per day? How do you plan to address hook and line captures?*

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 (sqft)?*

The Proposed Project includes construction of crevasses via dredging. In-water work is unavoidable due to the Proposed Project location and purpose. Dredge volumes in cubic feet for the five crevasse are anticipated to be 1,550,000; 35,200; 60,000; 48,000; and 60,000, totaling approximately 1,753,200 cubic feet.

The crevasses are intended to serve as new public access points and not intended to serve as docking facilities or piers. BMPs presented in the attachment below discuss minimization and avoidance of effects to protect the species that may occur within the Proposed Project action area.

b. *Pilings & Sheetpiles (What type of material is the piling or sheetpiles? What size and how many will be used? Method used to install: impact hammer, vibratory hammer, jetting, etc.?)*

No pilings or sheetpiles are proposed.

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.)*

No marinas or boat slips are proposed.

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.)*

The Proposed Project does not involve public or private boat ramp work.

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.*

The Proposed Project does not involve shoreline armoring.

f. *Dredging or digging (Provide details about dredge type (hopper, cutterhead, clamshell, etc.), maximum depth of dredging, area (ft^2) to be dredged, volume of material (yd^3) 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.*

Dredging would be conducted using standard dredging methods, which typically include a bucket-style dredge or hydraulic dredge depending upon site conditions and amount of material to be moved. Dredge locations are not near dry land, so dredges are anticipated to be barge-mounted units. Dredged material will be moved via dragline or amphibious excavator. The dredge material would be placed on adjacent wetlands just above the tidal elevation.

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.)*

No blasting would be necessary or allowed during construction.

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), 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.*

No artificial reefs are present (LDWF 2013) or proposed for this project.

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)).*

Fishing activities are anticipated to be low in most of the Proposed Project due to the limited accessibility. The temporary sedimentation from dredging activities is not anticipated to have a significant impact on fishing activities. The addition of the crevasses may increase fishing activity across the WMA but will reduce the localized pressure at certain easily accessible access points.

F. NOAA Species & Critical Habitat and Effects Determination Requested

1. *List all species, critical habitat, proposed species and proposed critical habitat that may be found in the action area.*

2. *Attach a separate map identifying species/critical habitat locations within the action area.*

For information on species and critical habitat under 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)	**DETERMINATION** (see definitions below)
Loggerhead Sea Turtle (T)		Marine	May Affect, Not Likely to Adversely Affect
Hawksbill Sea Turtle (E)		Marine	May Affect, Not Likely to Adversely Affect
Leatherback Sea Turtle (E)		Marine	May Affect, Not Likely to Adversely Affect
Kemp's Ridley Sea Turtle (E)		Marine	May Affect, Not Likely to Adversely Affect
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
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Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate

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 = 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 = 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.

Critical Habitat Destruction or Adverse Modification = Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.

G. USFWS Species & Critical Habitat and Effects Determination Requested

1. *List all species, critical habitat, proposed species and proposed critical habitat that may be found in the action area.*
2. *Attach a separate map identifying species/critical habitat locations within the action area.*

For information on species and critical habitat under USFWS jurisdiction, visit http://www.fws.gov/endangered/species/.

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)	**DETERMINATION** (see definitions below)
Gulf sturgeon		Riverine/freshwater	May Affect, Not Likely to Adversely Affect
Pallid sturgeon		Select One	May Affect, Not Likely to Adversely Affect
Hawksbill sea turtle		Terrestrial	No Effect
Kemp's Ridley		Terrestrial	No Effect
Leatherback sea turtle		Terrestrial	No Effect
Loggerhead sea turtle		Terrestrial	No Effect
Piping plover		Select One	No Effect
Red knot		Select One	No Effect
West Indian manatee		Select One	May Affect, Not Likely to Adversely Affect
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
		Select One	Select Most Appropriate
		Select One	Select Most Appropriate

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 = 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 = 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.

Critical Habitat Destruction or Adverse Modification = Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.

H. Effects of the proposed project to the species and habitats

I. *Explain the potential beneficial and adverse effects to each species listed above (Describe what, when, and how the species will be impacted and the likely response to the impact. Be sure to include direct, indirect, and cumulative impacts and where possible, quantify effects. If species are present (or potentially present) and will not be adversely affected describe your rationale. If species are unlikely to be present in the general area or action area, explain why. This justification provides documentation for your administrative record, avoids the need for additional correspondence regarding the species, and helps expedite review.)*

The Proposed Project actions are anticipated to have No Effect on the following species: the terrestrial life stages of the hawksbill, Kemp's ridley, leatherback and loggerhead sea turtles; piping plover and red knot. This is based on the assumption that these species will not occur in the Proposed Project action area due to the absence of suitable nesting habitat for all the sea turtles, and lack of wintering foraging/roosting/loafing habitat for the piping plover and red knot (GoogleEarth Imagery 2017; NOAA 2018; Love et al. 2013; NatureServe 2016). The Proposed Project is not anticipated to yield direct or indirect impacts to these species at broader spatial and temporal scales within and beyond the Proposed Project action area due to the localized and temporary nature of the proposed dredging activities.

The Proposed Project actions May Affect, Not Likely to Adversely Affect the following species: marine life stages of hawksbill, Kemp's Ridley, leatherback and loggerhead sea turtles; the Gulf and pallid sturgeons; and the West Indian manatee.

These species of sea turtles are known to use large channels along the Gulf of Mexico (NOAA pers. comm. 2018) and thus may occur in the Proposed Project action area. The Proposed Project's activities will involve the use of a floating bucket dredge to widen the channel for increased access for recreation. Dredging activities within the Proposed Project action area could result in temporary increases in turbidity or construction noise that would be localized and temporary. The turbidity and construction noise may result in localized temporary avoidance of the Proposed Project action area. The passes in Proposed Project action area do not harbor extensive sea grass beds that may be used as foraging habitats, thus foraging habitat loss is not an expected impact. The use of bucket dredging is anticipated to have minimal entrapment risk to sea turtles and thus not considered a significant direct impact. BMPs listed in the attachment will be implemented and enforce by the implementing trustee to minimize and avoid any potential impacts within the Proposed Project action area.
A discussion of potential effects on the Gulf and pallid sturgeons, and West Indian manatee are provided in the attachment.

II. *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 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 Proposed Project action area is outside designated critical habitat; therefore, no effects to critical habitat would occur.

I. Actions to Reduce Adverse Effects

I. *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.)*

Species-specific BMPs from the PDARP/EIS (DWH Trustees 2016) that would be incorporated into the Proposed Project are included as an attachment.

Additionally all individuals (such as construction workers) working on the proposed project would be provided with information on general awareness of any federally protected species that have the potential to occur in the Proposed Project action area. Seasonal avoidance measures will be implemented when practicable. If work must be conducted when these species are present, certain activities may be restricted or modified to reduce disturbance of these species (see attached BMPs).

The implementing trustee will implement and enforce approved BMPs listed in the attachment to avoid and minimize impacts to species listed in Sections F and G. Continued coordination of BMPs will occur during the final design phase.

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.)*

The Proposed Project action area is located outside designated critical habitat; therefore no effects to critical habitat will occur.

J. 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

Is your activity likely to impact 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	
☑	☐	*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) *Building or enhancing areas for water-related recreational use or fishing opportunities (e.g. fishing piers, bridges, boat ramps, marinas)*
☑	☐	*f) Aquaculture*
☐	☑	*g) Dredging or in-water construction activities to change hydrologic conditions or connectivity, create breakwaters and living shorelines, etc.*
☑	☐	*h) Restoration of barrier islands, levee construction or similar projects*
☑	☐	*i) Fresh-water river diversions*

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

Please refer Section E Project Description for construction details of the Proposed Project. The in-water activities involve dredging that may generate some noise. The NOAA Technical Guidance on Acoustic Impacts does discuss marine mammal responses to dredging, thus the Proposed Project activity may or may not result in temporary shifts in species behaviors (NOAA Fisheries 2016c).

IV. Are any measures planned to mitigate potential impacts to marine mammals? If yes, provide text in box below. NO ☐ YES ☑

The implementing trustee will implement and enforce the Standard Manatee Conditions BMPs, NMFS's Measures for Reducing Entrapment Risk to Marine Mammals, and NMFS's Vessel Strike Avoidance Measures as listed in the attachment to avoid and minimize impacts to manatees and bottlenose dolphins. Continued coordination of BMPs will occur during the final design phase.

K. 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**

L. Migratory Birds

Identify the species anticipated in the action area and behaviors (breeding, roosting, foraging) anticipated during project implementation. You may list similar species on a single line and categorize by type (e.g., Wading birds - great blue heron, snowy egret, reddish egret). If species are present and impacts to individuals or habitat could occur, identify avoidance and minimization measures to prevent incidental take.
Incidental take of Migratory Birds cannot be authorized. Use additional tables on the next page if needed.

I.

Species/Species Group	Behavior	Species/Habitat Impacts and Conservation Measures to Minimize Impacts
American Golden-plover	non breeder	The Proposed Project area is located within a region that includes the following birds of conservation concern (USFWS 2018). There is no land-based construction effort and no required tree clearing. During the project design phase, coordination with the USFWS and the state trust resource agency would occur to site and design project features to avoid or minimize impacts to migratory bird nesting habitats or important feeding and loafing areas. If vegetation clearing (e.g., marsh or potential mangrove habitat) is required, it would take place outside of the migratory bird nesting season (approximately mid-February through mid-September) or a qualified biologist would inspect for active nests. If no active nests are found, vegetation may be removed. If active nests are found, vegetation may be removed after the nestlings successfully fledge. If project activities must occur during this time-frame and breeding, nesting, and fledging birds are present, the state trust resource agency will be contracted to obtain the most recent guidance to protect nesting birds or rookeries, and their recommendations will be implemented.
American Oystercatcher	breeder	
Arctic Tern	breeder	
Audubon's Shearwater	breeder	
Bald Eagle	breeder	
Band-rumped Storm-petrel	non breeder	
Black Scoter	non breeder	
Black Skimmer	breeder	
Bonaparte's Gull	non breeder	
Bridled Tern	non breeder	
Brown Pelican	breeder	
Buff-breasted Sandpiper	non breeder	
Clapper Rail	breeder	
Common Loon	non breeder	
Common Tern	non breeder	
Cory's Shearwater	non breeder	
Double-crested Cormorant	breeder	
Great Black-backed Gull	non breeder	
Great Shearwater	non breeder	
Gull-billed Tern	breeder	
Herring Gull	breeder	
King Rail	breeder	
Le Conte's Sparrow	non breeder	

M. Migratory Birds

Continuation page if needed.

II.	SPECIES/SPECIES GROUP	BEHAVIOR	SPECIES/HABITAT IMPACTS and CONSERVATION MEASURES TO MINIMIZE IMPACTS
	Least Tern	breeder	
	Lesser Yellowlegs	non breeder	
	Magnificent Frigatebird	non breeder	
	Marbled Godwit	non breeder	
	Nelson's Sparrow	non breeder	
	Northern Gannet	non breeder	
	Parasitic Jaeger	non breeder	
	Pomarine Jaeger	non breeder	
	Prothonotary Warbler	breeder	
	Red-breasted Merganser	non breeder	
	Red-necked Phalarope	non breeder	
	Reddish Egret	breeder	
	Ring-billed Gull	non breeder	
	Royal Tern	breeder	
	Seaside Sparrow	breeder	
	Semipalmated Sandpiper	non breeder	
	Short-billed Dowitcher	non breeder	
	Sooty Tern	breeder	
	Sprague's Pipit	non breeder	
	Surf Scoter	non breeder	
	Swallow-tailed Kite	breeder	
	Whimbrel	non breeder	
	Wilson's Plover	breeder	
	Wilson's Storm-petrel	non breeder	
	Yellow Rail	non breeder	

N. Best Practices

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 pratices you'll be using in your project.

BMPs from the PDARP/EIS that would be incorporated into the Proposed Project are included as an attachment.

O. Submitting the BE Form

NMFS ESA § 7 Consultation

We request that all ESA §7 consultation requests/packages be submitted electronically to: **Christina.Fellas@noaa.gov**

Questions about consultation status may be directed to the email address above or

by phone: Christy Fellas: 727-551-5714

USFWS ESA § 7 Consultation

We request that all consultation requests/packages to USFWS be submitted electronically to: **Ashley_Mills@fws.gov**.

You will be notified when we receive your Biological Evaluation. 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 send your Biological Evaluation to the appropriate Field Office to conduct consultation.

Questions about consultation status may be directed to the email address above or by phone:
Ashley Mills: 812-756-2712

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.

Are you using this form to request approval for use of NMFS PDCs for this project? ○ Yes ◉ No

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

- ☐ Project is designed to avoid techniques and locations listed in the oyster reef creation and enhancement PDCs 1.a-1.e.
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Construction Conditions (PDC 2.a)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.b)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.c)
- ☐ In Gulf sturgeon critical habitat, oyster reef creation and enhancement occurs only on existing shell substrata or relic reef locations (PDC 2.d)
- ☐ Cultch material is free of debris and contaminants (PDC 2.e)
- ☐ Fresh shell has been properly aged or quarantined before being deployed (PDC 2.f)
- ☐ Cultch material is placed in a manner to minimize disturbance of sediment (PDC 2.g)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDC 2.h)
- ☐ Plan/drawings for intermittent breaks between oyster reef segment has been provided (2.i)
- ☐ Spill prevention and response plan has been developed (2.j)
- ☐ Design and materials used avoid entanglement and entrapment risks for ESA-listed species (2.k)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Marine Debris Removal ○ Yes ◉ No

- ☐ This project is designed to avoid techniques and locations listed in the marine debris removal PDCs 1.a-1.c
- ☐ All on-water operations shall take place during daylight hours (PDC 2.a)
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Conditions (PDC 2.b)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.c)
- ☐ Project personnel have been notified of procedures if approached by a marine mammal or sea turtle (PDC 2.d)
- ☐ Trash and debris will be disposed of at an upland location (PDCs 2.e)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Construction of Living Shorelines

○ Yes ◉ No

- ☐ This project is designed to avoid techniques and locations listed in the living shoreline PDCs 1.a-1.h
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Conditions (PDC 2.a)
- ☐ All in-water work activities will conducted during daylight hours (PDC 2.b)
- ☐ Piles for navigation of public safety purposes are less than 24" diameter and non-metal if impact hammer used (PDC 2.c)
- ☐ Spill prevention and response plan has been developed (2.d)
- ☐ Fill material is not sourced using hopper dredge or from sea turtle, Gulf sturgeon or smalltooth sawfish critical habitat and in-water borrow sites do not impact turtle nesting beaches (PDC 2.e)
- ☐ Design and materials do not create entrapment or entanglement risks to ESA-listed species and do not block migration (PDC 2.f)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.g)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDC 2.h)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.i)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Marsh Creation and Enhancement

○ Yes ◉ No

- ☐ Project is designed to avoid techniques and locations listed in the marsh creation PDCs 1.a-1.f
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Conditions (PDC 2.a)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.b)
- ☐ All in-water work activities will be conducted during daylight hours (PDC 2.c)
- ☐ Spill prevention and response plan has been developed (PDC 2.d)
- ☐ Fill material is not sourced using hopper dredge or from sea turtle, Gulf sturgeon or smalltooth sawfish critical habitat and in-water borrow sites do not impact turtle nesting beaches (PDC 2.e)
- ☐ Design and materials do not create entrapment or entanglement risks to ESA-listed species and do not block migration (PDC 2.f)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.g)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDCs 2.h)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Construction of Non-Fishing Piers

◯ Yes ◉ No

- ☐ This project is designed to avoid locations listed in the non-fishing piers PDCs 1.a
- ☐ Spill prevention and response plan has been developed (PDC 2.a)
- ☐ Design and materials do not create entrapment or entanglement risks to ESA-listed species and do not block migration (PDC 2.b)
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Construction Conditions (PDC 2.c)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.d)
- ☐ Follow Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat (PDC 2.e)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.f)
- ☐ Follows methods and timing for pile driving (2.g)
- ☐ Follows construction sequencing and avoids propwashing (PDC 2.h)
- ☐ Water depth will not be altered (PDC 2.i)
- ☐ Lighting specifications are incorporated for piers on or adjacent to sea turtle nesting beaches (PDC 2.j)
- ☐ Follows educational and fishing signage requirements (PDC 2.k)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDC 2.l)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

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

Name of person(s) completing this form:

Date form completed:

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

BIOLOGICAL EVALUATIONS FORM ATTACHMENTS

BIOLOGICAL EVALUATION FORM CONTINUATION SHEET

Section H.I. Effects of the proposed project to the species and habitats (continued)

The Gulf sturgeon can occur in river systems and nearshore bays and estuaries depending upon the life stage of the species and season (NOAA Fisheries 2016a). The pallid sturgeon is found in large, turbid, free-flowing riverine habitats including the Mississippi River and the Atchafalaya watershed (NatureServe 2016). The Proposed Project action area is located at the coastal end of the Mississippi River in tidally influenced riverine waters. The Proposed Project dredging does not involve obstruction of riverine paths, nor will there be significant modification of upstream hydrologic flows of the Mississippi River. Potential temporary and localized direct impacts for these sturgeons from the Proposed Project activities include potential temporary avoidance of the immediate Project vicinity due to construction noise and activities. Although the Proposed Project activities may temporarily increase local turbidity, increased turbidity is not anticipated to adversely affect this species per the species prefer habitat (i.e., relatively turbid riverine waters). Entrainment is anticipated to be avoided or minimized due use of bucket dredge methods, and the Gulf and pallid sturgeon BMPs listed in the attachment that will be implemented and enforce by the implementing trustee. The chances of recreational fishing impacts on the pallid sturgeon are likely low given the low likelihood of its presence; this species occurs in main channel habitats of the riverine systems as opposed to the braided tributaries and passes of in this Proposed Project area. The Gulf sturgeon may occur in the Proposed Project area, but recreational fishing for this species is prohibited thus significant adverse impacts to these species are anticipated to be minimized due to fishing regulations (USFWS 2014).

The Proposed Project is located in a parish where the West Indian manatee may occur (LDWF 2018). The same localized temporary impacts of turbidity and noise are anticipated from the dredging activities are anticipated for the West Indian manatee; that may result in temporary avoidance of the Proposed Project action area. This project does not involve pile driving or explosives that would emit acoustic impacts that may affect marine mammals (NOAA 2016). Freshwater and estuarine tidal channels in Proposed Project action area do not harbor extensive sea grass beds that may be used as foraging habitats, thus habitat loss is not an expected impact. Injury and collisions are not anticipated due to implementation of the *Standard Manatee Condition* BMP listed in the attachment.

PAL WMA ACCESS

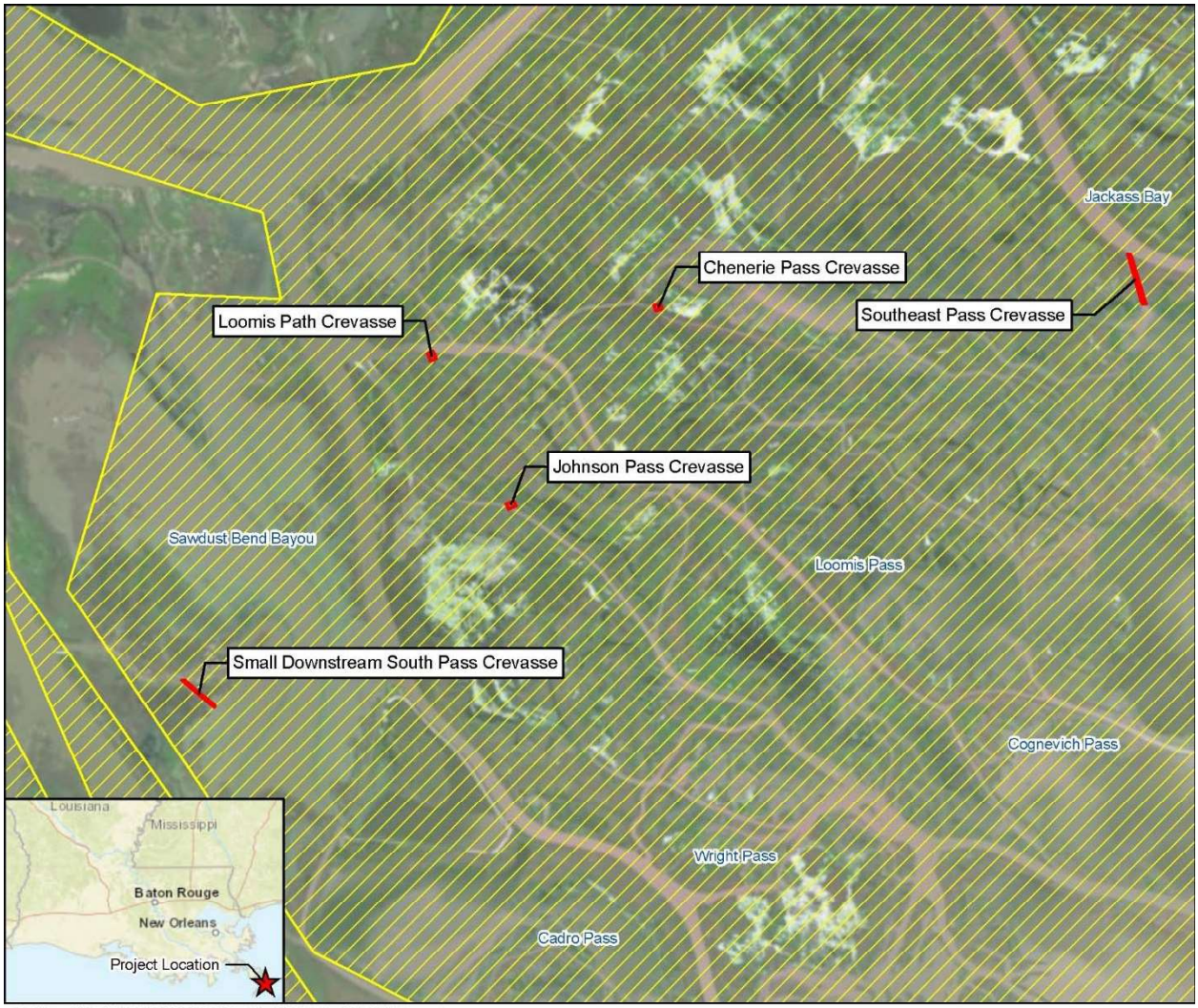
PROJECT DETAIL MAP
PLAQUEMINES PARISH, LOUISIANA

Proposed Alternative

1:60,000

Created By: JS
Project Number: 48078
Date: 3/19/2018
NAD 1983 StatePlane Louisiana South FIPS 1702 Feet

0 3,400 6,800 Feet
0 2,300 4,600 6,900 Feet



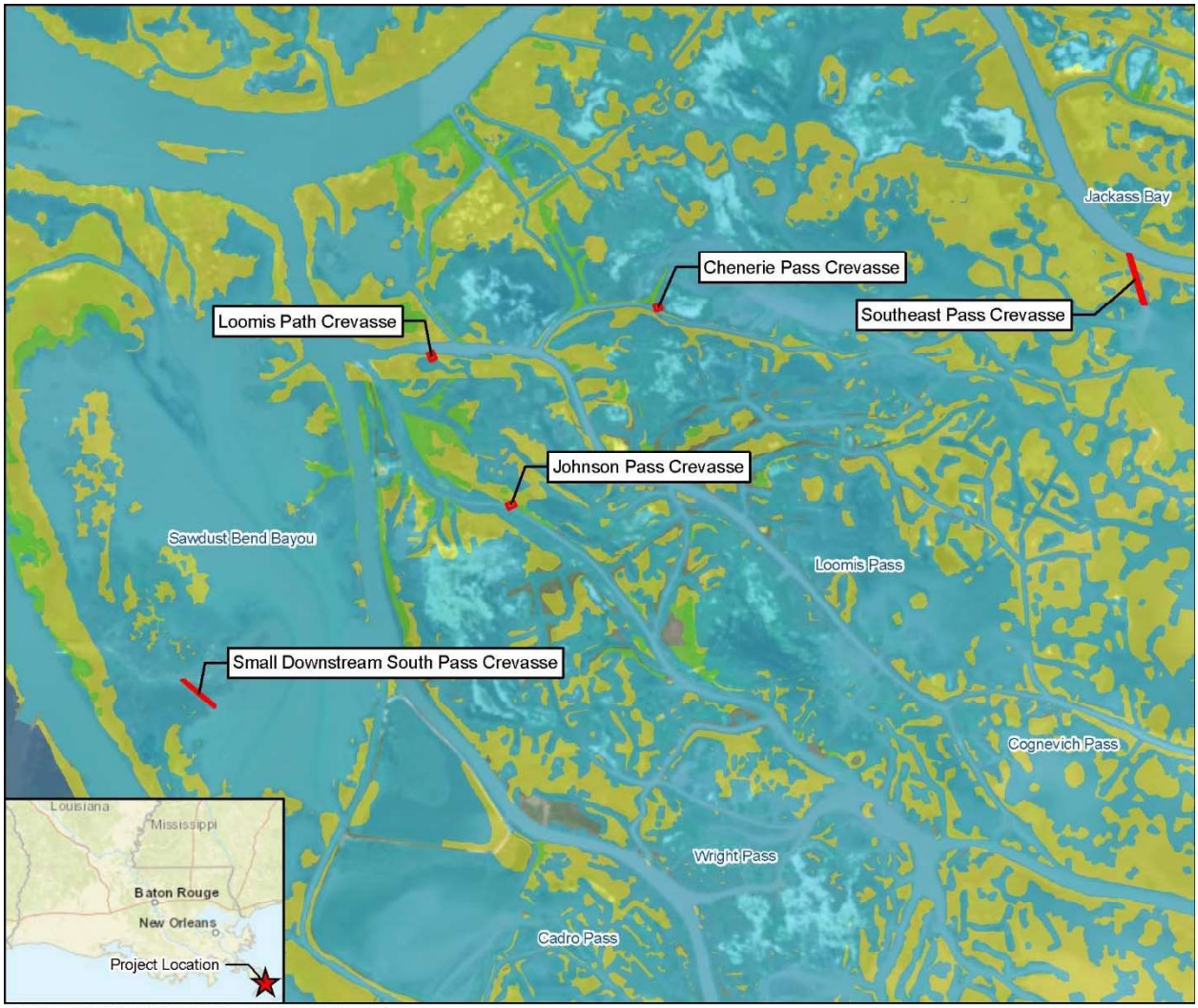
PAL WMA ACCESS
ESSENTIAL FISH HABITAT AND
USFWS CRITICAL HABITAT MAP
PLAQUEMINES PARISH, LOUISIANA

Proposed Alternative
Essential Fish Habitat

1:60,000

Created By: JS
Project Number: 48078
Date: 4/20/2018
NAD 1983 StatePlane Louisiana South FIPS 1702 Feet

0 3,400 6,800 Feet
0 2,300 4,600 6,900 Feet



PAL WMA ACCESS
NWI MAP
PLAQUEMINES PARISH, LOUISIANA

Proposed Alternative

NWI Designation

- EstuarineWetland
- Emergent Wetland
- Forested/Shrub Wetland
- Marine Deepwater
- Freshwater Waterbody

1:60,000

Created By: JS
Project Number: 48078
Date: 4/20/2018
NAD 1983 StatePlane Louisiana South FIPS 1702 Feet

0 3,400 6,800 Feet
0 2,300 4,600 6,900 Feet

BEST PRACTICES FROM THE PDARP/PEIS

The following section is a direct excerpt from Section 6, Appendix A in Deepwater Horizon Oil Spill: Final Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental Impact Statement (DWH Trustees 2016).

Birds

Bald Eagles

If bald eagle breeding or nesting behaviors are observed or a nest is discovered or known, have all activities 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. Maintain this avoidance distance from the onset of breeding/courtship behaviors until any eggs have hatched and eaglets have fledged (approximately 6 months).

If a similar activity (such as driving on a roadway) is closer than 660 feet to a nest, maintain a distance buffer as close to the nest as the existing tolerated activity. 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 maintain a distance buffer as close to the nest as the existing tolerated activity.

In some instances activities conducted within 660 feet of a nest may result in disturbance, particularly for the eagles occupying the Mississippi barrier islands. If an activity appears to cause initial disturbance, stop the activity and move all individuals and equipment away until the eagles are no longer displaying disturbance behaviors. Contact the USFWS's Migratory Bird Permit Office to determine how to avoid impacts or if a permit may be needed.

Migratory Birds

Use care to avoid birds when operating machinery or vehicles near birds.

During the project design phase, coordinate with the USFWS and the state trust resource agency to site and design projects to avoid or minimize impacts to migratory bird nesting habitats or important feeding/loafing areas.

Avoid working in migratory bird nesting habitats during breeding, nesting, and fledging (approximately mid-February through late August). If project activities must occur during this timeframe and breeding, nesting, or fledging birds are present, contact the state trust resource agency to obtain the most recent guidance to protect nesting birds or rookeries, and their recommendations will be implemented.

Conservation areas may already be marked to protect bird nesting areas. Stay out of existing marked areas.

If vegetation clearing is necessary, clear vegetation outside the migratory bird nesting season (approximately mid-February through late August) or have a qualified biologist inspect for active nests. If no active nests are found, vegetation may be removed. If active nests are found, vegetation may be removed after the nest successfully fledges.

Avoid driving over the natural organic material ("wrack") line or areas of dense seaweed, as these habitats may contain hatchlings and chicks that are difficult to see.

Install pointy, white piling caps on exposed pilings to prevent bird roosting on piers, docks, and marinas.

Mammals

Manatee

In Louisiana, follow the most recent version of the *Standard Manatee Conditions for In-water Activities*:

During in-water work in areas that potentially support manatees all personnel associated with the project should be instructed about the potential presence of manatees, manatee speed zones, and the need to avoid collisions with and injury to manatees. All personnel should be advised that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973. Additionally, personnel should be instructed not to attempt to feed or otherwise interact with the animal, although passively taking pictures or video would be acceptable.

All on-site personnel are responsible for observing water-related activities for the presence of manatee(s). We recommend the following to minimize potential impacts to manatees in areas of their potential presence:

- All work, equipment, and vessel operation should cease if a manatee is spotted within a 50-foot radius (buffer zone) of the active work area. Once the manatee has left the buffer zone on its own accord (manatees must not be herded or harassed into leaving), or after 30 minutes have passed without additional sightings of manatee(s) in the buffer zone, in-water work can resume under careful observation for manatee(s).

- If a manatee(s) is sighted in or near the project area, all vessels associated with the project should operate at "no wake/idle" speeds within the construction area and at all times while in waters where the draft of the vessel provides less than a four-foot clearance from the bottom. Vessels should follow routes of deep water whenever possible.

- If used, siltation or turbidity barriers should be properly secured, made of material in which manatees cannot become entangled, and be monitored to avoid manatee entrapment or impeding their movement.

- Temporary signs concerning manatees should be posted prior to and during all in-water project activities and removed upon completion. Each vessel involved in construction activities should display at the vessel control station or in a prominent location, visible to all employees operating the vessel, a temporary sign at least 8½ " X 11" reading language similar to the following: "CAUTION BOATERS: MANATEE AREA/ IDLE SPEED IS REQUIRED IN CONSRUCTION AREA AND WHERE THERE IS LESS THAN FOUR FOOT BOTTOM CLEARANCE WHEN MANATEE IS PRESENT". A second temporary sign measuring 8½ " X 11" should be posted at a location prominently visible to all personnel engaged in water-related activities and should read language similar to the following: "CAUTION: MANATEE AREA/ EQUIPMENT MUST BE SHUTDOWN IMMEDIATELY IF A

MANATEE COMES WITHIN 50 FEET OF OPERATION".

- Collisions with, injury to, or sightings of manatees should be immediately reported to the Service's Louisiana Ecological Services Office (337/291-3100) and the Louisiana Department of Wildlife and Fisheries, Natural Heritage Program (225/765-2821). Please provide the nature of the call (i.e., report of an incident, manatee sighting, etc.); time of incident/sighting; and the approximate location, including the latitude and longitude coordinates, if possible.

Bottlenose Dolphin

For projects with any in-water construction activities, dredging, or wetland/barrier island creation and nourishment, follow the most current version of the NMFS Southeast Region's Measures for Reducing Entrapment Risk to Protected Species.

For projects that enhance recreational fishing opportunities (e.g., fishing pier enhancement / development), visibly post the NMFS Southeast Region's Dolphin-Friendly Fishing Tips and Don't Feed Wild Dolphins signs and other applicable protected species educational signs.

To reduce the risk associated with vessel strikes of protected species or related disturbance, follow the most current version of NMFS Southeast Region's Vessel Strike Avoidance Measures and Reporting for Mariners, revised February 2008.

For projects that enhance recreational and commercial vessel based activities, follow NMFS's Southeast

U.S. Marine Mammal and Sea Turtle Viewing Guidelines.

Other Marine Mammals

To reduce the risk associated with vessel strikes of protected species or related disturbance, follow the most current version of NMFS Southeast Region's *Vessel Strike Avoidance Measures and Reporting for Mariners*, revised February 2008.

Turtles

Sea Turtles—In Water

Implement the following guidelines: NMFS's *Sea Turtle and Smalltooth Sawfish Construction Conditions* (revised March 23, 2006), NMFS's *Measures for Reducing Entrapment Risk to Protected Species* (revised May 22, 2012) and NMFS's *Vessel Strike Avoidance Measures and Reporting for Mariners* (revised February 2008).

Fish

Gulf Sturgeon

Avoid work in riverine critical habitats when Gulf sturgeon are likely to be present (April to October). Do not dredge in spawning areas when Gulf sturgeon are likely to be present.

During project implementation, maintain riparian buffers of at least 100 feet around critical habitat. Install silt fencing to prevent sedimentation or erosion into streams and rivers.

Operate dredge equipment in a manner to avoid risks to Gulf sturgeon (e.g., disengage pumps when the cutter head is not in the substrate; avoid pumping water from the bottom of the water column).

Implement NMFS's *Sea Turtle and Smalltooth Construction Conditions* (revised March 23, 2006) and NMFS's *Measures for Reducing Entrapment Risk to Protected Species* (revised May 22, 2012), as they are protective of Gulf sturgeon as well.

Pallid Sturgeon

In areas inhabited by the pallid sturgeon, we offer the following recommendations for any work using a cutterhead/suction dredge (Louisiana Ecological Service Field Office 2018):

1. The cutterhead shall remain completely buried in the bottom material during dredging operations. If pumping water through the cutterhead is necessary to dislodge material or to clean the pumps or cutterhead, etc., the pumping rate should be reduced to the lowest rate possible until the cutterhead is at mid-depth, where the pumping rate can then be increased

2. During dredging, the pumping rates should be reduced to the slowest speed feasible while the cutterhead is descending to the channel bottom

General Construction Measures

Protected Species

Provide all individuals working on a project with information in support of general awareness of and means to avoid impacts to protected species and their habitats present at the specific project site.

Site Maintenance and Conduct

Use the nearest, existing staging, access and egress areas, travel corridors, pathways, and roadways (including those provided by the state, local governments, land managers, trustee, or private property owner, with proper permissions) and do not create new staging areas, access (except dune walkovers) or egress, or travel corridors through dune habitats.

Minimize construction noise to the maximum extent practicable when working near protected species and their habitats.

Maintain or improve all lighting regimes. Methods include working during daylight hours only, prohibiting lighting on dune walkovers, and using wildlife-friendly lighting where lighting is necessary for human safety.

Land and Vegetation Protection

Develop and implement an erosion control plan to minimize erosion during and after construction and where possible use vegetative buffers (100 feet or greater), revegetate with native species or annual grasses, and conduct work during dry seasons.

Develop and implement a spill prevention and response plan, including conducting daily inspections of all construction and related equipment to ensure there are no leaks of antifreeze, hydraulic fluid, or other substances and cleaning and sealing all equipment that would be used in the water to rid it of chemical residue. Develop a contract stipulation to disallow use of any leaking equipment or vehicles.

Prohibit use of hazardous materials, such as lead paint, creosote, pentachlorophenol, and other wood preservatives during construction in, over or adjacent to, sensitive sites during construction and routine maintenance.

Where landscaping is necessary or desired, use native plants from local sources. If non-native species must be used, ensure they are noninvasive and use them in container plantings.

Wetland and Aquatic Resource Protection

Avoid and minimize, to the maximum extent practicable, placement of dredged or fill material in wetlands and other aquatic resources.

Design construction equipment corridors to avoid and minimize impacts to wetlands and other aquatic resources to the maximum extent practicable.

To the maximum extent possible, implement the placement of sediment to minimize impacts to existing vegetation or burrowing organisms.

When local conditions indicate the likely presence of contaminated soils and sediments, test soil samples for contaminant levels and take precautions to avoid disturbance of, or provide for proper disposal of, contaminated soils and sediments. Evaluate methods prior to dredging to reduce the potential for impacts from turbidity or tarballs.

Perform maintenance of generators, cranes, and any other stationary equipment operated within 150 feet of any natural or wetland area, as necessary, to prevent leaks and spills from entering the water.

Designate a vehicle staging area removed from any natural surface water resource or wetland to perform fueling, maintenance, and storage of construction vehicles and equipment. Inspect vehicles and equipment daily prior to leaving the storage area to ensure that no petroleum or oil products are leaking.

Upon completion of construction activities, restore all disturbed areas as necessary to allow habitat functions to return. Create and manage public access developments to enhance recreational experience and educational awareness to minimize effects to habitat within wetland and shallow water areas and to the long-term health of related biological communities.

Use silt fencing where appropriate to reduce increased turbidity and siltation in the project vicinity. This would apply to both on land and in water work.

Make all efforts to reduce the peak sound level and exposure levels of fish to reduce the potential impact of sound on fish present in the project areas.

Use sound attenuation devices where practicable for pulse noise (impact hammers) to reduce peak sound pressure levels in the aquatic environment.

Stipulate the timing of activities to avoid impacts to spawning fish and eggs/larvae.

Use best practices to reduce turbidity, such as turbidity blankets, to reduce the potential impact of turbidity on finfish.

Screen water withdrawal pipes to minimize potential entrainment of fish from the withdrawal area. Have project proponents coordinate with NMFS to create an intake screen that would minimize potential impingement of fish.

FUTURE BEST PRACTICES

Best Practices for EFH Under MSFCMA

At time of publication, practices to avoid and minimize effects to EFH were under development. Please check the following webpage for EFH best practices that may be developed: http://sero.nmfs.noaa.gov/habitat_conservation/documents/sero_hazmat_efh_consultation_bmps_ver201612.pdf

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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 Protect 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.

A. Project Identification

Federal Action Agency: U.S. Fish and Wildlife Service

Additional Federal Action Agency: National Marine Fisheries Service

Agency Contact(s)

USFWS: Ashley Mills at 812-756-2712 and Ashley_Mills@fws.gov
NMFS: Christy Fellas at 727-551-5714 and Christina.Fellas@noaa.gov

I. *Implementing Trustee(s)*: Louisiana Department of Wildlife and Fisheries

II. *Contact Person*: Brady Carter

III. *Phone*: (225) 763-5504

Email: bcarter@wlf.la.gov

IV. *Project Name and ID# (Official name of project and ID number assigned by Trustees in DIVER)*: Pass-a-Loutre Wildlife Management Area Campgrounds

V. *NMFS Office (Choose appropriate office based on project location)*: NMFS Southeast Regional Office

USFWS Office (Choose or write in appropriate office based on project location): Louisiana Ecological Services Field Office (Lafayette)

VI. *Project Type #1*: Enhance Public Access to Natural Resources for Recreatior

Project Type #2, if helpful: Enhance Recreational Experiences

VII. *TIG*: Louisiana TIG

Restoration Plan: Recreational Use

B. Project Location

I. Physical Address of action area (If applicable): N/A

II. *State & County/Parish of action area*: Louisiana, Plaquemines Parish

III. *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])*: 29.105455°N, 89.234727°W NAD83

IV. Township, range and section of the action area: Township 18 South, Range 16 East, Section 1

C. 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:
-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

Have any federal permits been applied for but not yet obtained, if so which ones and what is the permit number(s)? ☐ Yes ☑ No

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.

Deepwater Horizon Oil Spill Louisiana Trustee Implementation Group Restoration Plan and Environmental Assessment #4: Nutrient Reduction (Nonpoint Source) and Recreational Use

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

Name of Person Completing this Form:	Nicole Smolensky
Name of Project Lead:	
Date Form Completed:	01/23/2018
Date Form Updated:	04/23/2018

D. Description of Action Area

Attach a separate map delineating where the action will occur and where critical habitat, if any, is located. Map or describe all areas that may be directly or indirectly affected by the action. 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). If CH is not designated in the area, then map or describe any suitable habitat in the area.

The Proposed Project is located in the Pass-a-Loutre Wildlife Management Area (WMA), Plaquemines Parish, Louisiana. The Proposed Project is located in the Mississippi Alluvial Plain (73) Level III ecoregion and the Deltaic Coastal Marshes and Barrier Islands (73o) Level IV ecoregion (Daigle et al. 2006). The following information was obtained from Daigle et al. (2006) unless otherwise indicated. The Mississippi Alluvial Plain is mostly a broad, flat alluvial plain with river terraces, swales, and levees providing the main elements of relief. Elevation ranges from 0 to 15 feet above mean sea level (amsl) and local relief ranges from 0 to 10 feet amsl. Winters are mild and summers are hot with minimum/maximum temperatures of 44˚F/64 ˚F and 72˚F/92˚F respectively. Mean annual precipitation ranges from 64 to 66 inches. The ecoregion was historically composed of bottomland deciduous forest with extensive wetlands but much of it was cleared for cultivation. The Deltaic Coastal Marshes and Barrier Islands are dominated by brackish and saline marshes with vegetation such as saltmarsh cordgrass, marshhay cordgrass, black needlerush, and coastal saltgrass. Black mangrove occurs in a few areas, and some live oak is found on Grand Isle and along old natural levees. Soils are fine textured and poorly drained although there are some areas of coarser, better-drained soils. Extensive organic deposits lie mainly below sea level in permanently flooded settings resulting in the development of mucky surfaced Histosols. Entisols may also be present. Soil series include Allemands, Kenner, Larose, Clovelly, Lafitte, Bancker, Scatlake, Timbalier, and Bellpass. Sediments of silts, clays, and peats contain large amounts of methane, oil, and hydrogen sulfide gas. Inorganic sediments found within the ecoregion are soft and have high water contents (Daigle et al. 2006).

Pass-a-Loutre WMA, is located in the Mississippi River Delta Basin, Plaquemines Parish. The entire basin is approximately 521,000 acres (Coastal Wetlands Planning, Protection and Restoration Act [CWPPRA] 2017). Most of the basin (420,000 acres) is open water. The remaining area is composed of land characterized by low relief, natural channel banks, dredged spoils and freshwater, intermediate, and brackish coastal marshes.

The Mississippi River discharges the headwater flows from about 41% of the contiguous 48 states. On a long-term daily basis, discharges in the Mississippi River average 470,000 cubic feet per second (cfs). A peak discharge of approximately 1,250,000 cfs occurs on the average of once every 16 years downstream of New Orleans. The Louisiana Department of Environmental Quality (LDEQ) FINAL 2016 Louisiana Water Quality Inventory: Integrated Report (305(b)/303(d)) (LDEQ 2016) lists the waters (Subsegments LA070401_00 and LA070601_00) of this area as fully supporting the designated use for fish and wildlife propagation, indicating few water quality problems.

Pass-a-Loutre WMA is composed of a multitude of passes, canals, cuts, and crevasses that bisect coastal marsh area, and is located on an 115,000-acre area of lands owned and managed by the Louisiana Department of Wildlife and Fisheries (LDWF). The WMA and adjacent lands are mostly undeveloped. Developments consists of a few scattered residences and mooring areas. The WMA is primarily made up of estuarine emergent and scrub-shrub wetland. Some of the scrub-shrub wetlands may be composed of black mangroves (LDWF 2015; Love et al. 2013). Most of the minor development occurs upstream along the bank of the Mississippi River.

The WMA and adjacent area is primarily used for recreation such as hunting and fishing. This WMA is widely regarded as a world-class public waterfowl destination, and hosts approximately 20,000 visitors annually. Pass-a-Loutre WMA was the first WMA in the state and was established by an act of the state legislature on November 1, 1921, on the opening day of waterfowl season (LDWF 2014). Public access to this WMA is strictly by boat from one of the public boat launches throughout the parish; the nearest boat launch is located 10 miles north of the WMA in Venice. There are no roads onto or through this WMA. Hunters currently access the Pass-a-Loutre Limited Access Area (LAA) by way of unimproved passes, which are difficult for them to navigate. Accessibility challenges have influenced this Proposed Project.

Designated Critical Habitat for piping plover (Unit LA-6) is located along the shoreline of dredge spoil areas near East Bay and Garden Island Bay. These islands are between 5.5 and 8 miles from the Proposed Project action area. The primary constituent elements for overwintering piping plovers include intertidal flats, including sand and/or mud flats with no or very sparse emergent vegetation. Adjacent unvegetated or sparsely vegetated sand, mud, or algal flats above high tide are also important, especially for roosting plovers. The designated critical habitat is not considered to be included in the Proposed Project action area due the habitats present in the action area (e.g., dense coastal marsh) and it lacks expansive shoreline habitat, mud, sand or algal flats is thus not considered to be part of the localized activities of the proposed actions.

Designated essential fish habitat (EFH) for coastal migratory pelagic resources, red drum, reef fish, and shrimp is present within the Proposed Project area (National Oceanic and Atmospheric Administration [NOAA] 2018). See the attachment map illustrating designated EFH.

a. *Waterbody*

If applicable. Name the body of water, including wetlands (freshwater or estuarine), on which the project is located. If the location is in a river or estuary, please approximate the navigable distance from the project location to the marine environment.

The Proposed Project is located in the Mississippi River delta, in lands adjacent to South Pass, Sawdust Bend Bayou, Cheniere Pass, Johnson Pass, and Southeast Pass. The Proposed Project is located between 5 and 8 miles (by water) from the Garden Island Bay via aforementioned passes. The Proposed Project includes open water, palustrine emergent, and scrub-shrub wetlands (U.S. Fish and Wildlife Service [USFWS] 2017). Please see attachment map illustrating the NWI dataset.

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.

There are currently a few scattered residences, rustic campgrounds, and mooring areas within the Proposed Project action area.

c. *Seagrasses & Other Marine Vegetation*

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

The Proposed Project action area is surrounded by freshwater and brackish waters that may contain seagrass and other marine vegetation as indicated by aerial imagery and mapped distributions conducted in 2006 by the U.S. Geological Survey (Google Earth Imagery 2016; Love et al. 2013). However spatial data available from NOAA (2018) do not show seagrass in the Proposed Project action area. Thus surveys for seagrass and other marine vegetation are not scheduled for the Proposed Project.

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.

The Proposed Project action area is surrounded by freshwater and brackish waters that may contain black mangroves as indicated by aerial imagery and mapped distributions conducted in 2006 by USGS (Google Earth Imagery 2016; Love et al. 2013). However spatial data available from NOAA (2018) do not show mangroves in the Proposed Project action area. Thus surveys for mangroves are not scheduled for the Proposed Project.

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.

The Proposed Project action area is surrounded by shallow freshwater and brackish waters systems that lack suitable environments for corals (Google Earth Imagery 2016) and is located outside of mapped distributions (Love et al. 2013; NOAA 2018). Surveys for these resources have not been conducted for this area nor are they scheduled for the Proposed Project.

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.).

The Proposed Project contains small patches of herbaceous and forested uplands.

g. *Marine Mammals*

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

The Proposed Project action area includes freshwater and estuarine habitats and is adjacent to marine habitats that may be suitable for the common bottlenose dolphin and the West Indian manatee (LDWF 2018; Love et al. 2013; NOAA Fisheries 2016b).

E. Project Description

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

Construction of the alternative would take place between February 1 and November 1. Projects of this scope typically require approximately 6 months to complete. Proposed Project design is currently underway, but construction methods have yet to be finalized.

II. *Describe the Proposed Action: 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. 3. 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.*

The Proposed Project would enhance recreational use at the five campgrounds by providing new picnic tables, barbeque pits, and boat docks at all five campgrounds. The Proposed Project would also install bulkheads at two campgrounds to reduce ongoing erosion, and dredge shallow areas at three campgrounds to improve boater access. Campgrounds where improvements are planned are shown in Figure 3.3-2 and are South Pass, Cadro, Loomis #1, Loomis #2, and Southeast Pass.

Proposed Project elements by campground include the following:
• South Pass Campground
o Install 266 linear feet of bulkhead with 170 cubic yards of associated backfill. Backfill material would come from the adjacent waterway.
o Install 100 linear feet of boat dock. Dock dimensions and construction type would be confirmed during design.
o Install five mobile picnic tables made of steel dipped in a rubber coating.
o Install five fire pit/barbeques.
o Dredge approximately 6,500 cubic yards of sediment to enhance access to the campground.
• Cadro Campground
o Install 100 linear feet of boat dock. Dock dimensions and construction type would be confirmed during design.
o Install eight mobile picnic tables made of steel dipped in a rubber coating.
o Install eight fire pit/barbeques.
• Loomis #1 Campground
o Install 210 linear feet of boat dock. Dock dimensions and construction type would be confirmed during design.
o Install eight mobile picnic tables made of steel dipped in a rubber coating.
o Install eight fire pit/barbeques.
• Loomis #2 Campground
o Install 65 linear feet of boat dock. Dock dimensions and construction type would be confirmed by during design.
o Install three mobile picnic tables made of steel dipped in a rubber coating.
o Install three fire pit/barbeques.
o Dredge approximately 400 cubic yards of sediment to be placed on the campground.
• Southeast Pass Campground
o Install 150 linear feet of bulkhead with 25 cubic yards of associated backfill. Backfill material would come from the adjacent waterway.
o Install 105 linear feet of boat dock. Dock dimensions and construction type would be confirmed during design.
o Install five mobile picnic tables made of steel dipped in a rubber coating.
o Install five fire pit/barbeques.
o Dredge approximately 750 cubic yards of sediment to improve boater access near the campground and new boat dock.

Dredging is expected to be conducted to a depth appropriate for recreational boat passage (approximately 8 to 10 feet) using standard dragline bucket-style or hydraulic dredge equipment. Dredge spoils would be placed on the campgrounds to elevate the facility above expected storm surge inundation elevations. Spoil material would be used for backfill behind the newly installed bulkheads if site conditions are suitable. Bulkheads will be driven at a maximum of 40 feet away from the existing shoreline, however most will be closer.

Details of bulkhead construction may vary after final design, though it is likely that bulkhead installations would include interlocking steel sheet piles driven directly into the sediment that are approximately 12-14 inches wide, summing to 228-266 sheet piles that would be driven for the South Pass Campground bulkhead and 129-150 sheet piles that would be driven for Southeast Pass Campground bulkhead. An cumulative total of 208 treated timber tie-backs with 8 x 8 inch dimensions would be driven into the substrate behind each sheet pile wall, connected to sheet piles with steel tie-back cables, and covered with associated backfill material. Because the sheet piling would be installed in water, typical installation would likely occur from a boat- or barge-mounted impact hammer system. An impact hammer system is anticipated rather than a vibratory hammer as it is likely that the sheet piles and timber piles will be soil displacement piles. Duration of pile driving activities can vary widely based on a number of site-specific variables, though it is likely, given a standard rate of 60 feet per day for large impact pile drivers, that approximately 51-60 sheet piles could be driven within an assumed 480 minute workday of continuous hammer operation. At this rate, cumulative timber and sheet pile installation for both campgrounds would take approximately 11 days.

Please see the attachment below for the remainder of this section.

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

a. *If applicable, Overwater Structures (Place your answers to the following questions in the box below.)*

i. *Is the proposed use of this structure for a docking facility or an observation platform?*

ii. *If no, is this a fishing pier? Public or Private? How many people are expected to fish per day? How do you plan to address hook and line captures?*

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 (sqft)?*

The Proposed Project includes installation of five boat docks that vary from 65 to 100 linear feet. It is expected that dock construction and associated pile driving would be completed from the water on a floating vessel and would include a connected walkway from the dock to the shoreline. Approximately 580 linear feet of dock would be constructed with approximately 84 8x8 inch timber piles. Dock construction could require in-water vegetation removal if vegetation is present, and minor amounts of upland vegetation removal during the construction of the boat dock access ramps. Bulkhead installation will include interlocking steel sheet piles driven directly into the sediment. Because the piles or sheet piling would be installed in water, typical installation would likely occur from a boat- or barge-mounted large impact hammer system. Pile driving would occur sequentially for each construction site.

b. *Pilings & Sheetpiles (What type of material is the piling or sheetpiles? What size and how many will be used? Method used to install: impact hammer, vibratory hammer, jetting, etc.?)*

Interlocking sheet pile may be of steel, aluminum, vinyl, or composite material based on site conditions, though piles will likely be made of steel. A cumulative maximum of 466 sheet piles are estimated to be used in bulkhead construction, likely varying between 12 and 14 inches wide each. An cumulative total of 208 treated timber tie-backs with 8 x 8 inch dimensions would be driven into the substrate behind each sheet pile wall, connected to sheet piles with steel tie-back cables, and covered with associated backfill material. Approximately 84 8 x 8 inch treated timber piles will be installed for dock construction. Because the timber piles and sheet piling would be installed in water, typical installation would likely occur from a boat- or barge-mounted impact hammer system.

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.)*

No marinas or boat slips are proposed.

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.)*

This project does not involve public or private boat ramp work.

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.*

This project does not involve shoreline armoring.

f. *Dredging or digging (Provide details about dredge type (hopper, cutterhead, clamshell, etc.), maximum depth of dredging, area (ft^2) to be dredged, volume of material (yd^3) 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.*

Dredging is expected to be conducted to a depth appropriate for recreational boat passage (approximately 8 to 10 feet) using standard bucket-style or hydraulic dredge equipment. Dredge spoils would likely be placed in water but outside of boating navigation areas. Dredgred material will be moved via dragline or amphibious excavator. If there is need for backfill behind newly installed bulkheads, and site conditions are suitable, spoil material may be used in these areas.

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.)*

No blasting would be necessary or allowed during construction.

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), 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.*

No artificial reefs are present (LDWF 2013) or proposed for this project.

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)).*

Temporary sedimentation from dredging activities is not anticipated to have a significant impact on fishing activities. The addition of the five campgrounds may increase fishing activity across the WMA. This would include line and hook from boats or banks within the WMA.

F. NOAA Species & Critical Habitat and Effects Determination Requested

1. *List all species, critical habitat, proposed species and proposed critical habitat that may be found in the action area.*

2. *Attach a separate map identifying species/critical habitat locations within the action area.*

For information on species and critical habitat under 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)	**DETERMINATION** (see definitions below)
Green Sea Turtle (T)		Marine	May Affect, Not Likely to Adversely Affect
Loggerhead Sea Turtle (T)		Marine	May Affect, Not Likely to Adversely Affect
Kemp's Ridley Sea Turtle (E)		Marine	May Affect, Not Likely to Adversely Affect
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
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Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate

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 = 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 = 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.

Critical Habitat Destruction or Adverse Modification = Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.

G. USFWS Species & Critical Habitat and Effects Determination Requested

1. *List all species, critical habitat, proposed species and proposed critical habitat that may be found in the action area.*
2. *Attach a separate map identifying species/critical habitat locations within the action area.*

For information on species and critical habitat under USFWS jurisdiction, visit http://www.fws.gov/endangered/species/.

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)	**DETERMINATION** (see definitions below)
Gulf sturgeon		Riverine/freshwater	May Affect, Not Likely to Adversely Affect
Pallid sturgeon		Select One	May Affect, Not Likely to Adversely Affect
Kemp's Ridley		Terrestrial	No Effect
Loggerhead sea turtle		Terrestrial	No Effect
Piping plover		Select One	No Effect
Red knot		Select One	No Effect
West Indian manatee		Select One	May Affect, Not Likely to Adversely Affect
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
		Select One	Select Most Appropriate
		Select One	Select Most Appropriate

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 = 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 = 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.

Critical Habitat Destruction or Adverse Modification = Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.

H. Effects of the proposed project to the species and habitats

I. *Explain the potential beneficial and adverse effects to each species listed above (Describe what, when, and how the species will be impacted and the likely response to the impact. Be sure to include direct, indirect, and cumulative impacts and where possible, quantify effects. If species are present (or potentially present) and will not be adversely affected describe your rationale. If species are unlikely to be present in the general area or action area, explain why. This justification provides documentation for your administrative record, avoids the need for additional correspondence regarding the species, and helps expedite review.)*

The Proposed Project is anticipated to have No Effect on the following species: terrestrial life stages of the Kemp's ridley and loggerhead sea turtles; piping plover and red knot. This is based on the assumption that these species will not occur in the Proposed Project action area due to the absence of suitable nesting beach habitats the sea turtles and suitable wintering habitat for the piping plover and red knot in and around the campgrounds (GoogleEarth Imagery 2017; NOAA 2018; Love et al. 2013; NatureServe 2016).

The Proposed Project May Affect, Not Likely to Adversely Affect the following species: marine life stages of the green, Kemp's ridley, and loggerhead sea turtles; Gulf and pallid sturgeons; and the West Indian manatee.

The sea turtle species listed above may occur in nearshore or inshore estuarine waters that contain seagrass or other submerged or emergent vegetation used as forage or that may harbor prey species (NOAA Fisheries 2018). Small patches of seagrass that may serve as foraging habitat may be present within the Proposed Project action area and it is located within the known ranges of these species (LDWF 2018; NatureServe2016). The Proposed Project's in-water work of boat docks, bulkhead and dredging may include use of an impact hammer for pile driving. These activities may result in temporary increases in turbidity and construction noise that may result in temporary avoidance of the Proposed Project area. Sea turtle BMPs will be implemented to reduce and avoid impacts to these species.

Please refer the attachment for continued discussion.

II. *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 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 Proposed Project action area is outside designated critical habitat; therefore, no effects to critical habitat would occur.

I. Actions to Reduce Adverse Effects

I. *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.)*

Species-specific BMPs from the PDARP/EIS (DWH Trustees 2016) that would be incorporated into the proposed project are included as an attachment.

Additionally all individuals (such as construction workers) working on the proposed project would be provided with information on general awareness of any federally protected species that have the potential to occur in the Proposed Project action area. Seasonal avoidance measures will be implemented when practicable. If work must be conducted when these species are present, certain activities may be restricted or modified to reduce disturbance of these species (see attached BMPs).

The implementing trustee will implement and enforce approved BMPs listed in the attachment to avoid and minimize impacts to species listed in Sections F and G. Continued coordination of BMPs will occur during the final design phase.

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.)*

Designated critical habitat is not present within the Proposed Project. Therefore, no impacts to critical habitat would occur as a result of the proposed construction of recreational features, and no additional conservation measures are proposed other than the construction BMPs listed in the attachment below.

J. 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

Is your activity likely to impact 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	
☑	☐	*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) *Building or enhancing areas for water-related recreational use or fishing opportunities (e.g. fishing piers, bridges, boat ramps, marinas)*
☑	☐	*f) Aquaculture*
☐	☑	*g) Dredging or in-water construction activities to change hydrologic conditions or connectivity, create breakwaters and living shorelines, etc.*
☑	☐	*h) Restoration of barrier islands, levee construction or similar projects*
☑	☐	*i) Fresh-water river diversions*

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

Please refer to Section E Project Description for construction details of the Proposed Project. The in-water activities involve dredging and bulkhead installation using a vibratory hammer system that may generate some noise. The NOAA Technical Guidance classifies vibratory hammer systems as non-impulsive sound source that may be less injurious relative to impulsive sound sources. Acoustic frequencies of the vibratory hammer systems implemented in the Proposed Project are unknown. Thus the Proposed Project may or may not result in temporary shifts in species behaviors (NOAA Fisheries 2016c).

IV. Are any measures planned to mitigate potential impacts to marine mammals? If yes, provide text in box below. NO ☐ YES ☑

The implementing trustee will implement and enforce the Standard Manatee Conditions BMPs, NMFS's Measures for Reducing Entrapment Risk to Marine Mammals, and NMFS's Vessel Strike Avoidance Measures as listed in the attachment to avoid and minimize impacts to manatees and bottlenose dolphins. Continued coordination of BMPs will occur during the final design phase.

K. 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**

L. Migratory Birds

Identify the species anticipated in the action area and behaviors (breeding, roosting, foraging) anticipated during project implementation. You may list similar species on a single line and categorize by type (e.g., Wading birds - great blue heron, snowy egret, reddish egret). If species are present and impacts to individuals or habitat could occur, identify avoidance and minimization measures to prevent incidental take.
Incidental take of Migratory Birds cannot be authorized. Use additional tables on the next page if needed.

I.

Species/Species Group	Behavior	Species/Habitat Impacts and Conservation Measures to Minimize Impacts
American Golden-plover	non breeder	The Proposed Project area is located within a region that includes the following birds of conservation concern (USFWS 2018). There is no land-based construction effort and no required tree clearing. During the project design phase, coordination with the USFWS and the state trust resource agency would occur to site and design project features to avoid or minimize impacts to migratory bird nesting habitats or important feeding and loafing areas. If vegetation clearing (e.g., of marsh or potential mangrove habitat) is required, it would take place outside of the migratory bird nesting season (approximately mid-February through mid-September) or a qualified biologist would inspect for active nests. If no active nests are found, vegetation may be removed. If active nests are found, vegetation may be removed after the nestlings successfully fledge. If project activities must occur during this time-frame and breeding, nesting, and fledging birds are present, the state trust resource agency would be contracted to obtain the most recent guidance to protect nesting birds or rookeries, and their recommendations would be implemented.
American Oystercatcher	breeder	
Arctic Tern	breeder	
Audubon's Shearwater	breeder	
Bald Eagle	breeder	
Band-rumped Storm-petrel	non breeder	
Black Scoter	non breeder	
Black Skimmer	breeder	
Bonaparte's Gull	non breeder	
Bridled Tern	non breeder	
Brown Pelican	breeder	
Buff-breasted Sandpiper	non breeder	
Clapper Rail	breeder	
Common Loon	non breeder	
Common Tern	non breeder	
Cory's Shearwater	non breeder	
Double-crested Cormorant	breeder	
Great Black-backed Gull	non breeder	
Great Shearwater	non breeder	
Gull-billed Tern	breeder	
Herring Gull	breeder	
King Rail	breeder	
Le Conte's Sparrow	non breeder	

M. Migratory Birds

Continuation page if needed.

II.	SPECIES/SPECIES GROUP	BEHAVIOR	SPECIES/HABITAT IMPACTS and CONSERVATION MEASURES TO MINIMIZE IMPACTS
	Least Tern	breeder	
	Lesser Yellowlegs	non breeder	
	Magnificent Frigatebird	non breeder	
	Marbled Godwit	non breeder	
	Nelson's Sparrow	non breeder	
	Northern Gannet	non breeder	
	Parasitic Jaeger	non breeder	
	Pomarine Jaeger	non breeder	
	Prothonotary Warbler	breeder	
	Red-breasted Merganser	non breeder	
	Red-necked Phalarope	non breeder	
	Reddish Egret	breeder	
	Ring-billed Gull	non breeder	
	Royal Tern	breeder	
	Seaside Sparrow	breeder	
	Semipalmated Sandpiper	non breeder	
	Short-billed Dowitcher	non breeder	
	Sooty Tern	breeder	
	Sprague's Pipit	non breeder	
	Surf Scoter	non breeder	
	Swallow-tailed Kite	breeder	
	Whimbrel	non breeder	
	Wilson's Plover	breeder	
	Wilson's Storm-petrel	non breeder	
	Yellow Rail	non breeder	

N. Best Practices

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 pratices you'll be using in your project.

BMPs from the PDARP/EIS that would be incorporated into the Proposed Project are included as an attachment.

O. Submitting the BE Form

NMFS ESA § 7 Consultation

We request that all ESA §7 consultation requests/packages be submitted electronically to: **Christina.Fellas@noaa.gov**

Questions about consultation status may be directed to the email address above or

by phone: Christy Fellas: 727-551-5714

USFWS ESA § 7 Consultation

We request that all consultation requests/packages to USFWS be submitted electronically to: **Ashley_Mills@fws.gov**.

You will be notified when we receive your Biological Evaluation. 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 send your Biological Evaluation to the appropriate Field Office to conduct consultation.

Questions about consultation status may be directed to the email address above or by phone:
Ashley Mills: 812-756-2712

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.

Are you using this form to request approval for use of NMFS PDCs for this project? ○ Yes ◉ No

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

- ☐ Project is designed to avoid techniques and locations listed in the oyster reef creation and enhancement PDCs 1.a-1.e.
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Construction Conditions (PDC 2.a)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.b)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.c)
- ☐ In Gulf sturgeon critical habitat, oyster reef creation and enhancement occurs only on existing shell substrata or relic reef locations (PDC 2.d)
- ☐ Cultch material is free of debris and contaminants (PDC 2.e)
- ☐ Fresh shell has been properly aged or quarantined before being deployed (PDC 2.f)
- ☐ Cultch material is placed in a manner to minimize disturbance of sediment (PDC 2.g)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDC 2.h)
- ☐ Plan/drawings for intermittent breaks between oyster reef segment has been provided (2.i)
- ☐ Spill prevention and response plan has been developed (2.j)
- ☐ Design and materials used avoid entanglement and entrapment risks for ESA-listed species (2.k)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Marine Debris Removal ○ Yes ◉ No

- ☐ This project is designed to avoid techniques and locations listed in the marine debris removal PDCs 1.a-1.c
- ☐ All on-water operations shall take place during daylight hours (PDC 2.a)
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Conditions (PDC 2.b)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.c)
- ☐ Project personnel have been notified of procedures if approached by a marine mammal or sea turtle (PDC 2.d)
- ☐ Trash and debris will be disposed of at an upland location (PDCs 2.e)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Construction of Living Shorelines

○ Yes ◉ No

- ☐ This project is designed to avoid techniques and locations listed in the living shoreline PDCs 1.a-1.h
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Conditions (PDC 2.a)
- ☐ All in-water work activities will conducted during daylight hours (PDC 2.b)
- ☐ Piles for navigation of public safety purposes are less than 24" diameter and non-metal if impact hammer used (PDC 2.c)
- ☐ Spill prevention and response plan has been developed (2.d)
- ☐ Fill material is not sourced using hopper dredge or from sea turtle, Gulf sturgeon or smalltooth sawfish critical habitat and in-water borrow sites do not impact turtle nesting beaches (PDC 2.e)
- ☐ Design and materials do not create entrapment or entanglement risks to ESA-listed species and do not block migration (PDC 2.f)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.g)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDC 2.h)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.i)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Marsh Creation and Enhancement

○ Yes ◉ No

- ☐ Project is designed to avoid techniques and locations listed in the marsh creation PDCs 1.a-1.f
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Conditions (PDC 2.a)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.b)
- ☐ All in-water work activities will be conducted during daylight hours (PDC 2.c)
- ☐ Spill prevention and response plan has been developed (PDC 2.d)
- ☐ Fill material is not sourced using hopper dredge or from sea turtle, Gulf sturgeon or smalltooth sawfish critical habitat and in-water borrow sites do not impact turtle nesting beaches (PDC 2.e)
- ☐ Design and materials do not create entrapment or entanglement risks to ESA-listed species and do not block migration (PDC 2.f)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.g)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDCs 2.h)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Construction of Non-Fishing Piers

◯ Yes ◉ No

- ☐ This project is designed to avoid locations listed in the non-fishing piers PDCs 1.a
- ☐ Spill prevention and response plan has been developed (PDC 2.a)
- ☐ Design and materials do not create entrapment or entanglement risks to ESA-listed species and do not block migration (PDC 2.b)
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Construction Conditions (PDC 2.c)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.d)
- ☐ Follow Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat (PDC 2.e)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.f)
- ☐ Follows methods and timing for pile driving (2.g)
- ☐ Follows construction sequencing and avoids propwashing (PDC 2.h)
- ☐ Water depth will not be altered (PDC 2.i)
- ☐ Lighting specifications are incorporated for piers on or adjacent to sea turtle nesting beaches (PDC 2.j)
- ☐ Follows educational and fishing signage requirements (PDC 2.k)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDC 2.l)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

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

Name of person(s) completing this form:

Date form completed:

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

BIOLOGICAL EVALUATIONS FORM ATTACHMENTS

BIOLOGICAL EVALUATION FORM CONTINUATION SHEET

Section E.II. Describe the Proposed Action (continued)

The 508 cumulative linear feet of boat dock for the Proposed Project will include approximately 84 8 x 8 inch treated timber piles installed using a large impact hammer system with standard equipment (crane, boom, set of leads, pile hammer, helmet, pile gate, and pile monkey). A pair of piles would be installed approximately every 15 feet where possible and would be driven past the 15-foot engineering-set minimum depth into the substrate. Assuming the aforementioned rate of 60 feet per 480-minute workday, it is anticipated that approximately 9 days of cumulative timber pile driving activity would occur for the boat docks with 240 minutes of each day as hammer operation. Pile driving would be conducted sequentially within each dock location.

The NRCS Soil Survey for Plaquemines Parish, Louisiana (U.S. Department of Agriculture [USDA] 2018) identifies two soil map units where construction or dredging is expected to occur within the Proposed Project area: Aquents, dredged, frequently flooded (AT) and Balize and Larose soils (BA). Balize and Larose soils comprise all but one area where construction is expected and are composed primarily of sand and clay constituents.

It is anticipated that pre-constructed picnic tables, made of steel dipped in a rubber coating, would be used and placed at campsites within each campground. Construction of fire pit/barbeque areas would consist of a heavy gauge steel fire ring with a barbeque grate on top.

Please see attached map of the Proposed Project.

Section H.I. Effects of the proposed project to the species and habitats (continued)

The Gulf sturgeon can occur in river systems and nearshore bays and estuaries depending upon the life stage of the species and season (NOAA Fisheries 2016a). The pallid sturgeon is found in large, turbid, free-flowing riverine habitats including the Mississippi River and the Atchafalaya watershed (NatureServe 2016). The Proposed Project action area is located at the coastal end of the Mississippi River in tidally influenced riverine waters. The Proposed Project in-water construction does not involve obstruction of riverine paths, nor will there be significant modification of upstream hydrologic flows of the Mississippi River. Potential temporary and localized direct impacts for these sturgeons from the Proposed Project activities include potential temporary avoidance of the immediate Project vicinity due to construction noise and activities. Although the Proposed Project activities may temporarily increase local turbidity, increased turbidity is not anticipated to adversely affect this species per the species prefer habitat (i.e., relatively turbid riverine waters). Entrainment is anticipated to be avoided or minimized due use of bucket dredge methods, and the Gulf and pallid sturgeon BMPs listed in the attachment that will be implemented and enforce by the implementing trustee. The chances of recreational fishing impacts on the pallid sturgeon are likely low given the low likelihood of its presence; this species occurs in main channel habitats of the riverine systems as opposed to the braided tributaries and passes of in this Proposed Project area. The Gulf sturgeon may occur in the Proposed Project area,

but recreational fishing for this species is prohibited thus significant adverse impacts to these species are anticipated to be minimized due to fishing regulations (USFWS 2014).

The Proposed Project is located in a parish where the West Indian manatee may occur (LDWF 2018). The same localized temporary impacts of turbidity and noise are anticipated from the dredging activities are anticipated for the West Indian manatee; that may result in temporary avoidance of the Proposed Project action area. This project involves pile driving that would emit acoustic impacts that may affect marine mammals (NOAA 2016). To reduce and avoid impacts *Standard Manatee Condition* BMP will be implemented. Freshwater and estuarine tidal channels in Proposed Project action area do not harbor extensive sea grass beds that may be used as foraging habitats, thus habitat loss is not an expected impact. Injury and collisions are not anticipated due to implementation of the *Standard Manatee Condition* BMP listed in the attachment.

PAL WMA CAMPGROUNDS

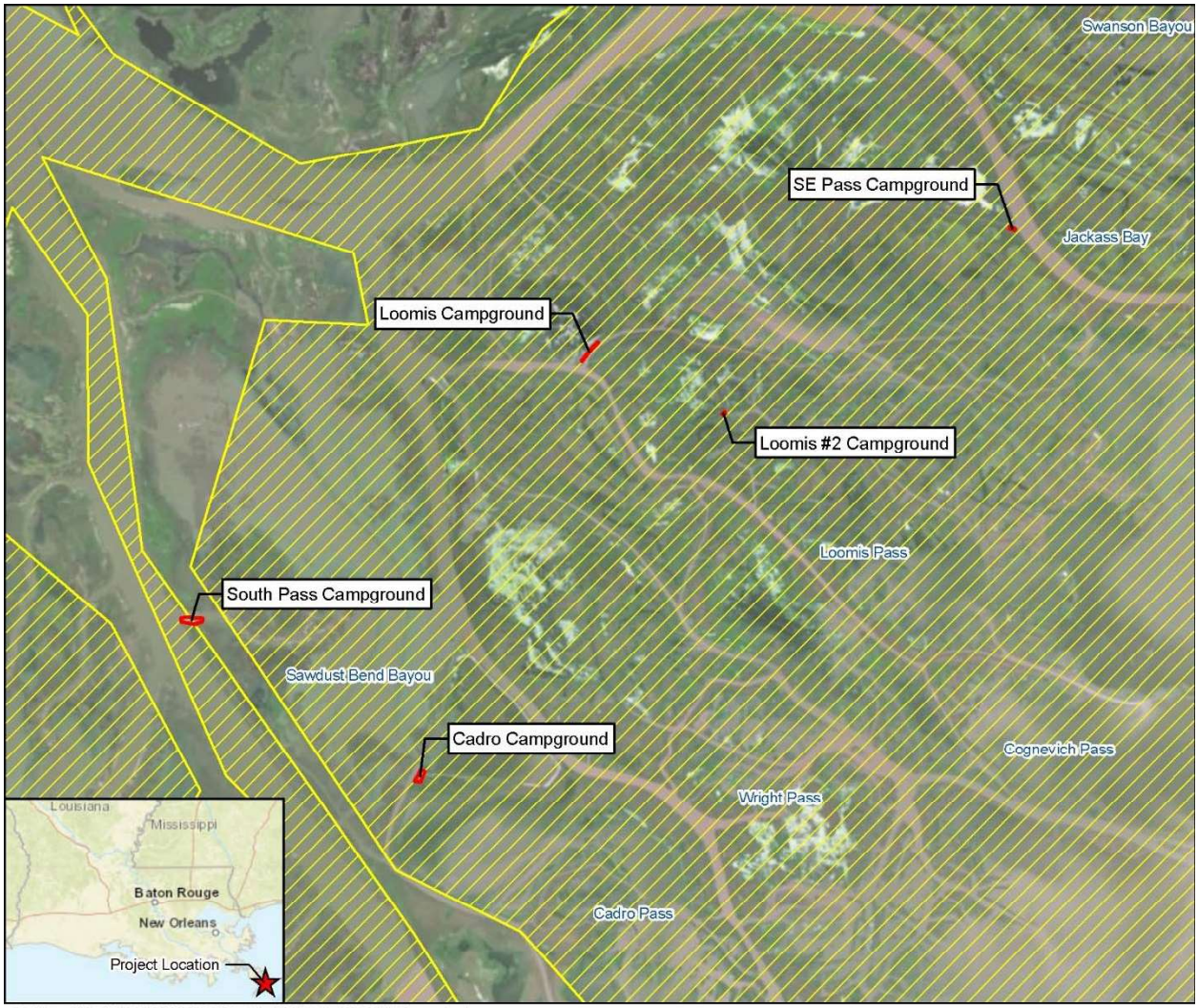
PROJECT DETAIL MAP
PLAQUEMINES PARISH, LOUISIANA

Proposed Alternative

1:72,000

Created By: JS
Project Number: 48078
Date: 3/19/2018
NAD 1983 StatePlane Louisiana South FIPS 1702 Feet

0 4,100 8,200 Feet
0 2,750 5,500 8,250 Feet



PAL WMA CAMPGROUNDS
ESSENTIAL FISH HABITAT AND
USFWS CRITICAL HABITAT MAP
PLAQUEMINES PARISH, LOUISIANA

Proposed Alternative

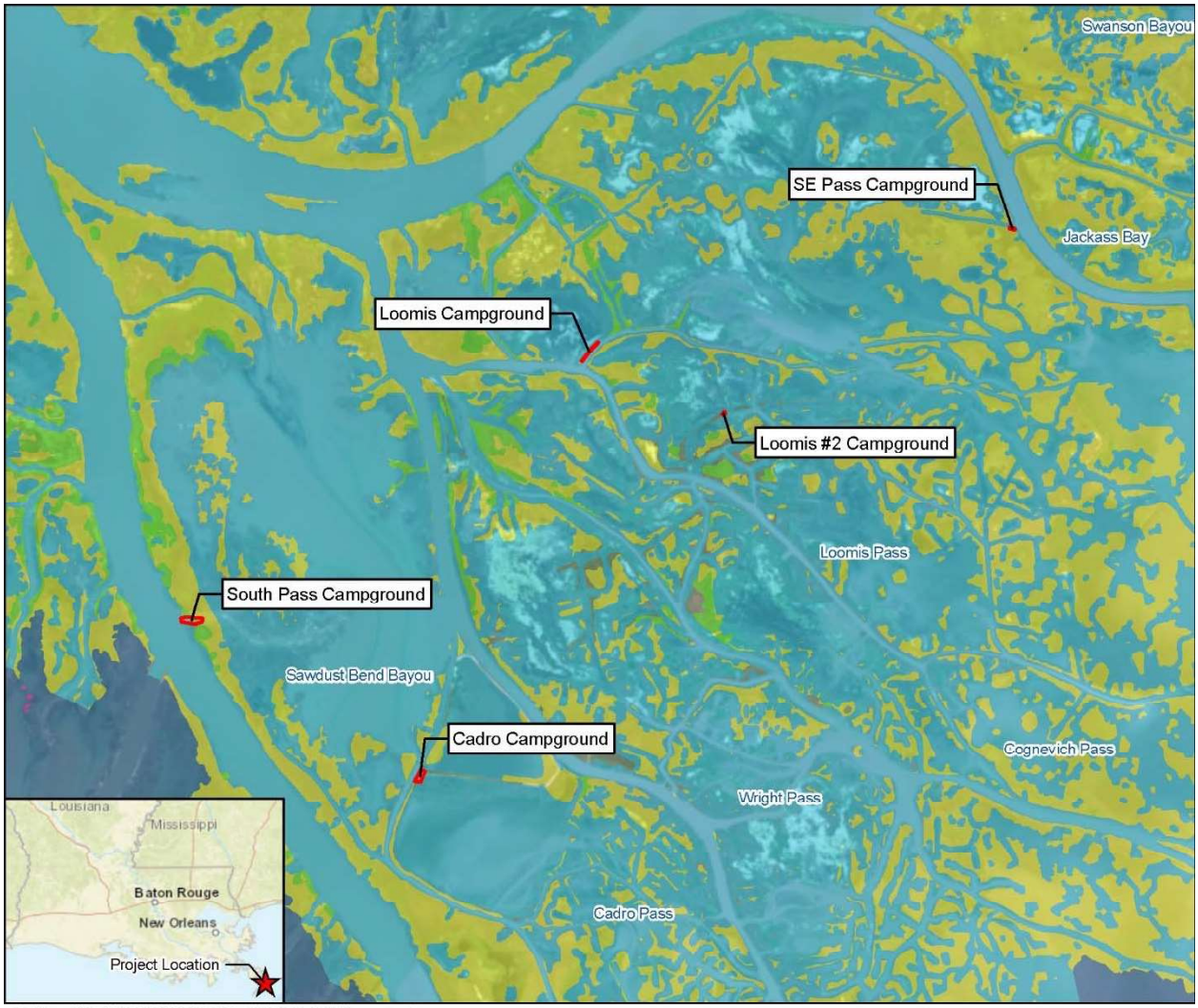
Essential Fish Habitat

1:72,000

Created By: JS
Project Number: 48078
Date: 4/20/2018
NAD 1983 StatePlane Louisiana South FIPS 1702 Feet

0 4,100 8,200 Feet

0 2,750 5,500 8,250 Feet



PAL WMA CAMPGROUNDS
NWI MAP
PLAQUEMINES PARISH, LOUISIANA

Proposed Alternative
NWI Designation
Estuarine Wetland
Emergent Wetland
Forested/Shrub Wetland
Marine Deepwater
Freshwater Waterbody

1:72,000

Created By: JS
Project Number: 48078
Date: 4/20/2018
NAD 1983 StatePlane Louisiana South FIPS 1702 Feet

0 4,100 8,200 Feet
0 2,750 5,500 8,250 Feet

BEST PRACTICES FROM THE PDARP/PEIS

The following section is a direct excerpt from Section 6, Appendix A in *Deepwater Horizon Oil Spill: Final Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental Impact Statement* (DWH Trustees 2016).

Birds

Bald Eagles

If bald eagle breeding or nesting behaviors are observed or a nest is discovered or known, have all activities 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. Maintain this avoidance distance from the onset of breeding/courtship behaviors until any eggs have hatched and eaglets have fledged (approximately 6 months).

If a similar activity (such as driving on a roadway) is closer than 660 feet to a nest, maintain a distance buffer as close to the nest as the existing tolerated activity. 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 maintain a distance buffer as close to the nest as the existing tolerated activity.

In some instances activities conducted within 660 feet of a nest may result in disturbance, particularly for the eagles occupying the Mississippi barrier islands. If an activity appears to cause initial disturbance, stop the activity and move all individuals and equipment away until the eagles are no longer displaying disturbance behaviors. Contact the USFWS's Migratory Bird Permit Office to determine how to avoid impacts or if a permit may be needed.

Migratory Birds

Use care to avoid birds when operating machinery or vehicles near birds.

During the project design phase, coordinate with the USFWS and the state trust resource agency to site and design projects to avoid or minimize impacts to migratory bird nesting habitats or important feeding/loafing areas.

Avoid working in migratory bird nesting habitats during breeding, nesting, and fledging (approximately mid-February through late August). If project activities must occur during this timeframe and breeding, nesting, or fledging birds are present, contact the state trust resource agency to obtain the most recent guidance to protect nesting birds or rookeries, and their recommendations will be implemented.

Conservation areas may already be marked to protect bird nesting areas. Stay out of existing marked areas.

If vegetation clearing is necessary, clear vegetation outside the migratory bird nesting season (approximately mid-February through late August) or have a qualified biologist inspect for active nests. If no active nests are found, vegetation may be removed. If active nests are found, vegetation may be removed after the nest successfully fledges.

Avoid driving over the natural organic material ("wrack") line or areas of dense seaweed, as these habitats may contain hatchlings and chicks that are difficult to see.

Install pointy, white piling caps on exposed pilings to prevent bird roosting on piers, docks, and marinas.

Mammals

Manatee

In Louisiana, follow the most recent version of the *Standard Manatee Conditions for In-water Activities*:

During in-water work in areas that potentially support manatees all personnel associated with the project should be instructed about the potential presence of manatees, manatee speed zones, and the need to avoid collisions with and injury to manatees. All personnel should be advised that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973. Additionally, personnel should be instructed not to attempt to feed or otherwise interact with the animal, although passively taking pictures or video would be acceptable.

All on-site personnel are responsible for observing water-related activities for the presence of manatee(s). We recommend the following to minimize potential impacts to manatees in areas of their potential presence:

- All work, equipment, and vessel operation should cease if a manatee is spotted within a 50-foot radius (buffer zone) of the active work area. Once the manatee has left the buffer zone on its own accord (manatees must not be herded or harassed into leaving), or after 30 minutes have passed without additional sightings of manatee(s) in the buffer zone, in-water work can resume under careful observation for manatee(s).

- If a manatee(s) is sighted in or near the project area, all vessels associated with the project should operate at "no wake/idle" speeds within the construction area and at all times while in waters where the draft of the vessel provides less than a four-foot clearance from the bottom. Vessels should follow routes of deep water whenever possible.

- If used, siltation or turbidity barriers should be properly secured, made of material in which manatees cannot become entangled, and be monitored to avoid manatee entrapment or impeding their movement.

- Temporary signs concerning manatees should be posted prior to and during all in-water project activities and removed upon completion. Each vessel involved in construction activities should display at the vessel control station or in a prominent location, visible to all employees operating the vessel, a temporary sign at least 8½ " X 11" reading language similar to the following: "CAUTION BOATERS: MANATEE AREA/ IDLE SPEED IS REQUIRED IN CONSRUCTION AREA AND WHERE THERE IS LESS THAN FOUR FOOT BOTTOM CLEARANCE WHEN MANATEE IS PRESENT". A second temporary sign measuring 8½ " X 11" should be posted at a location prominently visible to all personnel engaged in water-related activities and should read language similar to the following: "CAUTION: MANATEE AREA/ EQUIPMENT MUST BE SHUTDOWN IMMEDIATELY IF A

MANATEE COMES WITHIN 50 FEET OF OPERATION".

- Collisions with, injury to, or sightings of manatees should be immediately reported to the Service's Louisiana Ecological Services Office (337/291-3100) and the Louisiana Department of Wildlife and Fisheries, Natural Heritage Program (225/765-2821). Please provide the nature of the call (i.e., report of an incident, manatee sighting, etc.); time of incident/sighting; and the approximate location, including the latitude and longitude coordinates, if possible.

Bottlenose Dolphin

For projects with any in-water construction activities, dredging, or wetland/barrier island creation and nourishment, follow the most current version of the NMFS Southeast Region's Measures for Reducing Entrapment Risk to Protected Species.

For projects that enhance recreational fishing opportunities (e.g., fishing pier enhancement / development), visibly post the NMFS Southeast Region's Dolphin-Friendly Fishing Tips and Don't Feed Wild Dolphins signs and other applicable protected species educational signs.

To reduce the risk associated with vessel strikes of protected species or related disturbance, follow the most current version of NMFS Southeast Region's Vessel Strike Avoidance Measures and Reporting for Mariners, revised February 2008.

For projects that enhance recreational and commercial vessel based activities, follow NMFS's Southeast

U.S. Marine Mammal and Sea Turtle Viewing Guidelines.

Turtles

Sea Turtles—In Water

Implement the following guidelines: NMFS's *Sea Turtle and Smalltooth Sawfish Construction Conditions* (revised March 23, 2006), NMFS's *Measures for Reducing Entrapment Risk to Protected Species* (revised May 22, 2012) and NMFS's *Vessel Strike Avoidance Measures and Reporting for Mariners* (revised February 2008).

Fish

Gulf Sturgeon

Avoid work in riverine critical habitats when Gulf sturgeon are likely to be present (April to October). Do not dredge in spawning areas when Gulf sturgeon are likely to be present.

During project implementation, maintain riparian buffers of at least 100 feet around critical habitat. Install silt fencing to prevent sedimentation or erosion into streams and rivers.

Operate dredge equipment in a manner to avoid risks to Gulf sturgeon (e.g., disengage pumps when the cutter head is not in the substrate; avoid pumping water from the bottom of the water column).

Implement NMFS's *Sea Turtle and Smalltooth Construction Conditions* (revised March 23, 2006) and NMFS's *Measures for Reducing Entrapment Risk to Protected Species* (revised May 22, 2012), as they are protective of Gulf sturgeon as well.

Pallid Sturgeon

In areas inhabited by the pallid sturgeon, we offer the following recommendations for any work using a cutterhead/suction dredge (Louisiana Ecological Service Field Office 2018):

1. The cutterhead shall remain completely buried in the bottom material during dredging operations. If pumping water through the cutterhead is necessary to dislodge material or to clean the pumps or cutterhead, etc., the pumping rate should be reduced to the lowest rate possible until the cutterhead is at mid-depth, where the pumping rate can then be increased

2. During dredging, the pumping rates should be reduced to the slowest speed feasible while the cutterhead is descending to the channel bottom

General Construction Measures

Protected Species

Provide all individuals working on a project with information in support of general awareness of and means to avoid impacts to protected species and their habitats present at the specific project site.

Site Maintenance and Conduct

Use the nearest, existing staging, access and egress areas, travel corridors, pathways, and roadways (including those provided by the state, local governments, land managers, trustee, or private property owner, with proper permissions) and do not create new staging areas, access (except dune walkovers) or egress, or travel corridors through dune habitats.

Minimize construction noise to the maximum extent practicable when working near protected species and their habitats.

Maintain or improve all lighting regimes. Methods include working during daylight hours only, prohibiting lighting on dune walkovers, and using wildlife-friendly lighting where lighting is necessary for human safety.

Land and Vegetation Protection

Develop and implement a spill prevention and response plan, including conducting daily inspections of all construction and related equipment to ensure there are no leaks of antifreeze, hydraulic fluid, or other substances and cleaning and sealing all equipment that would be used in the water to rid it of chemical residue. Develop a contract stipulation to disallow use of any leaking equipment or vehicles.

Wetland and Aquatic Resource Protection

Avoid and minimize, to the maximum extent practicable, placement of dredged or fill material in wetlands and other aquatic resources.

Design construction equipment corridors to avoid and minimize impacts to wetlands and other aquatic resources to the maximum extent practicable.

To the maximum extent possible, implement the placement of sediment to minimize impacts to existing vegetation or burrowing organisms.

When local conditions indicate the likely presence of contaminated soils and sediments, test soil samples for contaminant levels and take precautions to avoid disturbance of, or provide for proper disposal of, contaminated soils and sediments. Evaluate methods prior to dredging to reduce the potential for impacts from turbidity or tarballs.

Perform maintenance of generators, cranes, and any other stationary equipment operated within 150 feet of any natural or wetland area, as necessary, to prevent leaks and spills from entering the water.

Designate a vehicle staging area removed from any natural surface water resource or wetland to perform fueling, maintenance, and storage of construction vehicles and equipment. Inspect vehicles and equipment daily prior to leaving the storage area to ensure that no petroleum or oil products are leaking.

Upon completion of construction activities, restore all disturbed areas as necessary to allow habitat functions to return. Create and manage public access developments to enhance recreational experience and educational awareness to minimize effects to habitat within wetland and shallow water areas and to the long-term health of related biological communities.

Use silt fencing where appropriate to reduce increased turbidity and siltation in the project vicinity. This would apply to both on land and in water work.

Make all efforts to reduce the peak sound level and exposure levels of fish to reduce the potential impact of sound on fish present in the project areas.

Use sound attenuation devices where practicable for pulse noise (impact hammers) to reduce peak sound pressure levels in the aquatic environment.

Stipulate the timing of activities to avoid impacts to spawning fish and eggs/larvae.

Use best practices to reduce turbidity, such as turbidity blankets, to reduce the potential impact of turbidity on finfish.

Screen water withdrawal pipes to minimize potential entrainment of fish from the withdrawal area. Have project proponents coordinate with NMFS to create an intake screen that would minimize potential impingement of fish.

FUTURE BEST PRACTICES

Best Practices for EFH Under MSFCMA

At time of publication, practices to avoid and minimize effects to EFH were under development. Please check the following webpage for EFH best practices that may be developed: http://sero.nmfs.noaa.gov/habitat_conservation/documents/sero_hazmat_efh_consultation_bmps_ver201612.pdf

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Marine Mammal Mitigation Measures for:
Pass-a-Loutre Wildlife Management Area Campgrounds project

NOAA NMFS, Southeast Regional Office
June 8, 2018

The title project is included in the Louisiana Trustee Resource Implementation Team's fourth Restoration Plan to enhance public access to natural resources for recreation following the *Deepwater Horizon* oil spill event. The project entails enhancing recreational use at the campgrounds by installing bulkheads and five boat docks, among other things. A boat or barge-mounted impact hammer driving system would be used for construction activities. Bulkhead construction will use interlocking sheet piles estimated to measure 12-14 inches in width, with the total number of piles between 228 and 266 for the South Pass Campground bulkhead and between 129 and 150 for the Southeast Pass Campground bulkhead. A total of 208 treated timber tie-backs with 8x8 inch dimensions will also be driven into the substrate behind each sheet pile wall. Assuming a standard rate of 60 feet per day using an impact hammer, approximately 60 piles may be driven per day, taking approximately 11 sequential days of pile driving activity.

The following are preventative measures to help minimize the potential for bottlenose dolphin behavioral harassment (i.e. *take*) from in-water work associated with impact hammer pile driving activities the title project. We recommend these best practices to minimize the potential for taking bottlenose dolphins during these activities; however, we recognize use of these measures cannot guarantee behavioral harassment will not occur. Implementation of these measures does not constitute compliance with the Marine Mammal Protection Act (MMPA). In the event of an unanticipated take, you should contact NMFS Office of Protected Resources immediately to provide notification of the incident and to work through the necessary steps to ensure MMPA compliance moving forward. It is NMFS' practice to support the continuation of ongoing activities, contingent upon implementation of agreed-upon avoidance measures, while NMFS acts on any such request; however, NMFS final recommendation will be dependent upon the nature and context of the incident. Please make sure the entire crew and construction team have read and understand these measures.

Preventative Mitigation Measures

1. Monitor within a 50 meter zone (e.g. shutdown zone) around impact hammer pile driving activities, <u>both</u> before and during pile driving, to help prevent behavioral harassment. Monitoring may be conducted by construction personnel, however, the personnel monitoring should have no other assigned tasks during monitoring periods. Pile driving activities include the time to install or remove a single pile or series of piles, as long as the time elapsed between uses of pile driving activity is no more than 30 minutes.
    a. <u>Pre-activity monitoring:</u> monitoring should take place at least 15 minutes prior to initiation of pile driving activity. Pile driving may start at the end of the 15 minutes if the observer has determined that the 50 meter shutdown zone is clear of marine mammals. A determination that the shutdown zone is clear should be

made during a period of good visibility (i.e., the entire shutdown zone and surrounding waters is visible to the naked eye).

b. If a bottlenose dolphin(s) enters the shutdown zone during pile driving activities or pre-monitoring, all pile driving activities at that location should be halted or delayed, respectively. If activity is halted or delayed, it should not be resumed until either the: (1) animal has voluntarily left and has been visually confirmed beyond the shutdown zone; or (2) an additional 15 minutes of pre-monitoring is conducted without re-detection of the animal.

2. Before commencing impact pile driving activities, use soft start techniques to alert animals to the forthcoming activities.
    a. Soft start entails an initial set of strikes at reduced energy, followed by a 30 second waiting period, then two subsequent reduced energy strike sets.
    b. Soft start should be implemented at the start of each day's impact pile driving and any time following cessation of pile driving activities for 30 minutes or longer.

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 Protect 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.

A. Project Identification

Federal Action Agency: U.S. Fish and Wildlife Service

Additional Federal Action Agency: National Marine Fisheries Service

Agency Contact(s)

USFWS: Ashley Mills at 812-756-2712 and Ashley_Mills@fws.gov
NMFS: Christy Fellas at 727-551-5714 and Christina.Fellas@noaa.gov

I. *Implementing Trustee(s)*: Louisiana Department of Wildlife and Fisheries

II. *Contact Person*: Brady Carter

III. *Phone*: (225) 763-5504

Email: bcarter@wlf.la.gov

IV. *Project Name and ID# (Official name of project and ID number assigned by Trustees in DIVER)*: Montegut S1/S2 Access/PAC Fishing Piers

V. *NMFS Office (Choose appropriate office based on project location)*: NMFS Southeast Regional Office

USFWS Office (Choose or write in appropriate office based on project location): Louisiana Ecological Services Field Office (Lafayette)

VI. *Project Type #1*: Enhance Recreational Experiences

Project Type #2, if helpful: Enhance Public Access to Natural Resources for Recreational

VII. *TIG*: Louisiana TIG

Restoration Plan: Recreational Use

B. Project Location

I. Physical Address of action area (If applicable): N/A

II. *State & County/Parish of action area*: Louisiana, Terrebonne and Lafourche Parishes

III. *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])*: 29.460862°N, 90.448478°W NAD83

IV. Township, range and section of the action area: Township 19 South, Range 19 East, Section 19

C. 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:
-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

Have any federal permits been applied for but not yet obtained, if so which ones and what is the permit number(s)? ☐ Yes ☑ No

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.

Deepwater Horizon Oil Spill Louisiana Trustee Implementation Group Restoration Plan and Environmental Assessment #4: Nutrient Reduction (Nonpoint Source) and Recreational Use

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

Name of Person Completing this Form:	Nicole Smolensky
Name of Project Lead:	
Date Form Completed:	01/23/2018
Date Form Updated:	04/23/2018

D. Description of Action Area

Attach a separate map delineating where the action will occur and where critical habitat, if any, is located. Map or describe all areas that may be directly or indirectly affected by the action. 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). If CH is not designated in the area, then map or describe any suitable habitat in the area.

Pointe-aux-Chenes Wildlife Management Area (PWMA) is a 35,266-acre marsh tract in Lafourche and Terrebonne Parishes. The PWMA is an intermediate to brackish marsh complex with a coastal forested ridge running through it also known as Point Farm. Forty percent (13,855 acres) of the WMA is under active management and is contained in water management units known as Montegut, Pointe-aux-Chenes, Grand Bayou #1, and Grand Bayou #2. Water elevations and salinity are controlled in the marsh management units by multiple water control structures. The dominant vegetation on the PWMA is marsh hay cordgrass, salt grass, smooth cordgrass, and marsh elder. Submerged aquatic vegetation comprises primarily widgeon grass, and a small amount of Eurasion milfoil may be found in the property's northeast corner. The problematic exotic species is Chinese tallow (Louisiana Department of Wildlife and Fisheries [LDWF] 2014).

The Proposed Project is located in the Mississippi Alluvial Plain (73) Level III ecoregion and the Southern Holocene Meander Belts (73k) Level IV ecoregion (Daigle et al. 2006). The following information was obtained from Daigle et al. 2006 unless indicated otherwise. The Mississippi Alluvial Plain is mostly a broad, flat alluvial plain with river terraces, swales, and levees providing the main elements of relief. Elevation ranges from 0 to 15 feet above mean sea level, and local relief ranges from 0 to 10 feet. Winters are mild and summers are hot with minimum/maximum temperatures of 44˚F/64˚F and 72˚F/92˚F, respectively. Mean annual precipitation ranges from 64 to 66 inches. The ecoregion historically comprised bottomland deciduous forest with extensive wetlands, but much of it was cleared for cultivation. The Southern Holocene Meander Belts ecoregion stretches from just north of Natchez, Mississippi, south to New Orleans, Louisiana. Point bars, oxbows, natural levees, and abandoned channels occur within this ecoregion. This region has a longer growing season, warmer annual temperatures, some hyperthermic soils, and more precipitation than its northern counterparts of 73a and 73h. Soils are somewhat poorly and poorly drained Inceptisols, Entisols, and Vertisols. The ecoregion contains minor species such as live oak, laurel oak, and Spanish moss that are generally not found in the more northerly regions. The bottomland forests have been cleared, and the region has been extensively modified for agriculture, flood control, and navigation. The levee system is extensive throughout the region (Daigle et al. 2006).

The Proposed Project is located in the Terrebonne River Basin, which covers approximately 3,705,863.09 acres (U.S. Geological Survey [USGS] 2018) in the southeastern portion of the state. The Terrebonne River Basin covers an area extending 120 miles from the Mississippi River on the north to the Gulf of Mexico to the south. It varies in width from 18 to 70 miles. The topography of the entire basin is lowland, and the land is subject to flooding except the natural levees along major waterways. The coastal portion of the basin is prone to tidal flooding and consists of marshes ranging from fresh to saline (Louisiana Department of Environmental Quality [LDEQ] 2016). According to the National Oceanic and Atmospheric Administration [NOAA], the Proposed Project action area is primarily freshwater and brackish marshes (NOAA 2018).

Additional habitats within the Proposed Project action area include estuarine and marine deep-water environments, estuarine and marine wetlands, palustrine scrub-shrub and forested wetlands, and freshwater ponds (U.S. Fish and Wildlife Service [USFWS] 2017). Riverine systems are found in the northern and western portions of the Proposed Project action area (USFWS 2017). No water quality issues were identified in the FINAL 2016 Louisiana Water Quality Inventory: Integrated Report (305(b)/303(d)) within the Proposed Project general vicinity, and waters within the general vicinity fully support swimming, boating, fishing, and oyster propagation (LDEQ 2016).

Although there is designated critical habitat (LA-4 and LA-5) for piping plover within Terrebonne and Lafourche Parishes along the barrier islands, it is located approximately 23 miles north of the Proposed Project. There is no designated critical habitat within the Proposed Project action area.

Designated essential fish habitat (EFH) for coastal migratory pelagic resources, red drum, reef fish, and shrimp is present within the Proposed Project (NOAA 2018). See the attachment map illustrating designated EFH.

a. *Waterbody*

If applicable. Name the body of water, including wetlands (freshwater or estuarine), on which the project is located. If the location is in a river or estuary, please approximate the navigable distance from the project location to the marine environment.

Wonder Lake, Lake Bully Camp, and numerous bayous connect to Terrebonne Bay and Timbalier Bay. Palustrine and estuarine wetlands and marine deep-water environments occur throughout the Proposed Project action area. Freshwater ponds and riverine systems are also present (USFWS 2017). Please see attachment map illustrating the NWI dataset.

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.

LA 665 runs through the heart of the PWMA, and Point Farm Road provides access to Point Farm. There is also a headquarters facility, a public primitive campground, and two observation towers located on the PWMA. Additionally, there are two boat launches on the PWMA. The first is the Grand Bayou boat launch, which provides access to the St. Louis Canal and into the Grand Bayou #1 management unit. The other is the Island Road Launch, which provides access to the Point-aux-Chenes Unit (LDWF 2014).

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.

The Proposed Project action area is located within estuarine and marine systems that could provide suitable environments for seagrass and other marine vegetation (Love et al. 2013; USFWS 2017); however, the action area is located outside of mapped distributions of seagrass (Love et al. 2013; NOAA 2018). Therefore, surveys for seagrass and other marine vegetation are not scheduled for the Proposed Project.

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.

The Proposed Project action area is located within estuarine and marine systems that could provide suitable environments mangroves, as indicated by mapped distributions conducted in 2006 by USGS (Love et al. 2013). However, aerial imagery (Google Earth Imagery 2016) and spatial data available from NOAA (2018) do not show mangroves in the Proposed Project action area. Therefore, surveys for mangroves are not scheduled for the Proposed Project.

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.

The Proposed Project action area is located outside of mapped distributions and known locations of corals (Love et al. 2013; NOAA 2018). Therefore, surveys for these resources have not been conducted for this area, nor are they scheduled for the Proposed Project.

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.).

The Point Farm is a 1,000-acre tract planted mostly in bottomland hardwood species. The property also has a dove field that is managed to provide forage for a large host of birds, including doves (LDWF 2014). Herbaceous habitats also occur in the extreme northern portions of the Proposed Project action area.

g. *Marine Mammals*

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

The West Indian manatee and bottle nose dolphin have the potential to occur within the general area of the Proposed Project. The Proposed Project action area could host suitable foraging habitats (Love et al. 2013; LDWF 2014; USFWS 2017) with sufficient connectivity to the Gulf, and this habitat could attract marine mammals (Google Earth Imagery 2016); however, available data indicate no occurrences of manatee have been recorded in this area or in the nearby vicinity (LDWF 2018; NatureServe 2016), but dolphins are known to occur in the area (NOAA Fisheries 2016a).

E. Project Description

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

The construction schedule has not yet been set and would be determined during final project design. Construction of the Proposed Project elements vary, but similar project activities would typically take 12 to 18 months to complete. Construction methods for the discrete Proposed Project elements could overlap to varying degrees depending upon the constructed elements.

II. *Describe the Proposed Action: 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. 3. 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.*

LDWF is proposing to develop four discrete recreation enhancements on lands owned and managed by LDWF in an effort to enhance recreational experiences of public users in the Point-aux-Chenes WMA. These elements are detailed below.

Pirogue Pullovers
Three new pirogue pullover structures would be constructed across the Morganza to the Gulf Hurricane Protection Reach of the J-2 Levee. These pullovers would be located in the Montegut and Point-aux-Chenes Units of the WMA, but within the designated limited access area (LAA). Adjacent to each pullover, two small wooden piers measuring 4' x 8' are also proposed on either end of each pullover. Pullovers would typically consist of an aluminum or other light-weight material framework that could be used to ease the effort of pulling non-motorized boats (pirogues) over the levee. Local fill material would be used on both sides of the levee at both pullover locations. A winch system would be installed on the western-most pullover to aid boaters in hauling their equipment over the levee, depending on site conditions. Because this levee is still under construction and would need continuous maintenance, these structures would be designed for relatively simple installation and dismantling for levee maintenance events.

Pirogue Launch
A new pirogue launch site would be constructed into the Montegut Unit of the WMA, but also within the designated LAA near the south end of the town of Montegut. Primary land access to the site would be through Wilderness Street (public roadway) in Montegut. Features would include the following:
• A new 20-foot-wide × 270-foot-long graveled access road. This access road would extend eastward from Wilderness Street to a new graveled parking lot. This would require clearing approximately 3,240 square feet of wooded upland area along the new access road.
• A 1.5-acre (200 feet wide × 320 feet long) graveled parking lot within the WMA boundary. This area is vegetated and would be cleared prior to construction.
• A bridge over the Montegut canal and levee into the adjacent marsh. The bridge would be a 20-foot-wide × 290-foot-long bridge and pier system over the existing Montegut Canal that would extend up and over the levee to open water east of the levee. At the east end of the bridge, a new pier would be constructed for hunters and anglers to dock their pirogues. This pier would be 6 feet wide, oriented north to south, extend 100 feet perpendicular of the main bridge, and then continue 44 feet east on each edge of the perpendicular section. The construction of the bridge would be fiberglass grating supported by 116 4" x 6" timber piles.

Fishing Piers at Water Control structures
New pier-supported docks and articulated concrete block walkways would be constructed at two locations in the LAA of the Montegut Unit. These new features would be co-located with existing water control structures along the J-2 Levee. At both sites, new 96-foot-long × 8-foot-wide docks supported by 12-inch diameter, 30-foot-long timber piles would be constructed on each side of the existing water control structure (totaling 4 pier-supported docks at each site) as shown in Appendix E, Figure E-6. New 8-foot-wide articulated concrete block walkways would be extended to the new docks from the existing walkways on top of the J-2 Levee. The new concrete block walkways would range from 80 to 120 feet in length.

Public docks would be constructed adjacent to water control structures at five other locations in the WMA. The Proposed Project would construct four new docks at each of the five locations, 20 feet from each water control structure, creating a total of 20 docks built for use by anglers. Preliminary plans are shown in Appendix E, Figure E-7. All of the docks would be 8 feet wide, and range from 50 to 120 feet long. The docks would be constructed using a fiberglass grating as deck material, and elevated on 12-inch diameter, 30-foot-long timber pile supports.

Please see attachment below for the remainder of this section.

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

a. *If applicable, Overwater Structures (Place your answers to the following questions in the box below.)*

i. *Is the proposed use of this structure for a docking facility or an observation platform?*

ii. *If no, is this a fishing pier? Public or Private? How many people are expected to fish per day? How do you plan to address hook and line captures?*

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 (sqft)?*

Pirogue Pullover: Raised timber piers 4 feet wide × 8 feet long. Bridge over Montegut Canal: 20 feet wide × 290 feet long. Two Docking Piers at Montegut Canal: 6 feet wide, oriented north-south, extend 100 feet perpendicular to the main bridge/pier, and then continue 44 feet east. Four pier-supported docks: 96 feet long × 8 feet wide. Walkways: 8 feet wide and range from 80 to 120 feet long. 20 docks: 8 feet wide and would range from 50 to 120 feet long. Three new boat docks/piers at the Island Road Boat Launch, 4 feet wide x 32 feet long.

b. *Pilings & Sheetpiles (What type of material is the piling or sheetpiles? What size and how many will be used? Method used to install: impact hammer, vibratory hammer, jetting, etc.?)*

Pilings: A total estimated 778 timber piles for all recreation enhancements consisting of 646 12-inch timber piles and 132 4-inch x 6-inch timber piles would be used in construction of numerous fishing piers and docks.

Sheet pilings: Pointe-aux-Chenes Island bulkhead replacement (370 linear feet of bulkhead, made of 12-inch wide interlocking vinyl sheet piles (~370 piles))

Daily duration of pile driving activities is estimated at 4 hours of continuous hammer time in a workday for timber structures and 8 hours of continuous hammer time per day for the sheet pile structures, with 54 days of total continuous pile driving activity. Piles will likely be driven using a barge-mounted impact hammer system.

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.)*

No marinas or boat slips are proposed.

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.)*

Island Boat Launch Renovation (one ramp replacement: concrete boat ramp, measuring 32 feet × 56 inches × 7 inches, to be constructed with pre-fabricated Waskey concrete panels)

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.*

This Proposed Project does not involve shoreline armoring.

f. *Dredging or digging (Provide details about dredge type (hopper, cutterhead, clamshell, etc.), maximum depth of dredging, area (ft^2) to be dredged, volume of material (yd^3) 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.*

Dredging for the Island Boat Launch Renovation: dredge out silted-in access canal (approximately 3,000 feet) along the Island Road. Spoils would be used in-water to build up above-water earthen terraces adjacent to excavated areas. Earthen terraces would have 50-foot gaps between them.
Dredging would be conducted using standard dredging methods, which typically include a bucket-style dredge or hydraulic dredge depending on site conditions and amount of material to be moved. Dredge locations are not typically along the shoreline, therefore dredges are anticipated to be barge-mounted units. Dredge spoils would typically be deposited in-water adjacent to the dredging location. Dredge spoils could be used as backfill behind bulkheads in some areas depending on site needs and conditions. Dredge spoils may also be piled up above the existing waterline to form earthen terraces where appropriate.

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.)*

No blasting would be necessary or allowed during construction.

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), 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.*

No artificial reefs are present (LDWF 2013) nor proposed for the Proposed Project.

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)).*

The Proposed Project would enhance access for fishing within the PWMA. This would include line and hook from boats, docks, piers, or banks within the PWMA.

F. NOAA Species & Critical Habitat and Effects Determination Requested

1. *List all species, critical habitat, proposed species and proposed critical habitat that may be found in the action area.*

2. *Attach a separate map identifying species/critical habitat locations within the action area.*

For information on species and critical habitat under 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)	**DETERMINATION** (see definitions below)
Green Sea Turtle (T)		Marine	May Affect, Likely to Adversely Affect
Loggerhead Sea Turtle (T)		Marine	May Affect, Likely to Adversely Affect
Hawksbill Sea Turtle (E)		Marine	May Affect, Likely to Adversely Affect
Leatherback Sea Turtle (E)		Marine	May Affect, Likely to Adversely Affect
Kemp's Ridley Sea Turtle (E)		Marine	May Affect, Likely to Adversely Affect
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate

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 = 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 = 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.

Critical Habitat Destruction or Adverse Modification = Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.

G. USFWS Species & Critical Habitat and Effects Determination Requested

1. *List all species, critical habitat, proposed species and proposed critical habitat that may be found in the action area.*
2. *Attach a separate map identifying species/critical habitat locations within the action area.*

For information on species and critical habitat under USFWS jurisdiction, visit http://www.fws.gov/endangered/species/.

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)	**DETERMINATION** (see definitions below)
Hawksbill sea turtle		Terrestrial	No Effect
Kemp's Ridley		Terrestrial	No Effect
Leatherback sea turtle		Terrestrial	No Effect
Loggerhead sea turtle		Terrestrial	No Effect
Piping plover		Select One	May Affect, Not Likely to Adversely Affect
Red knot		Select One	May Affect, Not Likely to Adversely Affect
West Indian manatee		Select One	May Affect, Not Likely to Adversely Affect
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
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Select One		Select One	Select Most Appropriate
		Select One	Select Most Appropriate
		Select One	Select Most Appropriate

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 = 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 = 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.

Critical Habitat Destruction or Adverse Modification = Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.

H. Effects of the proposed project to the species and habitats

I. *Explain the potential beneficial and adverse effects to each species listed above (Describe what, when, and how the species will be impacted and the likely response to the impact. Be sure to include direct, indirect, and cumulative impacts and where possible, quantify effects. If species are present (or potentially present) and will not be adversely affected describe your rationale. If species are unlikely to be present in the general area or action area, explain why. This justification provides documentation for your administrative record, avoids the need for additional correspondence regarding the species, and helps expedite review.)*

The Proposed Project would have No Effect on the following species: terrestrial life stages of the hawksbill, Kemp's ridley, leatherback, and loggerhead sea turtles. This is based on the assumption that these species would not occur in the Proposed Project action area based on the absence of suitable nesting beach habitats and no known nesting occurrences have been documented within the general vicinity (Love et al. 2013; NatureServe 2016; NOAA 2018).

The Proposed Project May Affect, Likely to Adversely Affect the following species: marine life stages of the green, loggerhead, hawksbill, leatherback and Kemp's ridley sea turtles.The sea turtle species listed above may occur in nearshore or inshore estuarine waters that contain seagrass or other submerged or emergent vegetation used as forage or that may harbor prey species (NOAA Fisheries 2018). Small patches of seagrass that may serve as foraging habitat may be present within the Proposed Project action area and it is located within the known ranges of these sea turtle species (LDWF 2018; NatureServe2016). The Proposed Project's in-water work of boat docks, piers, bulkhead and dredging may include the use of a bucket-style dredge or hydraulic dredge and an impact hammer for pile driving. These activities may result in temporary increases in turbidity and construction noise that may result in temporary avoidance of the Proposed Project area. However, piers are located toward the interior of the WMA that is surrounded by wetlands thus lowering the probability of hook or snagging. Sea turtle BMPs will be implemented due to in-water impact pile driving.

Please see attachment for remainder of section.

II. *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 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 Proposed Project action area is located outside designated critical habitat; therefore, No Effects to critical habitat would occur.

I. Actions to Reduce Adverse Effects

I. *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.)*

Species-specific BMPs from the Final PDARP/PEIS (DWH Trustees 2016:Section 6, Appendix A) that would be incorporated into the Proposed Project are included as an attachment.

Additionally, all individuals (such as construction workers) working on the Proposed Project would be provided with information on general awareness of any federally protected species that have the potential to occur in the Proposed Project action area. Seasonal avoidance measures will be implemented when practicable. If work must be conducted when these species are present, certain activities may be restricted or modified to reduce disturbance of these species (see attached BMPs).

The implementing trustee will implement and enforce approved BMPs listed in the attachment to avoid and minimize impacts to species listed in Sections F and G. Continued coordination of BMPs will occur during the final design phase.

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.)*

Designated critical habitat is not present within the Proposed Project. Therefore, no impacts to critical habitat would occur as a result of the proposed construction of recreational features, and no additional conservation measures are proposed other than the construction BMPs listed in the attachment below.

J. 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

Is your activity likely to impact 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	
☑	☐	*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) *Building or enhancing areas for water-related recreational use or fishing opportunities (e.g. fishing piers, bridges, boat ramps, marinas)*
☑	☐	*f) Aquaculture*
☐	☑	*g) Dredging or in-water construction activities to change hydrologic conditions or connectivity, create breakwaters and living shorelines, etc.*
☑	☐	*h) Restoration of barrier islands, levee construction or similar projects*
☑	☐	*i) Fresh-water river diversions*

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

Please refer Section E Project Description and continued description in the attachment for construction details of the Proposed Project. The in-water construction activities could impact the quality of marine or estuarine waters from pile driving, dredging, and installing bulkheads. Construction activities may also generate impulsive noise sources that could result in temporary shifts in marine mammal behaviors (NOAA Fisheries 2016b).

IV. Are any measures planned to mitigate potential impacts to marine mammals? If yes, provide text in box below. ☐ NO ☑ YES

The implementing trustee will implement and enforce the Standard Manatee Conditions BMPs, NMFS's Measures for Reducing Entrapment Risk to Marine Mammals, and NMFS's Vessel Strike Avoidance Measures as listed in the attachment to avoid and minimize impacts to manatees and bottlenose dolphins. Continued coordination of BMPs will occur during the final design phase.

K. 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**

L. Migratory Birds

Identify the species anticipated in the action area and behaviors (breeding, roosting, foraging) anticipated during project implementation. You may list similar species on a single line and categorize by type (e.g., Wading birds - great blue heron, snowy egret, reddish egret). If species are present and impacts to individuals or habitat could occur, identify avoidance and minimization measures to prevent incidental take.
Incidental take of Migratory Birds cannot be authorized. Use additional tables on the next page if needed.

I.

Species/Species Group	Behavior	Species/Habitat Impacts and Conservation Measures to Minimize Impacts
American Golden-Plover	non breeder	The Proposed Project area is located within a region that includes the following birds of conservation concern (USFWS 2018). During the Proposed Project design phase, coordination with the USFWS and the state trust resource agency would occur to site and design Proposed Project features to avoid or minimize impacts to migratory bird nesting habitats or important feeding and loafing areas. If vegetation clearing is required, it would take place outside of the migratory bird nesting season (approximately mid-February through mid-September) or a qualified biologist would inspect the area for active nests. If no active nests are found, vegetation may be removed. If active nests are found, vegetation may be removed after the nestlings successfully fledge. If Proposed Project activities must occur during this time-frame and breeding, nesting, and fledging birds are present, the state trust resource agency would be contracted to obtain the most recent guidance to protect nesting birds or rookeries, and their recommendations would be implemented.
American Oystercatcher	breeder	
Audubon's Shearwater	non breeder	
Bald Eagle	breeder	
Black Skimmer	breeder	
Bonaparte's Gull	non breeder	
Bridled Tern	non breeder	
Brown Pelican	breeder	
Buff-Breasted Sandpiper	non breeder	
Clapper Rail	breeder	
Common Loon	non breeder	
Common Tern	non breeder	
Double-Crested Cormorant	breeder	
Great Black-Backed Gull	non breeder	
Gull-Billed Tern	breeder	
Henslow's Sparrow	non breeder	
Herring Gull	breeder	
Kentucky Warbler	breeder	
King Rail	breeder	
Le Conte's Sparrow	non breeder	
Least Tern	breeder	
Lesser Yellowlegs	non breeder	
Long-Billed Curlew	non breeder	
Magnificent Frigatebird	non breeder	
Marbled Godwit	non breeder	
Nelson's Sparrow	non breeder	

M. Migratory Birds

Continuation page if needed.

II.	SPECIES/SPECIES GROUP	BEHAVIOR	SPECIES/HABITAT IMPACTS and CONSERVATION MEASURES TO MINIMIZE IMPACTS
	Northern Gannet	non breeder	
	Pomarine Jaeger	non breeder	
	Prothonotary Warbler	breeder	
	Red-Breasted Merganser	non breeder	
	Red-Headed Woodpecker	breeder	
	Red-Necked Phalarope	non breeder	
	Reddish Egret	breeder	
	Ring-Billed Gull	non breeder	
	Royal Tern	breeder	
	Rusty Blackbird	non breeder	
	Seaside Sparrow	breeder	
	Semipalmated Sandpiper	non breeder	
	Short-Billed Dowitcher	non breeder	
	Sooty Tern	breeder	
	Sprague's Pipit	non breeder	
	Surf Scoter	non breeder	
	Swallow-Tailed Kite	breeder	
	Whimbrel	non breeder	
	White-Winged Scoter	non breeder	
	Willet	breeder	
	Wilson's Plover	breeder	
	Wilson's Storm-Petrel	non breeder	
	Wood Thrush	breeder	
	Yellow Rail	non breeder	

N. Best Practices

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 pratices you'll be using in your project.

PDARP/PEIS best practices that would be incorporated into the Proposed Project are attached.

O. Submitting the BE Form

NMFS ESA § 7 Consultation

We request that all ESA §7 consultation requests/packages be submitted electronically to: **Christina.Fellas@noaa.gov**

Questions about consultation status may be directed to the email address above or

by phone: Christy Fellas: 727-551-5714

USFWS ESA § 7 Consultation

We request that all consultation requests/packages to USFWS be submitted electronically to: **Ashley_Mills@fws.gov**.

You will be notified when we receive your Biological Evaluation. 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 send your Biological Evaluation to the appropriate Field Office to conduct consultation.

Questions about consultation status may be directed to the email address above or by phone:
Ashley Mills: 812-756-2712

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.

Are you using this form to request approval for use of NMFS PDCs for this project? ○ Yes ◉ No

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

- ☐ Project is designed to avoid techniques and locations listed in the oyster reef creation and enhancement PDCs 1.a-1.e.
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Construction Conditions (PDC 2.a)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.b)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.c)
- ☐ In Gulf sturgeon critical habitat, oyster reef creation and enhancement occurs only on existing shell substrata or relic reef locations (PDC 2.d)
- ☐ Cultch material is free of debris and contaminants (PDC 2.e)
- ☐ Fresh shell has been properly aged or quarantined before being deployed (PDC 2.f)
- ☐ Cultch material is placed in a manner to minimize disturbance of sediment (PDC 2.g)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDC 2.h)
- ☐ Plan/drawings for intermittent breaks between oyster reef segment has been provided (2.i)
- ☐ Spill prevention and response plan has been developed (2.j)
- ☐ Design and materials used avoid entanglement and entrapment risks for ESA-listed species (2.k)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Marine Debris Removal ○ Yes ◉ No

- ☐ This project is designed to avoid techniques and locations listed in the marine debris removal PDCs 1.a-1.c
- ☐ All on-water operations shall take place during daylight hours (PDC 2.a)
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Conditions (PDC 2.b)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.c)
- ☐ Project personnel have been notified of procedures if approached by a marine mammal or sea turtle (PDC 2.d)
- ☐ Trash and debris will be disposed of at an upland location (PDCs 2.e)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Construction of Living Shorelines

○ Yes ◉ No

- ☐ This project is designed to avoid techniques and locations listed in the living shoreline PDCs 1.a-1.h
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Conditions (PDC 2.a)
- ☐ All in-water work activities will conducted during daylight hours (PDC 2.b)
- ☐ Piles for navigation of public safety purposes are less than 24" diameter and non-metal if impact hammer used (PDC 2.c)
- ☐ Spill prevention and response plan has been developed (2.d)
- ☐ Fill material is not sourced using hopper dredge or from sea turtle, Gulf sturgeon or smalltooth sawfish critical habitat and in-water borrow sites do not impact turtle nesting beaches (PDC 2.e)
- ☐ Design and materials do not create entrapment or entanglement risks to ESA-listed species and do not block migration (PDC 2.f)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.g)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDC 2.h)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.i)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Marsh Creation and Enhancement

○ Yes ◉ No

- ☐ Project is designed to avoid techniques and locations listed in the marsh creation PDCs 1.a-1.f
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Conditions (PDC 2.a)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.b)
- ☐ All in-water work activities will be conducted during daylight hours (PDC 2.c)
- ☐ Spill prevention and response plan has been developed (PDC 2.d)
- ☐ Fill material is not sourced using hopper dredge or from sea turtle, Gulf sturgeon or smalltooth sawfish critical habitat and in-water borrow sites do not impact turtle nesting beaches (PDC 2.e)
- ☐ Design and materials do not create entrapment or entanglement risks to ESA-listed species and do not block migration (PDC 2.f)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.g)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDCs 2.h)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Construction of Non-Fishing Piers

◯ Yes ◉ No

- ☐ This project is designed to avoid locations listed in the non-fishing piers PDCs 1.a
- ☐ Spill prevention and response plan has been developed (PDC 2.a)
- ☐ Design and materials do not create entrapment or entanglement risks to ESA-listed species and do not block migration (PDC 2.b)
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Construction Conditions (PDC 2.c)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.d)
- ☐ Follow Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat (PDC 2.e)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.f)
- ☐ Follows methods and timing for pile driving (2.g)
- ☐ Follows construction sequencing and avoids propwashing (PDC 2.h)
- ☐ Water depth will not be altered (PDC 2.i)
- ☐ Lighting specifications are incorporated for piers on or adjacent to sea turtle nesting beaches (PDC 2.j)
- ☐ Follows educational and fishing signage requirements (PDC 2.k)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDC 2.l)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

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

Name of person(s) completing this form:

Date form completed:

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

BIOLOGICAL EVALUATIONS FORM ATTACHMENTS

BIOLOGICAL EVALUATION FORM CONTINUATION SHEET

Section E.II. Describe the Proposed Action (continued)

Island Road Boat Launch Renovation

Repairs would be conducted at the existing Pointe-aux-Chenes Island Road Boat Launch to improve public user access. Boat launch repairs would include:

- New concrete boat launch/ramp
- Replacement to the bulkhead surrounding the parking lot (approximately 370 linear feet)
- Three new boat docks/piers attached to the boat ramp and parking lot
- New parking lot lighting
- Dredge out silted-in access canal (approximately 3,000 feet) along the Island Road. Spoils would be beneficially placed in water to construct marsh terraces. Terraces would have 50-foot gaps between them.

The NRCS Soil Survey for Terrebonne and Lafourche Parishes, Louisiana (U.S. Department of Agriculture [USDA] 2018) identifies nine soil map units where construction would occur within the Proposed Project area. The expected soil varieties are gently-sloping, soft substrates predominantly composed of silt, clay, and muck, and include: Aquents, dredged, 1 to 5 percent slopes, occasionally flooded (ATB); Bancker muck, slightly saline, tidal (BNA); Cancienne silty clay loam, 0 to 1 percent slopes, occasionally flooded (CeA); Clovelly muck, slightly saline, tidal (CKA); Clovelly muck, very slightly saline, tidal (CLA); Fausse clay, 0 to 1 percent slopes, frequently flooded (FAA); Lafitte-Clovelly association, 0 to 0.2 percent slopes, very frequently flooded (LA); Lafitte muck, slightly saline, tidal (LFA); and Schriever clay, 0 to 1 percent slopes, occasionally flooded (SrA).

Construction Methodology

The sections below describe how similar Proposed Project elements would likely be constructed. Construction of the Proposed Project would include use of standard construction and earth-moving equipment such as bulldozers, excavators, trucks, backhoes, cranes, barges, fork lifts, generators, and pile drivers.

Piers, Docks, and Pilings

Planned piers and docks would be constructed on treated timber, and pile tops would typically be capped with plastic. Piers and docks would be supported on pairs of 12-inch diameter, 30-foot-long timber pilings spaced approximately 8 feet apart, with the exception of the four 4’ x 8’ piers near the pirogue pullovers and the pier/bridge structure for the pirogue launch, which would be constructed using a total of 132 4-inch x 6-inch timber piles that are each 20 feet long. Cumulative construction for large piers built at the Island Road boat launch and at the five water control structures would require approximately 646 timber piles. Timber pilings are typically set in place by a crane or boom and driven into place with using an impact pile hammer (vibratory hammers are typically not used on timber displacement piles). At an estimated hammer energy rating of 52,000 ft-lbs used in soft substrates, it is predicted that approximately 200 strikes per pile (or less for smaller timber piles) would be required during construction. Duration of pile driving activities can vary widely based on a number of site-specific

variables, though it is likely, given a standard rate of 60 feet per day for large impact pile drivers, that approximately 16 timber piles could be driven within an assumed 8 hour workday, with 240 minutes of hammer operation per day. It is therefore estimated that cumulative timber pile installation for all proposed piers and docks would take approximately 47 days of sequential pile driving activity. However, it is anticipated that driving activity would likely be sequential within each smaller project site, requiring 1 to 7 days of sequential pile driving activity per site. The crane or boom and associated equipment would operate from the landward side where possible or staged on a barge. Pier and dock framing would likely be pressure-treated, marine-grade dimensional wood. Piers and docks are anticipated to be surfaced with fiberglass decking.

Pirogue Pullover Structures

Pullover structures would be constructed from lightweight aluminum (or similar material) and would consist of a cradled track on which to drag the pirogue. If place on natural soil, e.g., the levee, pullovers would require filling with native material (if suitable) or off-site fill to ease the grade at which the pullover rests. Pullovers situated on the levee would not be deeply anchored, in order to make them removable for levee maintenance.

Fill and Backfilling

Proposed Project elements requiring fill material such as the boat launch, or backfilling such as may be required for bulkheads, would use locally sourced material where appropriate. Standard construction equipment would be used for all excavation, moving, spreading, and compacting of fill material. Fill activities and fill material used at levee locations would be conducted by the Levee District and hauled in from a USACE-approved location.

Dredging and Dredge Spoils

Dredging would be conducted using standard dredging methods, which typically include a bucket-style dredge. Dredge locations are not typically along the shoreline, so dredges are anticipated to be barge-mounted units. Dredge spoils would typically be deposited in water in areas adjacent to the dredging location. Dredge spoils could be used as backfill behind bulkheads in some areas depending on site needs and conditions. Dredge spoils will also be piled up above the existing waterline to create marsh terraces. These earthen marsh terraces are expected to offset any wetland mitigation requirements of the Proposed Project and enhance boating access.

Clearing

Upland, shoreline, and aquatic vegetation would be removed only in areas required for construction. Cleared vegetation would be removed from the site and disposed of at an approved location. Debris and/or previously existing man-made material would be removed as needed and disposed of at an approved location.

Access Roads and Parking Areas

Access roads and parking areas would be graded and surfaced as appropriate to their use (asphalt, gravel, concrete). All rights-of-way would be obtained prior to construction. Vegetation would be removed from the rights-of-way as needed. These areas would be contoured to allow adequate drainage.

Bulkheads

Bulkhead construction for the Island road renovations will include 370 linear feet of interlocking 12-inch vinyl sheet piling placed immediately outside of the existing timber pile wall, which will remain. Vinyl sheeting will be driven into the sediment using an impact pile hammer system. Sheet piling would be installed in water, though due to the replacement bulkhead's proximity to land, installation may occur from the landward side if site conditions are suitable; otherwise, installation would occur from a boat- or barge-mounted impact hammer system. The finished bulkhead will include a combination of the existing timber pilings, new sheet pile wall, and backfill. Based on a hammer energy rating of 52,000 ft-lbs used in soft substrates, it is estimated that approximately 200 strikes per sheet pile would be required. The duration of pile driving activities can vary widely based on a number of site-specific variables, though given the aforementioned rate of 60 feet per day for large impact pile drivers, approximately 60 piles could be driven within an assumed 480 minute workday of hammer operation. At this rate, sheet pile installation for the bulkhead would take approximately 6-7 days of sequential pile driving activity.

Articulated Concrete Block Walkways

Articulated concrete blocks would be used to create pedestrian walkways at some of the Proposed Project locations. These features would be a matrix of individual concrete blocks placed together to form an erosion-resistant overlay. The flexible, interlocking matrix is formed from concrete blocks of uniform size, shape, and weight. Each block is interconnected with adjacent blocks by a series of cables. These walkways would be designed for pedestrian traffic but prevent erosion and allow vegetation to grow throughout the entire system. The walkways would likely be transported along the levee road to each site, or by barge if no road is available, and set in place by crane or boom. This task would not likely require notable vegetation removal because the articulated walkways are designed to mold to the existing topography. Minor cut/fill may be required to make the walkways pedestrian friendly.

Boat Launch

The boat launch would be constructed from prefabricated concrete panels laid in place by crane from the landward side of the boat ramp. Boat ramps would have a concrete apron supported with four 12-inch diameter timber pilings at the upper end to anchor the prefabricated boat ramp panels. Timber pilings would be driven sequentially using an impact hammer system, assuming the same specifications as aforementioned pier pile driving, and would be estimated to take less than a day. Concrete-filled steel bollards would be installed at either side of the boat ramp to prevent driving off the edge.

Please see the attached map of the Proposed Project.

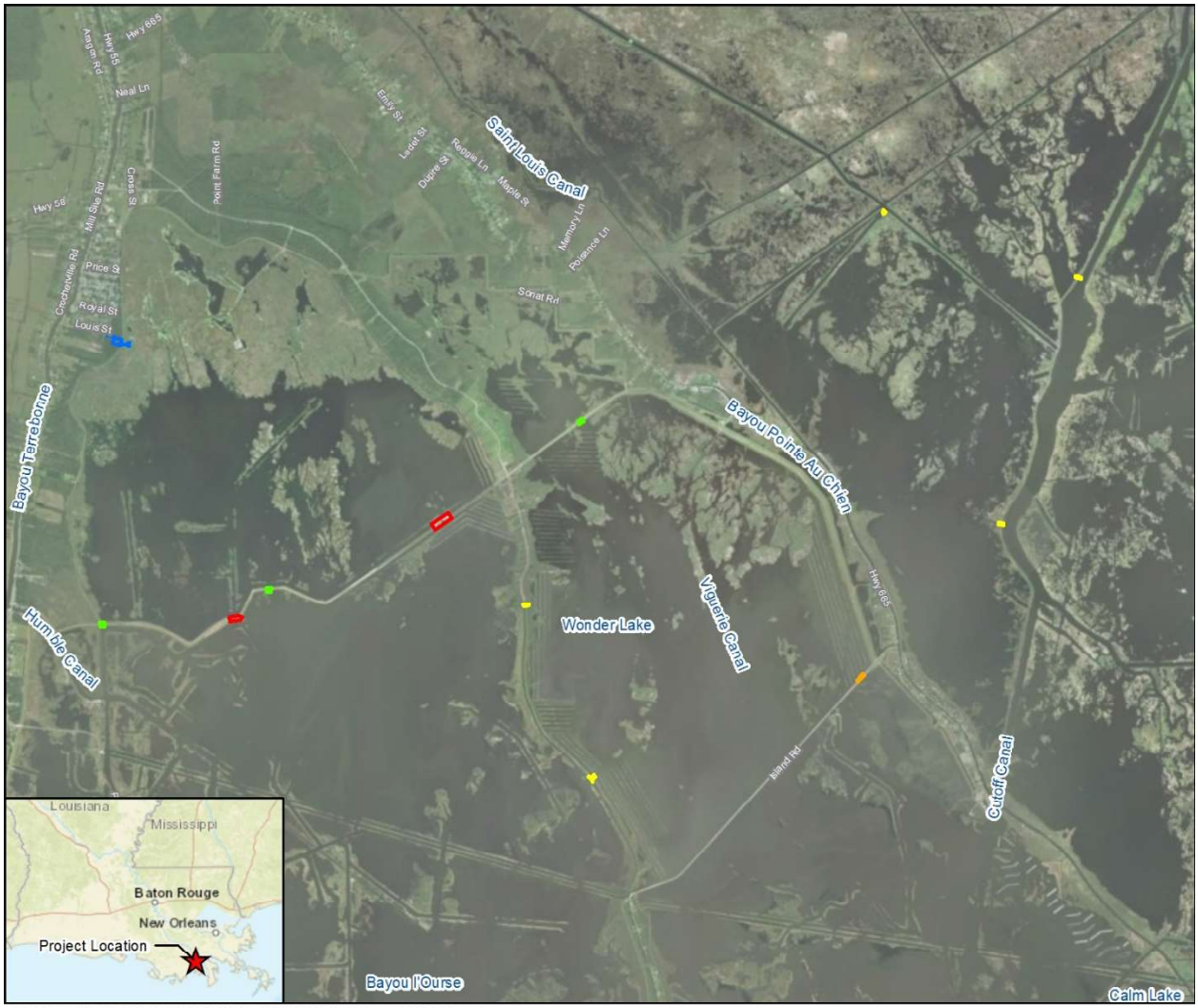
Section H.I. Effects of the proposed project to the species and habitats (continued)

The Proposed Project May Affect, Not Likely to Adversely Affect the following species: the West Indian manatee, piping plover, and red knot.

The piping plover and red knot may use habitats within the Proposed Project area during wintering and migratory periods for foraging, roosting, and loafing. The Proposed Project construction activities may cause temporary direct noise impacts to these species that may resulting temporary fleeing or

avoidance of the area. These impacts are anticipated to be localized and temporary in duration. Although piping plovers and red knots have been documented in areas utilized for recreation, indirect effects from increased recreation activity could include temporary fleeing of the area if individuals are approached. Piping plover and red knot BMPs would be implemented to minimize impacts to these species.

Habitats suitable to support marine vegetation may be present within the Proposed Project action area that could attract the West Indian manatee. However, no known occurrences of this species has been documented within the Proposed Project action area (LDWF 2018; NatureServe 2016). The same localized, temporary impacts of turbidity and noise are anticipated from in-water pile driving via impact hammer and excavation via bucket dredge. These may result in temporary avoidance of the Proposed Project action area. Standard Manatee Condition BMPs will be implemented to reduce and avoid potential impacts to this species.



POINTE-AUX-CHENES RECREATIONAL USE ENHANCEMENT

PROJECT DETAIL MAP
TERREBONNE PARISH, LOUISIANA

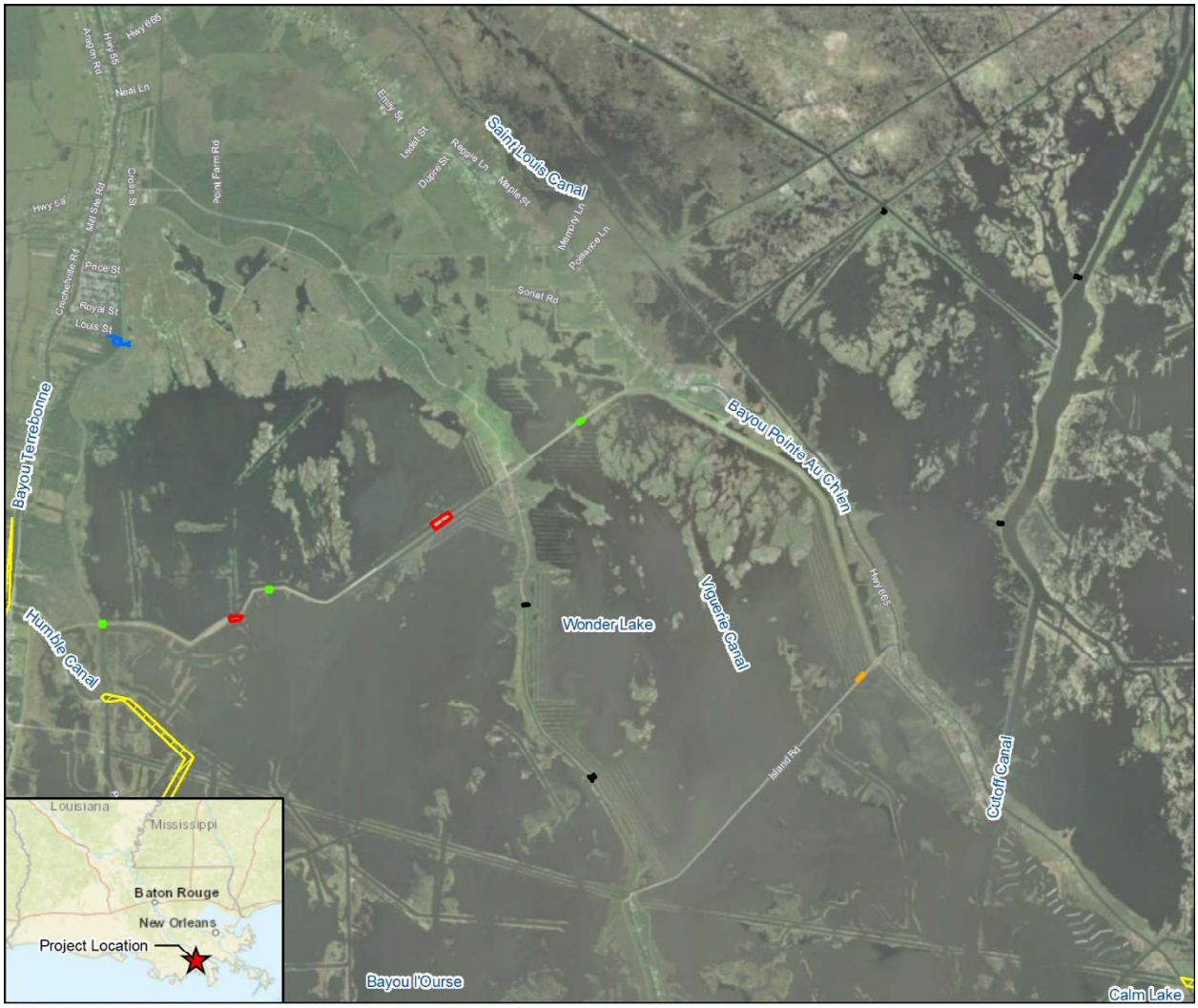
Proposed Alternative

- Access Improvement
- Pirogue Pullover
- Fishing Pier
- Island Road Boat Launch
- Pirogue Launch

1:85,000

Created By: JS
Project Number: 48078
Date: 3/19/2018
NAD 1983 StatePlane Louisiana South FIPS 1702 Feet

0 4,900 9,800 Feet
0 3,250 6,500 9,750 Feet



POINTE-AUX-CHENES
RECREATIONAL USE ENHANCEMENT
ESSENTIAL FISH HABITAT AND
USFWS CRITICAL HABITAT MAP
TERREBONNE PARISH, LOUISIANA

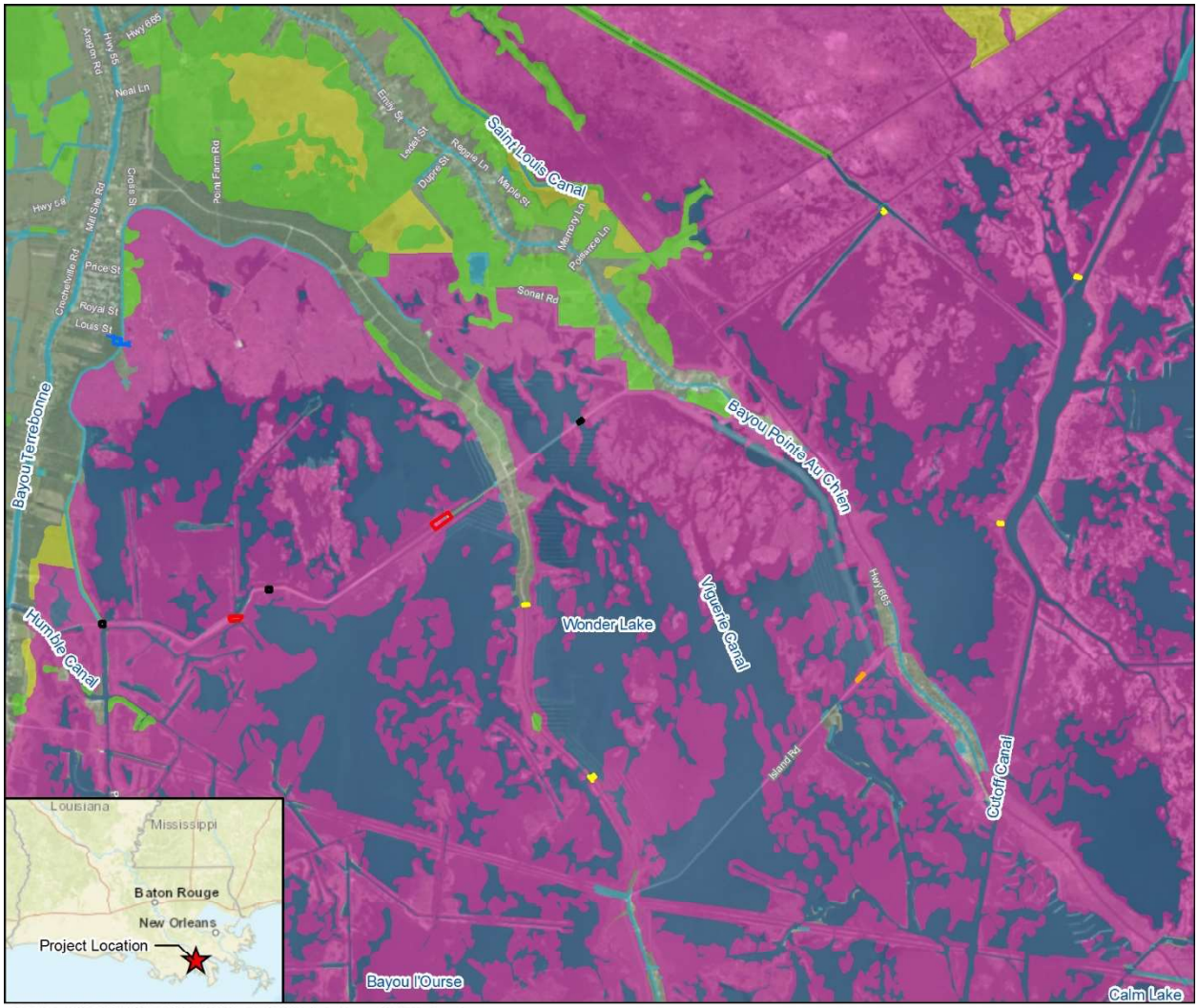
Proposed Alternative
- Access Improvement
- Pirogue Pullover
- Fishing Pier
- Island Road Boat Launch
- Pirogue Launch

Habitat Designation
- Essential Fish Habitat

1:85,000

Created By: JS
Project Number: 48078
Date: 5/3/2018
NAD 1983 StatePlane Louisiana South FIPS 1702 Feet

0 4,900 9,800 Feet
0 3,250 6,500 9,750 Feet



POINTE-AUX-CHENES
RECREATIONAL USE ENHANCEMENT
NWI MAP
TERREBONNE PARISH, LOUISIANA

Proposed Alternative
- Access Improvement
- Pirogue Pullover
- Fishing Pier
- Island Road Boat Launch
- Pirogue Launch

NWI Designation
- EstuarineWetland
- Emergent Wetland
- Forested/Shrub Wetland
- Marine Deepwater
- Freshwater Waterbody

1:85,000

Created By: JS
Project Number: 48078
Date: 5/3/2018
NAD 1983 StatePlane Louisiana South FIPS 1702 Feet

0 4,900 9,800 Feet
0 3,250 6,500 9,750 Feet

BEST PRACTICES FROM THE PDARP/PEIS

The following section is a direct excerpt from Section 6, Appendix A in Deepwater Horizon Oil Spill: Final Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental Impact Statement (DWH Trustees 2016).

Birds

Migratory Birds

Use care to avoid birds when operating machinery or vehicles near birds.

During the project design phase, coordinate with the USFWS and the state trust resource agency to site and design projects to avoid or minimize impacts to migratory bird nesting habitats or important feeding/loafing areas.

Avoid working in migratory bird nesting habitats during breeding, nesting, and fledging (approximately mid-February through late August). If project activities must occur during this timeframe and breeding, nesting, or fledging birds are present, contact the state trust resource agency to obtain the most recent guidance to protect nesting birds or rookeries, and their recommendations will be implemented.

Conservation areas may already be marked to protect bird nesting areas. Stay out of existing marked areas.

If vegetation clearing is necessary, clear vegetation outside the migratory bird nesting season (approximately mid-February through late August) or have a qualified biologist inspect for active nests. If no active nests are found, vegetation may be removed. If active nests are found, vegetation may be removed after the nest successfully fledges.

Avoid driving over the natural organic material ("wrack") line or areas of dense seaweed, as these habitats may contain hatchlings and chicks that are difficult to see.

Install pointy, white piling caps on exposed pilings to prevent bird roosting on piers, docks, and marinas.

Piping Plover and Red Knot

Provide all individuals working on a 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.

Avoid working in designated critical habitat when piping plovers are present (approximately late July through mid-May) or important wintering sites for red knots when they are present (contact USFWS for red knot timeframes and habitats) to the maximum extent practicable.

If work must be conducted when birds are present, avoid working near concentrations of individuals or post avoidance areas to minimize disturbance.

For projects that result in large-scale habitat changes, coordinate early with USFWS to enhance or protect habitat features preferred by the species (inlet shoals, lagoons, washover fans, ephemeral pools, baysides, and mud flats). Do not remove sand from intertidal, sand, or mud flats.

Use dredged material to enhance adjacent emerged and submerged shoals and bayside habitats within and adjacent to project areas.

Minimize vegetation planting in preferred habitats and avoid removal of wrack year-around along the shoreline.

During recreational use, enforce leash or "no pet" policies in critical or important habitats.

Mammals

Manatee

In Louisiana, follow the most recent version of the *Standard Manatee Conditions for In-water Activities*:

During in-water work in areas that potentially support manatees all personnel associated with the project should be instructed about the potential presence of manatees, manatee speed zones, and the need to avoid collisions with and injury to manatees. All personnel should be advised that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973. Additionally, personnel should be instructed not to attempt to feed or otherwise interact with the animal, although passively taking pictures or video would be acceptable.

All on-site personnel are responsible for observing water-related activities for the presence of manatee(s). We recommend the following to minimize potential impacts to manatees in areas of their potential presence:

- All work, equipment, and vessel operation should cease if a manatee is spotted within a 50-foot radius (buffer zone) of the active work area. Once the manatee has left the buffer zone on its own accord (manatees must not be herded or harassed into leaving), or after 30 minutes have passed without additional sightings of manatee(s) in the buffer zone, in-water work can resume under careful observation for manatee(s).

- If a manatee(s) is sighted in or near the project area, all vessels associated with the project should operate at "no wake/idle" speeds within the construction area and at all times while in waters where the draft of the vessel provides less than a four-foot clearance from the bottom. Vessels should follow routes of deep water whenever possible.

- If used, siltation or turbidity barriers should be properly secured, made of material in which manatees cannot become entangled, and be monitored to avoid manatee entrapment or impeding their movement.

- Temporary signs concerning manatees should be posted prior to and during all in-water project activities and removed upon completion. Each vessel involved in construction activities should display at the vessel control station or in a prominent location, visible to all employees operating the vessel, a temporary sign at least 8½ " X 11" reading language similar to the following: "CAUTION BOATERS: MANATEE AREA/ IDLE SPEED IS REQUIRED IN CONSRUCTION AREA AND WHERE THERE IS LESS THAN FOUR FOOT BOTTOM CLEARANCE WHEN MANATEE IS PRESENT". A second temporary sign measuring 8½ " X 11" should be posted at a location prominently visible to all personnel engaged in water-related activities and should read language similar to the following: "CAUTION: MANATEE AREA/ EQUIPMENT MUST BE SHUTDOWN IMMEDIATELY IF A MANATEE COMES WITHIN 50 FEET OF OPERATION".

- Collisions with, injury to, or sightings of manatees should be immediately reported to the Service's Louisiana Ecological Services Office (337/291-3100) and the Louisiana Department of Wildlife and Fisheries, Natural Heritage Program (225/765-2821). Please provide the nature of the call (i.e., report of an incident, manatee sighting, etc.); time of incident/sighting; and the approximate location, including the latitude and longitude coordinates, if possible.

Bottlenose Dolphin

For projects with any in-water construction activities, dredging, or wetland/barrier island creation and nourishment, follow the most current version of the NMFS Southeast Region's Measures for Reducing Entrapment Risk to Protected Species.

For projects that enhance recreational fishing opportunities (e.g., fishing pier enhancement / development), visibly post the NMFS Southeast Region's Dolphin-Friendly Fishing Tips and Don't Feed Wild Dolphins signs and other applicable protected species educational signs.

To reduce the risk associated with vessel strikes of protected species or related disturbance, follow the most current version of NMFS Southeast Region's Vessel Strike Avoidance Measures and Reporting for Mariners, revised February 2008.

For projects that enhance recreational and commercial vessel based activities, follow NMFS's Southeast

U.S. Marine Mammal and Sea Turtle Viewing Guidelines.

Other Marine Mammals

To reduce the risk associated with vessel strikes of protected species or related disturbance, follow the most current version of NMFS Southeast Region's *Vessel Strike Avoidance Measures and Reporting for Mariners*, revised February 2008.

Tortoises/Turtles

Sea Turtles—In Water

Implement the following guidelines: NMFS's *Sea Turtle and Smalltooth Sawfish Construction Conditions* (revised March 23, 2006), NMFS's *Measures for Reducing Entrapment Risk to Protected Species* (revised

May 22, 2012) and NMFS's *Vessel Strike Avoidance Measures and Reporting for Mariners* (revised February 2008).

Invasive Species

Develop and implement a Hazard Analysis and Critical Control Points (HACCP) plan to prevent and control invasive species. Use (ASTM E2590−08) or other version of HACCP or other similar planning tool.

Implement an Integrated Pest Management (IPM) approach to facility design, sanitation, and maintenance to prevent and control invasive and pest species.

Inspect sites, staging, and buffer areas for common invasive species prior to the onset of work. Map any invasive species detected and note qualitative or quantitative measures regarding abundance.

Implement a control plan, if necessary, to ensure these species do not increase in distribution or abundance at a site due to project implementation. Inspect sites periodically to identify and control new colonies/individuals of an invasive species not previously observed prior to construction.

Prior to bringing any equipment (including personal gear, machinery, vehicles, or vessels) to the work site, inspect each item for mud or soil, seeds, and vegetation. If present, clean the equipment, vehicles, or personal gear until they are free from mud, soil, seeds, and vegetation. Inspect the equipment, vehicles, and personal gear each time they are being prepared to go to a site or prior to transferring between sites to avoid spreading exotic, nuisance species.

Place and maintain predator-proof waste receptacles in strategic locations during project implementation to prevent an increase in predator abundance. For projects designed to enhance or increase visitor use, maintain predator-proof waste receptacles for the life of the project.

Have the appropriate state agency inspect any equipment or construction materials for invasive species prior to use.

Inspect and certify propagated or transplanted vegetation as pest and disease free prior to planting in restoration project areas.

General Construction Measures

Guidelines

Bubble Curtain Specifications for Pile Driving, as contained in the Florida Statewide Programmatic Opinion on page 270.

Protected Species

Provide all individuals working on a project with information in support of general awareness of and means to avoid impacts to protected species and their habitats present at the specific project site.

Site Maintenance and Conduct

Use the nearest, existing staging, access and egress areas, travel corridors, pathways, and roadways (including those provided by the state, local governments, land managers, trustee, or private property owner, with proper permissions) and do not create new staging areas, access (except dune walkovers) or egress, or travel corridors through dune habitats.

Minimize construction noise to the maximum extent practicable when working near protected species and their habitats.

Maintain or improve all lighting regimes. Methods include working during daylight hours only, prohibiting lighting on dune walkovers, and using wildlife-friendly lighting where lighting is necessary for human safety.

Post signs at kiosks, ramps, and piers to provide visitors with information to avoid and minimize impacts to protected species and their habitats while recreating. Develop signs in coordination with NMFS, USFWS, and the local state trust resource agency.

Supply and maintain containers for waste fishing gear to avoid fish and wildlife entanglement.

Land and Vegetation Protection

Develop and implement an erosion control plan to minimize erosion during and after construction and where possible use vegetative buffers (100 feet or greater), revegetate with native species or annual grasses, and conduct work during dry seasons.

Develop and implement a spill prevention and response plan, including conducting daily inspections of all construction and related equipment to ensure there are no leaks of antifreeze, hydraulic fluid, or other substances and cleaning and sealing all equipment that would be used in the water to rid it of chemical residue. Develop a contract stipulation to disallow use of any leaking equipment or vehicles.

Prohibit use of hazardous materials, such as lead paint, creosote, pentachlorophenol, and other wood preservatives during construction in, over or adjacent to, sensitive sites during construction and routine maintenance.

Where landscaping is necessary or desired, use native plants from local sources. If non-native species must be used, ensure they are noninvasive and use them in container plantings.

Wetland and Aquatic Resource Protection

Avoid and minimize, to the maximum extent practicable, placement of dredged or fill material in wetlands and other aquatic resources.

Design construction equipment corridors to avoid and minimize impacts to wetlands and other aquatic resources to the maximum extent practicable.

To the maximum extent possible, implement the placement of sediment to minimize impacts to existing vegetation or burrowing organisms.

When local conditions indicate the likely presence of contaminated soils and sediments, test soil samples for contaminant levels and take precautions to avoid disturbance of, or provide for proper

disposal of, contaminated soils and sediments. Evaluate methods prior to dredging to reduce the potential for impacts from turbidity or tarballs.

Perform maintenance of generators, cranes, and any other stationary equipment operated within 150 feet of any natural or wetland area, as necessary, to prevent leaks and spills from entering the water.

Designate a vehicle staging area removed from any natural surface water resource or wetland to perform fueling, maintenance, and storage of construction vehicles and equipment. Inspect vehicles and equipment daily prior to leaving the storage area to ensure that no petroleum or oil products are leaking.

Upon completion of construction activities, restore all disturbed areas as necessary to allow habitat functions to return. Create and manage public access developments to enhance recreational experience and educational awareness to minimize effects to habitat within wetland and shallow water areas and to the long-term health of related biological communities.

Use silt fencing where appropriate to reduce increased turbidity and siltation in the project vicinity. This would apply to both on land and in water work.

Make all efforts to reduce the peak sound level and exposure levels of fish to reduce the potential impact of sound on fish present in the project areas.

Use sound attenuation devices where practicable for pulse noise (impact hammers) to reduce peak sound pressure levels in the aquatic environment.

Stipulate the timing of activities to avoid impacts to spawning fish and eggs/larvae.

Use best practices to reduce turbidity, such as turbidity blankets, to reduce the potential impact of turbidity on finfish.

Screen water withdrawal pipes to minimize potential entrainment of fish from the withdrawal area. Have project proponents coordinate with NMFS to create an intake screen that would minimize potential impingement of fish.

FUTURE BEST PRACTICES

Best Practices for EFH Under MSFCMA

At time of publication, practices to avoid and minimize effects to EFH were under development. Please check the following webpage for EFH best practices that may be developed: http://sero.nmfs.noaa.gov/habitat_conservation/documents/sero_hazmat_efh_consultation_bmps_ver201612.pdf

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Marine Mammal Mitigation Measures for:
Montegut S1/S2 Access/PAC Fishing Piers project

NOAA NMFS, Southeast Regional Office
June 8, 2018

The title project is included in the Louisiana Trustee Resource Implementation Team's fourth Restoration Plan to enhance public access to natural resources for recreation following the *Deepwater Horizon* oil spill event. The project entails enhancing recreational experiences in the Point-aux-Chenes WMA by constructing new fishing piers/docks and bulkheads, among other things. A boat or barge-mounted impact hammer driving system will be used for construction activities. Bulkhead construction will include approximately 370 interlocking 12-inch diameter sheet piles. Fishing pier and dock construction will use an estimated total 778 timber piles, with 646 piles that are 12-inch diameter and 132 that are 6-inch. The daily duration of pile driving activities is estimated to be four hours of continuous hammer activities per day for timber piles and eight hours per day for sheet piles, with 54 days of total continuous pile driving activity.

The following are preventative measures to help minimize the potential for bottlenose dolphin behavioral harassment (i.e. *take*) from in-water work associated with impact hammer pile driving activities the title project. We recommend these best practices to minimize the potential for taking bottlenose dolphins during these activities; however, we recognize use of these measures cannot guarantee behavioral harassment will not occur. Implementation of these measures does not constitute compliance with the Marine Mammal Protection Act (MMPA). In the event of an unanticipated take, you should contact NMFS Office of Protected Resources immediately to provide notification of the incident and to work through the necessary steps to ensure MMPA compliance moving forward. It is NMFS' practice to support the continuation of ongoing activities, contingent upon implementation of agreed-upon avoidance measures, while NMFS acts on any such request; however, NMFS final recommendation will be dependent upon the nature and context of the incident. Please make sure the entire crew and construction team have read and understand these measures.

Preventative Mitigation Measures

1. Monitor within a 50 meter zone (e.g. shutdown zone) around impact hammer pile driving activities, <u>both</u> before and during pile driving, to help prevent behavioral harassment. Monitoring may be conducted by construction personnel, however, the personnel monitoring should have no other assigned tasks during monitoring periods. Pile driving activities include the time to install or remove a single pile or series of piles, as long as the time elapsed between uses of pile driving activity is no more than 30 minutes.
    a. <u>Pre-activity monitoring:</u> monitoring should take place at least 15 minutes prior to initiation of pile driving activity. Pile driving may start at the end of the 15 minutes if the observer has determined that the 50 meter shutdown zone is clear of marine mammals. A determination that the shutdown zone is clear should be made during a period of good visibility (i.e., the entire shutdown zone and surrounding waters is visible to the naked eye).

b. If a bottlenose dolphin(s) enters the shutdown zone during pile driving activities or pre-monitoring, all pile driving activities at that location should be halted or delayed, respectively. If activity is halted or delayed, it should not be resumed until either the: (1) animal has voluntarily left and has been visually confirmed beyond the shutdown zone; or (2) an additional 15 minutes of pre-monitoring is conducted without re-detection of the animal.

2. Before commencing impact pile driving activities, use soft start techniques to alert animals to the forthcoming activities.
    a. Soft start entails an initial set of strikes at reduced energy, followed by a 30 second waiting period, then two subsequent reduced energy strike sets.
    b. Soft start should be implemented at the start of each day's impact pile driving and any time following cessation of pile driving activities for 30 minutes or longer.

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 Protect 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.

A. Project Identification

Federal Action Agency: U.S. Fish and Wildlife Service

Additional Federal Action Agency: National Marine Fisheries Service

Agency Contact(s)

USFWS: Ashley Mills at 812-756-2712 and Ashley_Mills@fws.gov
NMFS: Christy Fellas at 727-551-5714 and Christina.Fellas@noaa.gov

I. *Implementing Trustee(s)*: Louisiana Department of Wildlife and Fisheries

II. *Contact Person*: Brady Carter

III. *Phone*: (225) 763-5504

Email: bcarter@wlf.la.gov

IV. *Project Name and ID# (Official name of project and ID number assigned by Trustees in DIVER)*: Rockefeller Piers and Rockefeller Signage

V. *NMFS Office (Choose appropriate office based on project location)*: NMFS Southeast Regional Office

USFWS Office (Choose or write in appropriate office based on project location): Louisiana Ecological Services Field Office (Lafayette)

VI. *Project Type #1*: Enhance Recreational Experiences

Project Type #2, if helpful: Enhance Public Access to Natural Resources for Recreational

VII. *TIG*: Louisiana TIG

Restoration Plan: Recreational Use

B. Project Location

I. Physical Address of action area (If applicable)

II. *State & County/Parish of action area*: Louisiana, Cameron and Vermilion Parishes

III. *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])*: 29.412470°N, 92.455701°W NAD83

IV. Township, range and section of the action area: Township 15 South, Range 4 West, Section 27; Township 16 South, Range 4 West, Section 11; Township 16 South, Range 4 West, Section 7

C. 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:
-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

Have any federal permits been applied for but not yet obtained, if so which ones and what is the permit number(s)? ☐ Yes ☑ No

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.

Deepwater Horizon Oil Spill Louisiana Trustee Implementation Group Restoration Plan and Environmental Assessment #4: Nutrient Reduction (Nonpoint Source) and Recreational Use

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

Name of Person Completing this Form:	Nicole Smolensky
Name of Project Lead:	
Date Form Completed:	01/23/2018
Date Form Updated:	04/23/2018

D. Description of Action Area

Attach a separate map delineating where the action will occur and where critical habitat, if any, is located. Map or describe all areas that may be directly or indirectly affected by the action. 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). If CH is not designated in the area, then map or describe any suitable habitat in the area.

The Proposed Project is located within the Rockefeller Wildlife Refuge (RWR) located in the southeastern portion of the Chenier Plain Region of southwestern Louisiana in Cameron and Vermilion Parishes. The RWR is 72,650 acres and is managed for public recreation including bird watching and fishing.

The Proposed Project is located in the Western Gulf Coastal Plain (34) Level III ecoregion and the Texas Louisiana Coastal Marshes (34g) Level IV ecoregion (Daigle et al. 2006). The following information was obtained from Daigle et al. (2006) unless otherwise indicated. The principal distinguishing characteristics of the Western Gulf Coastal Plain are its relatively flat topography and mainly grassland potential natural vegetation. Largely because of this flat land and relatively fertile soils, a higher percentage of the land is used for cropland than in bordering ecological regions. Urban and industrial land uses have expanded greatly in recent decades in some parts of the region, and oil and gas production is common. The Texas-Louisiana Coastal Marshes region is characterized by extensive freshwater and saltwater coastal marshes, few bays, and a lack of barrier islands. There are many rivers, lakes, bayous, tidal channels, and canals. The streams and rivers that supply nutrients and sediments to this region are primarily from the humid pine belt of Ecoregion 35. Soils are very poorly drained Histosols and Entisols with muck or clay surface textures. The region, called the Chenier Plain in Louisiana, is almost treeless. The cheniers, or narrow ridges paralleling the shoreline, rise to about 5 feet in elevation and occupy only about 3% of the region. Live oaks and hackberries are dominant canopy species on many of the ridges, with an understory of palmetto and prickly pear cactus. Extensive cordgrass marshes occur in the more saline areas with maidencane and sawgrass on fresh marshes. The estuaries and marshes support abundant marine life, supply wintering grounds for globally significant populations of ducks and geese, and provide habitat for small mammals and alligators. Brown shrimp and white shrimp are commercially important. Sport fishery species such as red drum, black drum, southern flounder, and spotted seatrout occur in the coastal bays (Daigle et al. 2006).

The RWR borders the Gulf of Mexico for 26.5 miles and extends inland toward the Grand Chenier Ridge, a stranded beach ridge 6 miles from the Gulf. The coastal marshes in the RWR occupy an elongated basin confined by the high Grand Chenier Ridge to the north and the lower sea rim beach to the south. Prior to major human-made landscape changes, freshwater reached this basin through precipitation and drainage from surrounding ridges, thus creating deep freshwater rush marshes near the chenier ridge. The rush marsh zone was vegetated primarily by bulrush (Scirpus californicus), giant cutgrass (Zizaniopsis miliacea), sawgrass (Cladium mariscus), and cattail (Typha sp.). Freshwater ponds in this zone contained various species of algae, frogsbit (Limnobium spongia), bladderwort (Utricularia macrorhiza), water pennywort (Hydrocotyle sp.), duckweeds (Lemna spp. and Spirodela spp.), and exotic water hyacinth (Eichhornia crassipes). Originally brackish (interior marsh zone) to saline (sea rim marsh zone) marshes occupied the lower two-thirds of the area, which was drained by dendritic tidal channels. A series of low salinity marsh ponds was situated at the inland extremities of the tidal marsh and supported widgeongrass (Ruppia maritima). The brackish interior marshes were densely vegetated with leafy-threesquare (Scirpus robustus) and wiregrass (Spartina patens), while the sea rim marshes contained saltgrass (Distichlis spicata), hogcane (Spartina cynosuroides), iva (Iva frutescens), and oystergrass (Spartina alterniflora). The distribution of vegetation zones that constitute major wildlife habitat types on the refuge has been altered considerably over the past 40 years due to the management of areas via water control structures and levees (LDWF 2014).

The average elevation of the RWR marshes is approximately 0.8 to 1.0 feet, NAVD 88. Normal tides are contained within the channels and canals, and the amount of water covering the marsh is governed by weather conditions, primarily precipitation and wind direction. While the average tidal fluctuation in the area is 1 foot, extremely high tides associated with southerly winds from storms flood the interior marshes at least once or twice a year, bringing in marine mud and saltwater. The introduction of saline mud creates a firmer marsh than is present in the Deltaic Plain because it prevents the formation of highly organic marsh peats. Creation of leveed impoundments on the refuge (beginning in 1954) has to some degree restricted the input of saline water and mud to only the unimpounded areas nearest the Gulf. However, extreme high water can overtop or even break the levees and can cause the impounded areas to be subjected to higher salinities than are desirable under the management program. During periods of drought or prolonged northerly winds, which cause low winter tides, the marsh is subject to extreme low water. Extended low-water periods expose the marsh to the threat of fire, with the possibility of intense peat fires that create new lakes at the cost of loss of vegetated marshlands (LDWF 2014).

The Proposed Project is located in the Mermentau River Basin which covers approximately 5,361,730.08 acres (USGS 2018). The Mermentau River Basin encompasses the prairie region of Louisiana and a section of the coastal zone. The Mermentaur River Basin is bounded on the north and east by the Vermilion-Teche Basin, on the west by the Calcasiue River Basin, and on the south by the Gulf of Mexico (LDEQ 2016). The Proposed Project action area contains estuarine and Marine deepwater habitats, palustrine emergent wetlands, lakes, and riverine systems (U.S. Fish and Wildlife Service [USFWS] 2017). Water quality issues identified in the area include dissolved oxygen and fecal coliform bacteria from natural sources and waterfowl (LDEQ 2016).

Designated critical habitat (LA-1) for piping plover is present along coastal shoreline in Cameron and Vermilion Parishes located approximately 2.5 miles north of the Proposed Project. The designated critical habitat is not considered to be included in the Proposed Project action area due the absence of primary constituent elements and the localized activities of the proposed actions.

There is no designated essential fish habitat (EFH) for coastal migratory pelagic resources, red drum, reef fish, and shrimp present within the Proposed Project (NOAA 2018).

a. *Waterbody*

If applicable. Name the body of water, including wetlands (freshwater or estuarine), on which the project is located. If the location is in a river or estuary, please approximate the navigable distance from the project location to the marine environment.

The Proposed Project action area is adjacent to Deep Lake. The Gulf of Mexico is located approximately 2.5 miles (by water) from the Proposed Project action area via Joseph Harbor Bayou. The Proposed Project action area contains estuarine and marine deepwater habitats, palustrine emergent wetlands, lakes, and riverine systems (USFWS 2017). Please see attachment map illustrating the NWI dataset.

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.

There are approximately 6 miles of interior roads and three boat ramps, two of which are free to the public and one which is private and fee-based. Temporary restrooms and a bunkhouse are also present in the RWR.

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.

The Proposed Project action area is located within estuarine and marine systems that could provide suitable habitat for seagrass and other marine vegetation and aerial imagery indicates potential presence of SAV (Love et al 2013; USFWS 2017); however, the action area is located outside mapped distributions of seagrass (Love et al 2013; NOAA 2018). Thus surveys for seagrass and other marine vegetation are not scheduled for the Proposed Project.

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.

The Proposed Project action area is dominated by intermediate and brackish marsh and estuarine and marine deepwater habitats that are unsuitable for mangroves (NOAA 2018; USFWS 2017). Thus surveys for mangroves are not scheduled for the Proposed Project.

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.

The Proposed Project action area is outside of mapped distributions of corals and the area lacks appropriate habitat for corals (Love et al. 2013; NOAA 2018). Therefore surveys for these resources have not been conducted for this area nor are they scheduled for the Proposed Project.

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.).

The Proposed Project action area is composed of mostly marsh habitats with adjacent grassland and shrub habitats.

g. *Marine Mammals*

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

The West Indian manatee has the potential to occur within the general area of the Proposed Project. The Proposed Project action area contains some freshwater riverine systems which might contain suitable habitat; however, available data indicate no suitable submerged aquatic vegetation exists within the vicinity (Love et al. 2013; NOAA 2018) and no occurrences have been recorded in this area (LDWF 2018).

E. Project Description

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

The proposed improvements are expected to take approximately 12 to 24 months from start to finish, subject to approval of permits and environmental review. Preliminary planning and engineering and design are anticipated to be completed in the first 6 months of the Proposed Project.

II. *Describe the Proposed Action: 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. 3. 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.***

The LDWF would improve visitor use experience and enhance management with the following: three new piers and educational signage. The Proposed Project would include construction of up to 560 feet of new piers at three locations within the Refuge. Past pier enhancements for recreational fishing and observation within the RWR have been successful and well received by the public. Since design and engineering are ongoing, location and details on the piers are limited. New piers would be of similar design to piers recently developed in the RWR. The Proposed Project also includes development of signage at the entrance of the Price Lake Road, East End Locks Road, Joseph Harbor Boat Launch, and along other roads and canals in the RWR. Proposed signage would provide location information, as well as education to the public on how the RWR works with other partners and parishes in order to reach common goals based around coastal conservation. Because coastal erosion is a particular concern within the RWR, proposed educational signage would also explain the steps being taken to protect the shoreline and create marsh in areas that need to be rehabilitated on the Refuge. Signage would also provide information on how the public can help in the effort to preserve lands within the Refuge. Likewise, because the RWR's system of canals play such an important role in helping landowners to the north drain water after heavy rains or floods (drainage is an important characteristic of the Mermentau Basin), signage would provide another chance to educate the public on the importance the Refuge serves to many homes and businesses in areas of north Cameron and Vermillion Parish.

Currently, there are few signs on the Refuge marking the names of roadways, canals, or water-control structures. The RWR proposed installation of ultraviolet (UV)-resistant and sealed directional signs and location markers within these area, each branded to coordinate with LDWF guidelines for refuges and wildlife management areas. Areas proposed for signage include the following:

- The Price Lake Road currently brings visitors along a stretch of pristine marsh and provides visitors with the unique opportunity of fishing for shrimp and crabs without the need for a boat. Signage at the entrance of the Price Lake Road requires informational signs about activities allowed on the road, a history of the Refuge, and a map of where facilities are located (e.g., bird observatory, fishing piers, turnarounds, etc.). The placement of three large-panel informational signs, measuring 4 × 8 feet would be placed on an existing wooden frame that currently holds a number of highways signs.
- The East End Locks Road is on the on the eastern side of the Joseph's Harbor Canal and provides visitor access to new parking and fishing from recently replaced bulkheads. The road entrance at this site would have three panel signs on an existing wooden frame that is similar to the size, content, and branding of the signs on the Price Lake Road. Information at this location would pertain to management and information for this area.
- The Joseph Harbor Boat Launch is a free boat launch on the west side of the Joseph's Harbor Canal, with two launch spots lined with concrete bulkheads and large parking lot for trucks and trailers. The entrances at this site would have three panel signs on an existing wooden frame that is similar to the size, content, and branding of the signs on the Price Lake Road and East End Locks Road. Information at this location would pertain to management and information for this area.
- Various signs would be installed on other roadside access points from Louisiana Highway 82 delineating areas that are not publicly accessible or roads that are not public use. Currently these roads do not have signage. Small signs on either new wooden posts or u-channel galvanized posts would be installed within road rights-of-way.
- Various signs would be installed along 60 miles of canals within the RWR to aid boaters as to where they are located on the Refuge. Currently, there are no signs along any of the major canals (i.e., Joseph Harbor Canal, Superior Canal) or the intersection of various canals. Small signs on either new wooden posts or u-channel galvanized posts would be installed along canals.

Construction of the fishing piers would require in-water work and involve several phases of construction. Piles, typically made of treated wood, would be needed to support the piers and would be driven into the substrate along the proposed pier placements, with a set of two piles installed approximately every 15 feet. Each of these piles would be driven past the 15-foot engineering-set minimum depth into the substrate. These piles would be at least 40 feet long to allow for penetration, varying water depths, height of water, and rail height.

The NRCS Soil Survey for Cameron and Vermillion Parishes, Louisiana (U.S. Department of Agriculture [USDA] 2018) identifies two soil map units where construction will occur within the Proposed Project area. The expected soil varieties are gently-sloping, soft substrates composed primarily of clay and sand and include: Hackberry loamy fine sand (Hb); Hackberry-Mermentau complex, gently undulating (Hm); and Scatlake mucky clay, 0 to 0.2 percent slopes, tidal (SC). Pier construction will occur in areas with higher clay content than signage construction.

Please refer to the attachment below for the remainder of Section E.II.

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

a. *If applicable, Overwater Structures (Place your answers to the following questions in the box below.)*

i. *Is the proposed use of this structure for a docking facility or an observation platform?*

ii. *If no, is this a fishing pier? Public or Private? How many people are expected to fish per day? How do you plan to address hook and line captures?*

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 (sqft)?*

The Proposed Project would include construction of up to 560 feet of new fishing and observation piers, requiring in-water work. Since design and engineering are ongoing, locations and details of the piers are limited.

b. *Pilings & Sheetpiles (What type of material is the piling or sheetpiles? What size and how many will be used? Method used to install: impact hammer, vibratory hammer, jetting, etc.?)*

Piles, typically made of treated wood, would be needed to support the pier and would be driven into the substrate along the proposed pier placement, with a set of two piles installed approximately every 15 feet. Each of these piles would be driven past the 15-foot engineering-set minimum depth into the substrate. These piles would be at least 40 feet long to allow for penetration, varying water depths, height of water, and rail height.

Typical construction methods used to install, or drive, the piles would involve using a hammer pile (vibratory hammers are typically used on timber piles) with standard equipment (crane, boom, set of leads, pile hammer, helmet, pile gate, and pile monkey).

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.)*

No marinas or boat slips are proposed.

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.)*

This project does not involve public or private boat ramp work.

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.*

This project does not involve shoreline armoring.

f. *Dredging or digging (Provide details about dredge type (hopper, cutterhead, clamshell, etc.), maximum depth of dredging, area (ft^2) to be dredged, volume of material (yd^3) 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.*

No dredging or digging would occur during construction.

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.)*

No blasting would be necessary or allowed during construction.

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), 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.*

No artificial reefs are present (LDWF 2013) or proposed for this project.

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)).*

The Proposed Project is to enhance access for fishing within the RWR. This would include line and hook gear from boats and designated fishing piers within the RWR.

F. NOAA Species & Critical Habitat and Effects Determination Requested

1. *List all species, critical habitat, proposed species and proposed critical habitat that may be found in the action area.*

2. *Attach a separate map identifying species/critical habitat locations within the action area.*

For information on species and critical habitat under 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)	**DETERMINATION** (see definitions below)
Green Sea Turtle (T)		Marine	No Effect
Loggerhead Sea Turtle (T)		Marine	No Effect
Hawksbill Sea Turtle (E)		Marine	No Effect
Leatherback Sea Turtle (E)		Marine	No Effect
Kemp's Ridley Sea Turtle (E)		Marine	No Effect
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate

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 = 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 = 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.

Critical Habitat Destruction or Adverse Modification = Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.

G. USFWS Species & Critical Habitat and Effects Determination Requested

1. *List all species, critical habitat, proposed species and proposed critical habitat that may be found in the action area.*
2. *Attach a separate map identifying species/critical habitat locations within the action area.*

For information on species and critical habitat under USFWS jurisdiction, visit http://www.fws.gov/endangered/species/.

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)	**DETERMINATION** (see definitions below)
Hawksbill sea turtle		Terrestrial	No Effect
Hawksbill sea turtle		Terrestrial	No Effect
Leatherback sea turtle		Terrestrial	No Effect
Loggerhead sea turtle		Terrestrial	No Effect
Piping plover		Select One	May Affect, Not Likely to Adversely Affect
Red knot		Select One	May Affect, Not Likely to Adversely Affect
West Indian manatee		Select One	No Effect
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
		Select One	Select Most Appropriate
		Select One	Select Most Appropriate

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 = 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 = 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.

Critical Habitat Destruction or Adverse Modification = Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.

H. Effects of the proposed project to the species and habitats

I. *Explain the potential beneficial and adverse effects to each species listed above (Describe what, when, and how the species will be impacted and the likely response to the impact. Be sure to include direct, indirect, and cumulative impacts and where possible, quantify effects. If species are present (or potentially present) and will not be adversely affected describe your rationale. If species are unlikely to be present in the general area or action area, explain why. This justification provides documentation for your administrative record, avoids the need for additional correspondence regarding the species, and helps expedite review.)*

The Proposed Project will have No Effect on the following species: marine life stage of the green sea turtle; both marine and terrestrial life stages hawksbill, Kemp's ridely, leatherback and loggerhead sea turtles; and the West Indian manatee. This is based on the assumption that these species will not occur in the Proposed Project action area based on the relative inaccessibility to the locations where piers would be installed, and the limited proposed upland activity (i.e., signage installation) in areas accessible to these species. Please refer to the project detail map in the attachment. Additionally, the Proposed Project area lacks mapped extensive areas of seagrass or marine vegetation, and riverine or beach habitats; the Proposed Project action area is outside the current known range of these species; and no known occurrences have been documented within the general vicinity (LDWF 2014; LDWF 2018; Love et al. 2013, NatureServe 2016; NOAA 2018), and suitable nesting habitat for the sea turtles. Potential foraging habitat for the sea turtles and West Indian manatee will not be impacted from upland terrestrial sign installation, .

The Proposed Project May Affect, Not Likely to Adversely Affect the following species: piping plover and red knot. Piping plover and red knot could use wetland and flats habitats within the Proposed Project vicinity for foraging and roosting; however, only marginal habitats exist within the area. Direct impacts to the piping plover and red knot may include disturbance in the form of fleeing the area due to the localized and temporary increase in human presence and activity (e.g. pier and sign installation). These impacts would be localized and temporary in duration, however. Indirect impacts could include habitat modification from the construction of new piers along shorelines, but as habitats within the area mostly include marshes with taller vegetation and little to no exposed sandy beaches these impacts are anticipated to have little to no effect.

II. *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 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 Proposed Project action area is located outside designated critical habitat; therefore no effects to critical habitat will occur.

I. Actions to Reduce Adverse Effects

I. *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.)*

Species specific best management practices (BMPs) from the PDARP/EIS (DWH Trustees 2016) that would be incorporated into the Proposed Project are included as an attachment.

Additionally all individuals (such as construction workers) working on the proposed project would be provided with information on general awareness of any federally protected species that have the potential to occur in the Proposed Project action area. Seasonal avoidance measures would be implemented when practicable. If work must be conducted when these species are present, certain activities may be restricted or modified to reduce disturbance of these species (see attached BMPs).

The implementing trustee will implement and enforce approved BMPs listed in the attachment to avoid and minimize impacts to species listed in Sections F and G. Continued coordination of BMPs will occur during the final design phase.

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.)*

Designated critical habitat is not present within the Proposed Project. Therefore, no impacts to critical habitat would occur as a result of the proposed construction of recreational features and no additional conservation measures are proposed other than the construction BMPs listed in the attachment below.

J. 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

Is your activity likely to impact 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	
☑	☐	*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) *Building or enhancing areas for water-related recreational use or fishing opportunities (e.g. fishing piers, bridges, boat ramps, marinas)*
☑	☐	*f) Aquaculture*
☑	☐	*g) Dredging or in-water construction activities to change hydrologic conditions or connectivity, create breakwaters and living shorelines, etc.*
☑	☐	*h) Restoration of barrier islands, levee construction or similar projects*
☑	☐	*i) Fresh-water river diversions*

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

Please refer Section E Project Description for construction details of the Proposed Project. The in-water construction activities could impact the quality of marine or estuarine waters due to pile driving. Impact pile driving may also generate impulsive noise sources that could result in temporary shifts in marine mammal behaviors (NOAA Fisheries 2016).

IV. Are any measures planned to mitigate potential impacts to marine mammals? If yes, provide text in box below. NO ☑ YES ☐

The Proposed Project action area is not anticipated to impact marine mammals thus no additional conservation measures are proposed other than the construction BMPs listed in the attachment below.

K. 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**

L. Migratory Birds

Identify the species anticipated in the action area and behaviors (breeding, roosting, foraging) anticipated during project implementation. You may list similar species on a single line and categorize by type (e.g., Wading birds - great blue heron, snowy egret, reddish egret). If species are present and impacts to individuals or habitat could occur, identify avoidance and minimization measures to prevent incidental take.
Incidental take of Migratory Birds cannot be authorized. Use additional tables on the next page if needed.

I.

Species/Species Group	Behavior	Species/Habitat Impacts and Conservation Measures to Minimize Impacts
American Golden-Plover	non breeder	The Proposed Project area is located within a region that includes the following birds of conservation concern (USFWS 2018). During the project design phase, coordination with the USFWS and the state trust resource agency will occur to site and design project features to avoid or minimize impacts to migratory bird nesting habitats or important feeding and loafing areas. If vegetation clearing is required, it would take place outside of the migratory bird nesting season (approximately mid-February through mid-September) or a qualified biologist would inspect for active nests. If no active nests are found, vegetation may be removed. If active nests are found, vegetation may be removed after the nestlings successfully fledge. If project activities must occur during this time-frame and breeding, nesting, and fledging birds are present, the state trust resource agency will be contracted to obtain the most recent guidance to protect nesting birds or rookeries, and their recommendations will be implemented.
American Oystercatcher	breeder	
Bald Eagle	breeder	
Black Rail	breeder	
Black Scoter	non breeder	
Black Skimmer	breeder	
Black-Legged Kittiwake	non breeder	
Bonaparte's Gull	non breeder	
Brown Pelican	breeder	
Buff-Breasted Sandpiper	non breeder	
Cerulean Warbler	breeder	
Clapper Rail	breeder	
Common Loon	non breeder	
Common Tern	non breeder	
Double-Crested Cormorant	breeder	
Great Black-Backed Gull	non breeder	
Gull-Billed Tern	breeder	
Henslow's Sparrow	non breeder	
Herring Gull	breeder	
Hudsonian Godwit	non breeder	
Kentucky Warbler	breeder	
King Rail	breeder	
Le Conte's Sparrow	non breeder	
Least Tern	breeder	
Lesser Yellowlegs	non breeder	
Long-Billed Curlew	non breeder	
Long-Tailed Duck	non breeder	

M. Migratory Birds

Continuation page if needed.

II.	SPECIES/SPECIES GROUP	BEHAVIOR	SPECIES/HABITAT IMPACTS and CONSERVATION MEASURES TO MINIMIZE IMPACTS
	Magnificent Frigatebird	non breeder	
	Marbled Godwit	non breeder	
	Neslon's Sparrow	non breeder	
	Northern Gannet	non breeder	
	Parasitic Jaeger	non breeder	
	Pomarine Jaeger	non breeder	
	Prothonotary Warbler	breeder	
	Razorbill	breeder	
	Red-Breasted Merganser	non breeder	
	Red-Headed Woodpecker	breeder	
	Red-Necked Phalarope	non breeder	
	Reddish Egret	breeder	
	Ring-Billed Gull	non breeder	
	Royal Tern	breeder	
	Rusty Blackbird	non breeder	
	Seaside Sparrow	breeder	
	Semipalmated Sandpiper	non breeder	
	Short-Billed Dowitcher	non breeder	
	Sprague's Pipit	non breeder	
	Surf Scoter	non breeder	
	Swallow-Tailed Kite	non breeder	
	Whimbrel	non breeder	
	White-Winged Scoter	non breeder	
	Willet	breeder	
	Wilson's Plover	breeder	
	Wood Thrush	breeder	
	Yellow Rail	non breeder	

N. Best Practices

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 pratices you'll be using in your project.

BMPs from the PDARP/EIS that would be incorporated into the Proposed Project are included as an attachment.

O. Submitting the BE Form

NMFS ESA § 7 Consultation

We request that all ESA §7 consultation requests/packages be submitted electronically to: **Christina.Fellas@noaa.gov**

Questions about consultation status may be directed to the email address above or

by phone: Christy Fellas: 727-551-5714

USFWS ESA § 7 Consultation

We request that all consultation requests/packages to USFWS be submitted electronically to: **Ashley_Mills@fws.gov**.

You will be notified when we receive your Biological Evaluation. 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 send your Biological Evaluation to the appropriate Field Office to conduct consultation.

Questions about consultation status may be directed to the email address above or by phone:
Ashley Mills: 812-756-2712

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.

Are you using this form to request approval for use of NMFS PDCs for this project? ○ Yes ◉ No

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

- ☐ Project is designed to avoid techniques and locations listed in the oyster reef creation and enhancement PDCs 1.a-1.e.
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Construction Conditions (PDC 2.a)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.b)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.c)
- ☐ In Gulf sturgeon critical habitat, oyster reef creation and enhancement occurs only on existing shell substrata or relic reef locations (PDC 2.d)
- ☐ Cultch material is free of debris and contaminants (PDC 2.e)
- ☐ Fresh shell has been properly aged or quarantined before being deployed (PDC 2.f)
- ☐ Cultch material is placed in a manner to minimize disturbance of sediment (PDC 2.g)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDC 2.h)
- ☐ Plan/drawings for intermittent breaks between oyster reef segment has been provided (2.i)
- ☐ Spill prevention and response plan has been developed (2.j)
- ☐ Design and materials used avoid entanglement and entrapment risks for ESA-listed species (2.k)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Marine Debris Removal ○ Yes ◉ No

- ☐ This project is designed to avoid techniques and locations listed in the marine debris removal PDCs 1.a-1.c
- ☐ All on-water operations shall take place during daylight hours (PDC 2.a)
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Conditions (PDC 2.b)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.c)
- ☐ Project personnel have been notified of procedures if approached by a marine mammal or sea turtle (PDC 2.d)
- ☐ Trash and debris will be disposed of at an upland location (PDCs 2.e)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Construction of Living Shorelines

○ Yes ◉ No

- ☐ This project is designed to avoid techniques and locations listed in the living shoreline PDCs 1.a-1.h
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Conditions (PDC 2.a)
- ☐ All in-water work activities will conducted during daylight hours (PDC 2.b)
- ☐ Piles for navigation of public safety purposes are less than 24" diameter and non-metal if impact hammer used (PDC 2.c)
- ☐ Spill prevention and response plan has been developed (2.d)
- ☐ Fill material is not sourced using hopper dredge or from sea turtle, Gulf sturgeon or smalltooth sawfish critical habitat and in-water borrow sites do not impact turtle nesting beaches (PDC 2.e)
- ☐ Design and materials do not create entrapment or entanglement risks to ESA-listed species and do not block migration (PDC 2.f)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.g)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDC 2.h)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.i)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Marsh Creation and Enhancement

○ Yes ◉ No

- ☐ Project is designed to avoid techniques and locations listed in the marsh creation PDCs 1.a-1.f
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Conditions (PDC 2.a)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.b)
- ☐ All in-water work activities will be conducted during daylight hours (PDC 2.c)
- ☐ Spill prevention and response plan has been developed (PDC 2.d)
- ☐ Fill material is not sourced using hopper dredge or from sea turtle, Gulf sturgeon or smalltooth sawfish critical habitat and in-water borrow sites do not impact turtle nesting beaches (PDC 2.e)
- ☐ Design and materials do not create entrapment or entanglement risks to ESA-listed species and do not block migration (PDC 2.f)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.g)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDCs 2.h)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Construction of Non-Fishing Piers

◯ Yes ◉ No

- ☐ This project is designed to avoid locations listed in the non-fishing piers PDCs 1.a
- ☐ Spill prevention and response plan has been developed (PDC 2.a)
- ☐ Design and materials do not create entrapment or entanglement risks to ESA-listed species and do not block migration (PDC 2.b)
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Construction Conditions (PDC 2.c)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.d)
- ☐ Follow Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat (PDC 2.e)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.f)
- ☐ Follows methods and timing for pile driving (2.g)
- ☐ Follows construction sequencing and avoids propwashing (PDC 2.h)
- ☐ Water depth will not be altered (PDC 2.i)
- ☐ Lighting specifications are incorporated for piers on or adjacent to sea turtle nesting beaches (PDC 2.j)
- ☐ Follows educational and fishing signage requirements (PDC 2.k)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDC 2.l)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

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

Name of person(s) completing this form:

Date form completed:

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

BIOLOGICAL EVALUATIONS FORM ATTACHMENTS

BIOLOGICAL EVALUATIONS CONTINUATION SHEET

Section E.II. Describe the Proposed Action (continued)

Construction methods for the pier extensions would be similar to that of the existing piers within the Refuge and include the use of marine-grade pressure-treated large timber members and stainless-steel fasteners. Pressure-treated wood products are manufactured and installed in a manner that minimizes any potential for adverse impacts to aquatic environments. Typical construction methods used to install, or drive, the piles would involve using an impact hammer pile (vibratory hammers are typically used on timber piles) with standard equipment (e.g., crane, boom, set of leads, pile hammer, helmet, pile gate, and pile monkey). The crane and associated equipment would be staged on a barge or on the shore. The pier would be approximately 6 feet wide. Barged heavy equipment would likely be needed for this construction.

ROCKEFELLER PIERS/ ROCKEFELLER SIGNAGE

PROJECT DETAIL MAP
CAMERON PARISH, LOUISIANA

Proposed Alternative

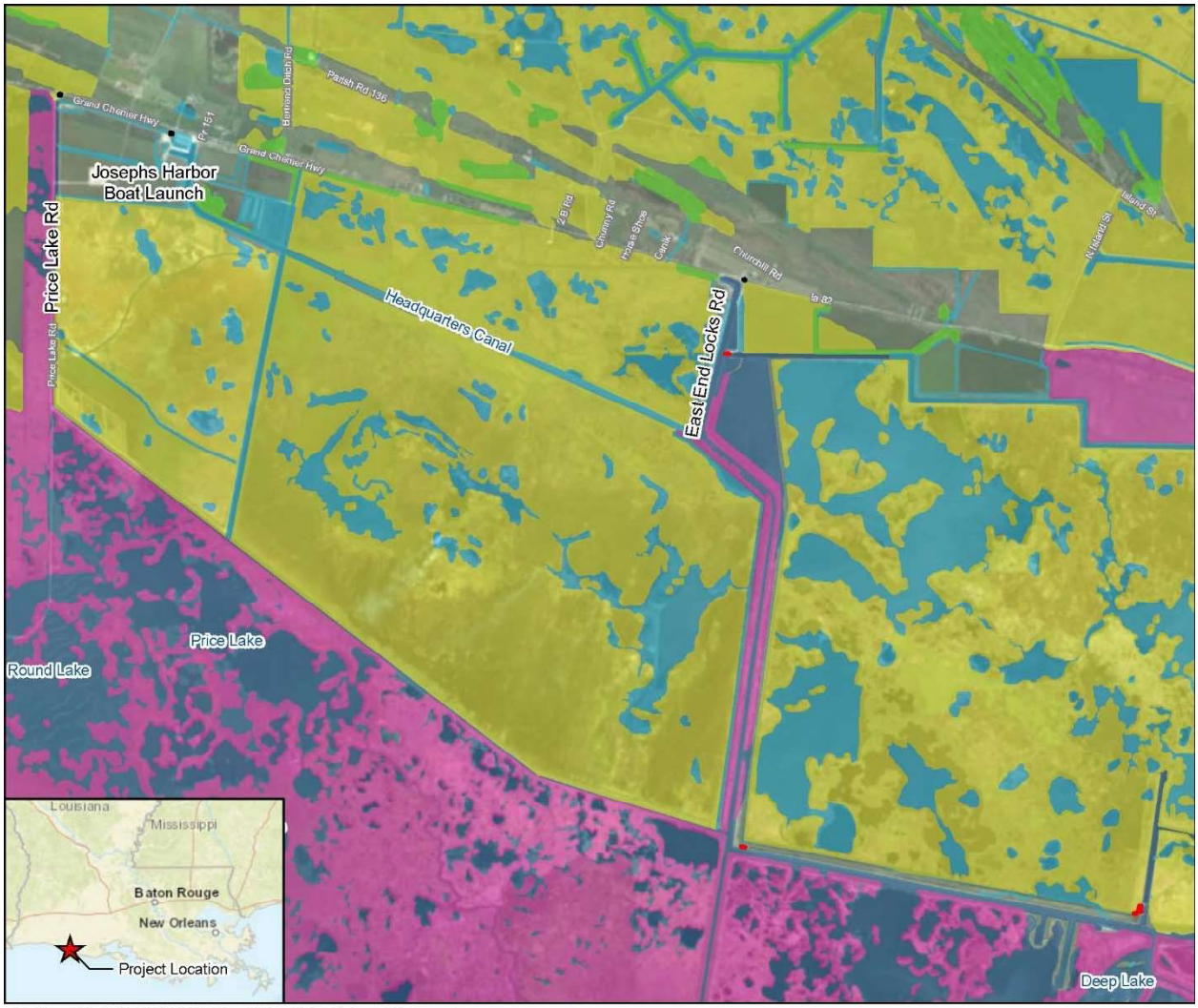
Pier

Sign

1:67,644

Created By: JS
Project Number: 48078
Date: 3/19/2018
NAD 1983 StatePlane Louisiana South FIPS 1702 Feet

0 3,900 7,800 Feet
0 2,600 5,200 7,800 Feet



ROCKEFELLER PIERS/ROCKEFELLER SIGNAGE
NWI MAP
CAMERON PARISH, LOUISIANA

Proposed Alternative
- Pier
- Sign

NWI Designation
- EstuarineWetland
- Emergent Wetland
- Forested/Shrub Wetland
- Marine Deepwater
- Freshwater Waterbody

1:67,644

Created By: JS
Project Number: 48078
Date: 4/20/2018
NAD 1983 StatePlane Louisiana South FIPS 1702 Feet

0 3,900 7,800 Feet
0 2,600 5,200 7,800 Feet

BEST PRACTICES FROM THE PDARP/PEIS

The following section is a direct excerpt from Section 6, Appendix A in Deepwater Horizon Oil Spill: Final Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental Impact Statement (DWH Trustees 2016).

Birds

Bald Eagles

If bald eagle breeding or nesting behaviors are observed or a nest is discovered or known, have all activities 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. Maintain this avoidance distance from the onset of breeding/courtship behaviors until any eggs have hatched and eaglets have fledged (approximately 6 months).

If a similar activity (such as driving on a roadway) is closer than 660 feet to a nest, maintain a distance buffer as close to the nest as the existing tolerated activity. 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 maintain a distance buffer as close to the nest as the existing tolerated activity.

In some instances activities conducted within 660 feet of a nest may result in disturbance, particularly for the eagles occupying the Mississippi barrier islands. If an activity appears to cause initial disturbance, stop the activity and move all individuals and equipment away until the eagles are no longer displaying disturbance behaviors. Contact the USFWS's Migratory Bird Permit Office to determine how to avoid impacts or if a permit may be needed.

Migratory Birds

Use care to avoid birds when operating machinery or vehicles near birds.

During the project design phase, coordinate with the USFWS and the state trust resource agency to site and design projects to avoid or minimize impacts to migratory bird nesting habitats or important feeding/loafing areas.

Avoid working in migratory bird nesting habitats during breeding, nesting, and fledging (approximately mid-February through late August). If project activities must occur during this timeframe and breeding, nesting, or fledging birds are present, contact the state trust resource agency to obtain the most recent guidance to protect nesting birds or rookeries, and their recommendations will be implemented.

Conservation areas may already be marked to protect bird nesting areas. Stay out of existing marked areas.

If vegetation clearing is necessary, clear vegetation outside the migratory bird nesting season (approximately mid-February through late August) or have a qualified biologist inspect for active nests. If no active nests are found, vegetation may be removed. If active nests are found, vegetation may be removed after the nest successfully fledges.

Avoid driving over the natural organic material ("wrack") line or areas of dense seaweed, as these habitats may contain hatchlings and chicks that are difficult to see.

Install pointy, white piling caps on exposed pilings to prevent bird roosting on piers, docks, and marinas.

Piping Plover and Red Knot

Provide all individuals working on a 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.

Use dredged material to enhance adjacent emerged and submerged shoals and bayside habitats within and adjacent to project areas.

During recreational use, enforce leash or "no pet" policies in critical or important habitats.

General Construction Measures

Protected Species

Provide all individuals working on a project with information in support of general awareness of and means to avoid impacts to protected species and their habitats present at the specific project site.

Site Maintenance and Conduct

Use the nearest, existing staging, access and egress areas, travel corridors, pathways, and roadways (including those provided by the state, local governments, land managers, trustee, or private property owner, with proper permissions) and do not create new staging areas, access (except dune walkovers) or egress, or travel corridors through dune habitats.

Minimize construction noise to the maximum extent practicable when working near protected species and their habitats.

Maintain or improve all lighting regimes. Methods include working during daylight hours only, prohibiting lighting on dune walkovers, and using wildlife-friendly lighting where lighting is necessary for human safety.

Land and Vegetation Protection

Develop and implement a spill prevention and response plan, including conducting daily inspections of all construction and related equipment to ensure there are no leaks of antifreeze, hydraulic fluid, or other substances and cleaning and sealing all equipment that would be used in the water to rid it of chemical residue. Develop a contract stipulation to disallow use of any leaking equipment or vehicles.

Wetland and Aquatic Resource Protection

Avoid and minimize, to the maximum extent practicable, placement of dredged or fill material in wetlands and other aquatic resources.

Design construction equipment corridors to avoid and minimize impacts to wetlands and other aquatic resources to the maximum extent practicable.

To the maximum extent possible, implement the placement of sediment to minimize impacts to existing vegetation or burrowing organisms.

When local conditions indicate the likely presence of contaminated soils and sediments, test soil samples for contaminant levels and take precautions to avoid disturbance of, or provide for proper

disposal of, contaminated soils and sediments. Evaluate methods prior to dredging to reduce the potential for impacts from turbidity or tarballs.

Perform maintenance of generators, cranes, and any other stationary equipment operated within 150 feet of any natural or wetland area, as necessary, to prevent leaks and spills from entering the water.

Designate a vehicle staging area removed from any natural surface water resource or wetland to perform fueling, maintenance, and storage of construction vehicles and equipment. Inspect vehicles and equipment daily prior to leaving the storage area to ensure that no petroleum or oil products are leaking.

Upon completion of construction activities, restore all disturbed areas as necessary to allow habitat functions to return. Create and manage public access developments to enhance recreational experience and educational awareness to minimize effects to habitat within wetland and shallow water areas and to the long-term health of related biological communities.

Use silt fencing where appropriate to reduce increased turbidity and siltation in the project vicinity. This would apply to both on land and in water work.

Make all efforts to reduce the peak sound level and exposure levels of fish to reduce the potential impact of sound on fish present in the project areas.

Use sound attenuation devices where practicable for pulse noise (impact hammers) to reduce peak sound pressure levels in the aquatic environment.

Use best practices to reduce turbidity, such as turbidity blankets, to reduce the potential impact of turbidity on finfish.

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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 Protect 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.

A. Project Identification

Federal Action Agency: U.S. Fish and Wildlife Service

Additional Federal Action Agency: Select Most Appropriate

Agency Contact(s)

USFWS: Ashley Mills at 812-756-2712 and Ashley_Mills@fws.gov
NMFS: Christy Fellas at 727-551-5714 and Christina.Fellas@noaa.gov

I. *Implementing Trustee(s)*: Louisiana Office of State Parks

II. *Contact Person*: Brandon Burris

III. *Phone*: (225) 342-8111

Email: bburris@crt.la.gov

IV. *Project Name and ID# (Official name of project and ID number assigned by Trustees in DIVER)*: Bayou Segnette State Park

V. *NMFS Office (Choose appropriate office based on project location)*: Select Most Appropriate

USFWS Office (Choose or write in appropriate office based on project location): Louisiana Ecological Services Field Office (Lafayette)

VI. *Project Type #1*: Enhance Recreational Experiences

Project Type #2, if helpful: Enhance Public Access to Natural Resources for Recreational

VII. *TIG*: Louisiana TIG

Restoration Plan: Recreational Use

B. Project Location

I. Physical Address of action area (If applicable)

7777 Westbank Expressway
Westwego, Louisiana 70094

II. *State & County/Parish of action area*: Louisiana, Jefferson Parish

III. *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])*: 29.896400°N, 90.159300°W

IV. Township, range and section of the action area: Township 14 South, Range 23 East, Section 16

C. 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:
-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

Have any federal permits been applied for but not yet obtained, if so which ones and what is the permit number(s)? ☐ Yes ☑ No

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.

Deepwater Horizon Oil Spill Louisiana Trustee Implementation Group Restoration Plan and Environmental Assessment #4: Nutrient Reduction (Nonpoint Source) and Recreational Use

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

Name of Person Completing this Form:	Nicole Smolensky
Name of Project Lead:	
Date Form Completed:	01/23/2018
Date Form Updated:	04/23/2018

D. Description of Action Area

Attach a separate map delineating where the action will occur and where critical habitat, if any, is located. Map or describe all areas that may be directly or indirectly affected by the action. 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). If CH is not designated in the area, then map or describe any suitable habitat in the area.

The Proposed Project is located in Jefferson Parish on the north terminus of Bayou Segnette, south of the Mississippi River, and southwest of Westwego, Louisiana. The Proposed Project is located in the Mississippi Alluvial Plain (73) Level III ecoregion and the Deltaic Coastal Marshes and Barrier Islands (73o) Level IV ecoregion (Daigle et al. 2006). The following information was obtained from Daigle et al. 2006 unless indicated otherwise. The Mississippi Alluvial Plain is mostly a broad, flat alluvial plain with river terraces, swales, and levees providing the main elements of relief. Elevation ranges from 0 to 15 feet above mean sea level and local relief ranges from 0 to 10 feet. Winters are mild and summers are hot with minimum/maximum temperatures of 44˚F/64˚F and 72˚F /92˚F, respectively. Mean annual precipitation ranges from 64 to 66 inches. The ecoregion historically comprised bottomland deciduous forest with extensive wetlands, but much of it was cleared for cultivation. The Deltaic Coastal Marshes and Barrier Islands are dominated by brackish and saline marshes with vegetation such as saltmarsh cordgrass, marshhay cordgrass, black needlerush, and coastal saltgrass. Black mangrove occurs in a few areas, and some live oak is found along old natural levees. Soils are fine textured and poorly drained, although there are some areas of coarser, better-drained soils. Extensive organic deposits lie mainly below sea level in permanently flooded settings resulting in the development of mucky surfaced Histosols. Entisols may also be present. Soil series include Allemands, Kenner, Larose, Clovelly, Lafitte, Bancker, Scatlake, Timbalier, Bellpass. Sediments of silts, clays, and peats contain large amounts of methane, oil, and hydrogen sulfide gas. Inorganic sediments found within the ecoregion are soft and have high water contents (Daigle et al. 2006).

Bayou Segnette State Park is located in Jefferson Parish in the Central Louisiana Coastal Basin. The entire basin is approximately 3,705,863.09 acres (U.S. Geological Survey [USGS] 2018). Freshwater inputs to the basin are primarily rainfall because the construction of levees along the Mississippi River has prevented freshwater and sediment inputs to the basin. Previous water quality inventory reports by the Louisiana Department of Environmental Quality (LDEQ) have listed suspected sources of water quality problems as crop production, pastureland, urban runoff, septic tanks, minor industrial point sources, petroleum activities, highway and maintenance runoff, hydromodification, and dredging (Louisiana Department of Wildlife and Fisheries [LDWF] 2015). Based on the FINAL 2016 Louisiana Water Quality Inventory: Integrated Report (305(b)/303(d)) (LDEQ 2016), subsegment LA020501_00 (Sauls, Avondale, and Main Canals) is listed as fully supporting the designated use for primary contact recreation (PCR) and secondary contact recreation (SCR); this subsegment is also listed as not supporting the designated use for fish and wildlife propagation (FWP) with suspected causes of impairment due to nitrates/nitrites, dissolved oxygen, phosphorus, sulfates, and total dissolved solids. Also included is subsegment LA020701_00 (Bayou Segnette-From Headwaters to Bayou Villars), which is listed as fully supporting the designated use for PCR, SCR, and FWP.

Much of the land adjacent to the Mississippi River has been developed or used for agriculture. However, as the river approaches the Gulf of Mexico, the landscape changes to coastal palustrine and estuarine wetlands and is noticeably less developed. Bayou Segnette State Park lies west of the residential areas of Westwego and Marrero, Louisiana, along the southern bank of the river and west of Bayou Segnette. The habitat within the Proposed Project action area consists predominantly of mixed hardwood upland forest and palustrine emergent, scrub-shrub, and forested wetlands broken up by natural channels, human-made ditches, and park roads. Maintained herbaceous uplands are also found along the park roads and structures. Palustrine emergent wetlands dominate the landscape beyond the banks of the Mississippi River, surrounding the Proposed Project to the south until Lake Cataouatche and Lake Salvador, where estuarine wetlands began to occur.

Critical habitat is designated for Gulf sturgeon and piping plover (LA-5) within Jefferson Parish; however, the Proposed Project does not fall within designated critical habitat for either species. Gulf sturgeon critical habitat designation only applies to non-breeding habitats in eastern Lake Pontchartrain approximately 8 miles north of the Proposed Project. Piping plover critical habitat designation only applies to suitable overwintering habitats on barrier islands and beaches in Barataria Bay (e.g., Elmers Island and Grand Isle) approximately 47 miles south of the Proposed Project. Freshwater systems, forested wetlands, and forested and herbaceous uplands, such as those present within the Proposed Project, are not within designated critical habitat for the Gulf sturgeon or piping plover.

Designated essential fish habitat (EFH) for coastal migratory pelagic resources, red drum, reef fish, and shrimp is present within the Proposed Project action area (National Oceanic and Atmospheric Administration [NOAA] 2018). See the attached map illustrating designated EFH.

a. *Waterbody*

If applicable. Name the body of water, including wetlands (freshwater or estuarine), on which the project is located. If the location is in a river or estuary, please approximate the navigable distance from the project location to the marine environment.

The Proposed Project is abutted to the east by Bayou Segnette and to the southeast by the Outer Cataouatche Canal and also includes the Main, Railroad, Whiskey Canals, and Inner Cataouatche Canal. The area is approximately 53 river miles from the Gulf of Mexico via Bayou Segnette, Lake Cataouatche, Lake Salvador, Bayou Perot, Bay Dosgris, Barataria Bay, and Barataria Pass. The Proposed Project includes palustrine forested, scrub-shrub, and emergent wetlands. Please see attachment map illustrating the NWI dataset (U.S. Fish and Wildlife Service [USFWS] 2017).

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.

There are several existing structures throughout the Proposed Project, including rental cabins, restroom facilities, maintenance buildings, information and check-in buildings, playground equipment, pavilions, park benches, improved and unimproved roadways, parking lots, boardwalks, piers, a water control structure, boat houses, and boat ramps. The specific Proposed Project action area is associated with the existing roads, parking lots, and playground areas.

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.

The Proposed Project action area is surrounded by freshwater systems that lack suitable environments for seagrass and other marine vegetation (Google Earth Imagery 2016) and is located outside of mapped distributions of submerged aquatic vegetation (Love et al. 2013; NOAA 2018). Therefore, surveys for these resources have not been conducted for this area nor are they anticipated for this area.

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.

The Proposed Project action area is surrounded by freshwater systems that lack suitable environments for mangroves (Google Earth Imagery 2016) and is located outside of mapped distributions of mangroves (Love et al. 2013; NOAA 2018). Therefore, surveys for these resources have not been conducted for this area nor are they anticipated for this area.

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.

The Proposed Project action area is surrounded by freshwater systems that lack suitable environments for corals (Google Earth Imagery 2016) and is located outside of mapped distributions (Love et al. 2013; NOAA 2018). Therefore, surveys for these resources have not been conducted for this area nor are they anticipated for this area.

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.).

The Proposed Project contains forested, scrub-shrub, and maintained herbaceous uplands.

g. *Marine Mammals*

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

The West Indian manatee has the potential to occur within the general area of the Proposed Project. The Proposed Project action area occurs within freshwater riverine systems, which might contain suitable habitats; however, available data indicate no suitable submerged aquatic vegetation exists within the vicinity (Love et al. 2013; NOAA 2018) and no occurrences have been recorded in this area (LDWF 2018).

E. Project Description

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

The Proposed Project would take approximately 18 to 44 months from start to finish, depending on the construction sequence, approval of permits, and environmental review. A conceptual design has already been developed. Preliminary planning, commencement activities, and E&D are anticipated to take from 4 to 6 months for each project element. Construction, including contracting and pre-construction activities, is anticipated to take from 6 to 12 months for each project element.

II. *Describe the Proposed Action: 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. 3. 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.***

The Louisiana Office of State Parks is pursuing the Proposed Project to repair the existing boating area and re-pave most roads and parking lots throughout the park to address damage caused by repeated flooding and soil subsidence issues within the Bayou Segnette State Park and to improve recreational access and safety in these areas, as well as upgrading the existing playground to improve ADA access. The Proposed Project would achieve these goals by: 1) re-paving approximately 4.52 miles (649,032 square feet) of roads and 445,471 square feet of parking lots to raise the surface elevation by 2 to 6 inches; and 2) replacing the existing non-ADA-compliant playground with ADA-compliant surfacing, play structures, and access. The new playground area would be targeted to 5- to 12-year olds and would have 18 to 22 play features with divided ground and above-ground levels. Each of these project elements would help achieve the project goals and would likely increase park visitation and enjoyment of multiple recreational activities. Please see the attached map of the Proposed Project

Repairing the existing roads and parking lots within the Bayou Segnette State Park, including the boating area, would include the following:
• Approximately 0.435 mile of existing two-way circulation road, with 12-foot-wide lanes, and 107,682 square feet of parking in the boating area
• Approximately 0.17 mile of existing two-way launch area road, with 12-foot-wide lanes, and 43,976 square feet of overflow parking in the boating area
• Approximately 1.4 miles of existing four-lane divided main entry boulevard
• Approximately 2.51 miles of existing roads throughout the park, consisting of the Day Use Loop road, group camp access road, and main cabin and campground access road
• Approximately 293,813 square feet of existing parking areas (wave pool parking lot, southern campground road and paved camping areas)
Upgrading the existing playground area within the Bayou Segnette State Park would include the following:
• Removal of existing playground structures, fall surfacing, and barriers within the playground area
• Construction of new concrete slab foundation with ADA-compliant fall surfacing in the existing playground area
• Construction of new playground equipment

The pavement repair would include the circulation road, main parking lot, overflow parking lot, and the boat launch area. The circulation road and main parking lot would consist of approximately 0.435 mile of road and 138,500 square feet of parking lot and reviving an asphalt overlay to provide at least a 2-inch lift in pavement elevation. The boat launch areas and overflow parking lot would consist of an asphalt overlay that would provide at least a 6-inch lift in pavement elevation for 0.17 mile of roadway and 43,976 square feet of parking lot area. Other select areas throughout the park would receive a 2-inch minimum lift asphalt overlay: the approximately 1.4-mile-long four-lane divided main entry boulevard, the approximately 1.54-mile-long two-way Day Use Loop road, approximately 0.3-mile-long two-way group camp access road, approximately 0.67-mile-long main cabin and campground access road, a 139,425-square-foot parking lot at the wave pool, and a 154,388-square-foot road and parking area at the southern campground. There are three wooden bridges along the Day Use Loop road that would likely require placement of asphalt wedges (asphalt laid thicker on one end to create a ramp) on both sides of the bridges and replacement of steel hinged transition plates. These road repairs would include minor repairs to the road base where necessary prior to asphalt overlay. The travel lanes for all roads have a footprint of 12 feet wide (typically 14 feet on turns).

The overall road length to be re-paved would be approximately 4.52 miles with an area of approximately 649,032 square feet. The overall parking area to be re-paved would be approximately 476,289 square feet. The road and parking lot overlay would raise the elevation of these elements to improve drainage off the travel surfaces. This would improve longevity of the roads and increase safe driving conditions. Some additional minor transition work adjacent to roads and parking lots may be necessary and could include pedestrian routes, sidewalks, light poles, curbs, and signs. Painting of travel lanes would be limited to roadways and parking lots. In-water work would be limited to paving in the boat launch areas that lie below high tide, which would be approximately 2,500 square feet of the road area in the boating area. No piling work is expected at the docks associated with the boat launches.

Please refer to the attachment below for the remainder of Section E.II.

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

a. *If applicable, Overwater Structures (Place your answers to the following questions in the box below.)*

i. *Is the proposed use of this structure for a docking facility or an observation platform?*

ii. *If no, is this a fishing pier? Public or Private? How many people are expected to fish per day? How do you plan to address hook and line captures?*

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 (sqft)?*

No overwater work is proposed.

b. *Pilings & Sheetpiles (What type of material is the piling or sheetpiles? What size and how many will be used? Method used to install: impact hammer, vibratory hammer, jetting, etc.?)*

No pilings or sheet piles are proposed.

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.)*

No marinas or boat slips are proposed.

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.)*

No new boat ramps are proposed. However, the existing paved boat launch area, which supports six existing boat ramps, would receive an asphalt overlay that would provide at least a 6-inch lift in pavement elevation in order to combat soil subsidence.

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.*

No shoreline armoring is proposed.

f. *Dredging or digging (Provide details about dredge type (hopper, cutterhead, clamshell, etc.), maximum depth of dredging, area (ft^2) to be dredged, volume of material (yd^3) 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.*

No dredging or digging would be necessary during construction.

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.)*

No blasting would be necessary or allowed during construction.

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), 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.*

No artificial reefs are present (LDWF 2013) nor proposed for the Proposed Project.

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)).*

The Proposed Project is intended to enhance recreational activities within and adjacent to Bayou Segnette. The Proposed Project would include upgrades to the paved boat launch area (not the existing boat ramps). However, boaters are more likely to use the waters away from the Proposed Project, and no significant increase in fishing and/or boating activities within the Proposed Project action area are anticipated as a result of the Proposed Project.

F. NOAA Species & Critical Habitat and Effects Determination Requested

1. *List all species, critical habitat, proposed species and proposed critical habitat that may be found in the action area.*

2. *Attach a separate map identifying species/critical habitat locations within the action area.*

For information on species and critical habitat under 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)	**DETERMINATION** (see definitions below)
Green Sea Turtle (T)		Marine	No Effect
Loggerhead Sea Turtle (T)		Marine	No Effect
Hawksbill Sea Turtle (E)		Marine	No Effect
Leatherback Sea Turtle (E)		Marine	No Effect
Kemp's Ridley Sea Turtle (E)		Marine	No Effect
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate

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 = 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 = 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.

Critical Habitat Destruction or Adverse Modification = Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.

G. USFWS Species & Critical Habitat and Effects Determination Requested

1. *List all species, critical habitat, proposed species and proposed critical habitat that may be found in the action area.*
2. *Attach a separate map identifying species/critical habitat locations within the action area.*

For information on species and critical habitat under USFWS jurisdiction, visit http://www.fws.gov/endangered/species/.

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)	**DETERMINATION** (see definitions below)
Pallid sturgeon		Select One	No Effect
Hawksbill sea turtle		Terrestrial	No Effect
Kemp's Ridley		Terrestrial	No Effect
Leatherback sea turtle		Terrestrial	No Effect
Loggerhead sea turtle		Terrestrial	No Effect
Piping plover		Terrestrial	No Effect
Red knot		Select One	No Effect
West Indian manatee		Select One	No Effect
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
Select One		Select One	Select Most Appropriate
		Select One	Select Most Appropriate
		Select One	Select Most Appropriate

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 = 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 = 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.

Critical Habitat Destruction or Adverse Modification = Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.

H. Effects of the proposed project to the species and habitats

I. *Explain the potential beneficial and adverse effects to each species listed above (Describe what, when, and how the species will be impacted and the likely response to the impact. Be sure to include direct, indirect, and cumulative impacts and where possible, quantify effects. If species are present (or potentially present) and will not be adversely affected describe your rationale. If species are unlikely to be present in the general area or action area, explain why. This justification provides documentation for your administrative record, avoids the need for additional correspondence regarding the species, and helps expedite review.)*

The Proposed Project is anticipated to have No Effect on the following species: pallid sturgeon; both terrestrial and marine life stages of the hawksbill Kemp's ridely, leatherback and loggerhead sea turtles; the marine life stage of the green sea turtle; piping plover and red knot; and West Indian manatee. This is based the fact that Proposed Project activities will occur in upland areas on previously developed lands, a lack of proposed in-water work, and the Proposed Projects direct and indirect actions will be limited to upland areas surround the Proposed Project. Additionally, these species are not anticipated in the Proposed Project action area (i.e. upland areas) due to a lack of suitable habitat nor documented occurrences for any of the listed species based on information and distribution maps of the species obtained from NatureServe (2016). The Proposed Project is not anticipated to yield direct nor indirect impacts to these species at broader spatial and temporal scales beyond the Proposed Project action area because of the localized and temporary nature of the Proposed Project and the existing infrastructure surrounding the Proposed Project and the construction best management practices (BMPs) presented in the attachment.

II. *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 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.*

Designated critical habitat is not present within the Proposed Project action area. Therefore, No Effects to critical habitat would occur as a result of the proposed construction of recreational features.

I. Actions to Reduce Adverse Effects

I. *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.)*

Species-specific BMPs from the Final PDARP/PEIS (DWH Trustees 2016:Section 6, Appendix A) that would be incorporated into the Proposed Project are included as an attachment.

Additionally, all individuals (such as construction workers) working on the Proposed Project would be provided with information on general awareness of any federally protected species that have the potential to occur in the Proposed Project action area. Seasonal avoidance measures will be implemented when practicable. If work must be conducted when these species are present, certain activities may be restricted or modified to reduce disturbance of these species (see attached BMPs).

The implementing trustee will implement and enforce approved BMPs listed in the attachment to avoid and minimize impacts to species listed in Sections F and G. Continued coordination of BMPs will occur during the final design phase.

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.)*

Designated critical habitat is not present within the Proposed Project. Therefore, No Effects to critical habitat would occur as a result of the proposed construction of recreational features.

J. 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

Is your activity likely to impact 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	
☐	☐	*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) *Building or enhancing areas for water-related recreational use or fishing opportunities (e.g. fishing piers, bridges, boat ramps, marinas)*
☐	☐	*f) Aquaculture*
☐	☐	*g) Dredging or in-water construction activities to change hydrologic conditions or connectivity, create breakwaters and living shorelines, etc.*
☐	☐	*h) Restoration of barrier islands, levee construction or similar projects*
☐	☐	*i) Fresh-water river diversions*

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. Are any measures planned to mitigate potential impacts to marine mammals? If yes, provide text in box below. NO ☑ YES ☐

K. 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**

L. Migratory Birds

Identify the species anticipated in the action area and behaviors (breeding, roosting, foraging) anticipated during project implementation. You may list similar species on a single line and categorize by type (e.g., Wading birds - great blue heron, snowy egret, reddish egret). If species are present and impacts to individuals or habitat could occur, identify avoidance and minimization measures to prevent incidental take.
Incidental take of Migratory Birds cannot be authorized. Use additional tables on the next page if needed.

I.

Species/Species Group	Behavior	Species/Habitat Impacts and Conservation Measures to Minimize Impacts
American Golden-Plover	non breeder	The Proposed Project area is located within a region that includes the following birds of conservation concern (USFWS 2018). During the Proposed Project design phase, coordination with the USFWS and the state trust resource agency would occur to site and design Proposed Project features to avoid or minimize impacts to migratory bird nesting habitats or important feeding and loafing areas. If vegetation clearing is required, it would take place outside of the migratory bird nesting season (approximately mid-February through mid-September) or a qualified biologist would inspect the area for active nests. If no active nests are found, vegetation may be removed. If active nests are found, vegetation may be removed after the nestlings successfully fledge. If the Proposed Project must occur during this time-frame and breeding, nesting, and fledging birds are present, the state trust resource agency would be contracted to obtain the most recent guidance to protect nesting birds or rookeries, and their recommendations would be implemented.
American Oystercatcher	breeder	
Bald Eagle	breeder	
Black Rail	breeder	
Black Skimmer	breeder	
Gull-Billed Tern	breeder	
King Rail	breeder	
Lesser Yellowlegs	non breeder	
Long-Billed Curlew	breeder	
Magnificent Frigatebird	non breeder	
Marbled Godwit	non breeder	
Nelson's Sparrow	non breeder	
Prothonotary Warbler	breeder	
Red-Head Woodpecker	breeder	
Reddish Egret	breeder	
Rusty Blackbird	non breeder	
Seaside Sparrow	breeder	
Semipalmated Sandpiper	non breeder	
Short-Billed Dowitcher	non breeder	
Swallow-Tailed Kite	breeder	
Whimbrel	non breeder	
Willet	breeder	
Wilson's Plover	breeder	
Wood Thrush	breeder	

M. Migratory Birds

Continuation page if needed.

II.	SPECIES/SPECIES GROUP	BEHAVIOR	SPECIES/HABITAT IMPACTS and CONSERVATION MEASURES TO MINIMIZE IMPACTS

N. Best Practices

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 pratices you'll be using in your project.

PDARP/PEIS best practices that would be incorporated into the Proposed Project are attached.

O. Submitting the BE Form

NMFS ESA § 7 Consultation

We request that all ESA §7 consultation requests/packages be submitted electronically to: **Christina.Fellas@noaa.gov**

Questions about consultation status may be directed to the email address above or

by phone: Christy Fellas: 727-551-5714

USFWS ESA § 7 Consultation

We request that all consultation requests/packages to USFWS be submitted electronically to: **Ashley_Mills@fws.gov**.

You will be notified when we receive your Biological Evaluation. 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 send your Biological Evaluation to the appropriate Field Office to conduct consultation.

Questions about consultation status may be directed to the email address above or by phone:
Ashley Mills: 812-756-2712

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.

Are you using this form to request approval for use of NMFS PDCs for this project? ○ Yes ◉ No

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

- ☐ Project is designed to avoid techniques and locations listed in the oyster reef creation and enhancement PDCs 1.a-1.e.
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Construction Conditions (PDC 2.a)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.b)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.c)
- ☐ In Gulf sturgeon critical habitat, oyster reef creation and enhancement occurs only on existing shell substrata or relic reef locations (PDC 2.d)
- ☐ Cultch material is free of debris and contaminants (PDC 2.e)
- ☐ Fresh shell has been properly aged or quarantined before being deployed (PDC 2.f)
- ☐ Cultch material is placed in a manner to minimize disturbance of sediment (PDC 2.g)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDC 2.h)
- ☐ Plan/drawings for intermittent breaks between oyster reef segment has been provided (2.i)
- ☐ Spill prevention and response plan has been developed (2.j)
- ☐ Design and materials used avoid entanglement and entrapment risks for ESA-listed species (2.k)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Marine Debris Removal ○ Yes ◉ No

- ☐ This project is designed to avoid techniques and locations listed in the marine debris removal PDCs 1.a-1.c
- ☐ All on-water operations shall take place during daylight hours (PDC 2.a)
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Conditions (PDC 2.b)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.c)
- ☐ Project personnel have been notified of procedures if approached by a marine mammal or sea turtle (PDC 2.d)
- ☐ Trash and debris will be disposed of at an upland location (PDCs 2.e)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Construction of Living Shorelines

○ Yes ◉ No

- ☐ This project is designed to avoid techniques and locations listed in the living shoreline PDCs 1.a-1.h
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Conditions (PDC 2.a)
- ☐ All in-water work activities will conducted during daylight hours (PDC 2.b)
- ☐ Piles for navigation of public safety purposes are less than 24" diameter and non-metal if impact hammer used (PDC 2.c)
- ☐ Spill prevention and response plan has been developed (2.d)
- ☐ Fill material is not sourced using hopper dredge or from sea turtle, Gulf sturgeon or smalltooth sawfish critical habitat and in-water borrow sites do not impact turtle nesting beaches (PDC 2.e)
- ☐ Design and materials do not create entrapment or entanglement risks to ESA-listed species and do not block migration (PDC 2.f)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.g)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDC 2.h)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.i)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Marsh Creation and Enhancement

○ Yes ◉ No

- ☐ Project is designed to avoid techniques and locations listed in the marsh creation PDCs 1.a-1.f
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Conditions (PDC 2.a)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.b)
- ☐ All in-water work activities will be conducted during daylight hours (PDC 2.c)
- ☐ Spill prevention and response plan has been developed (PDC 2.d)
- ☐ Fill material is not sourced using hopper dredge or from sea turtle, Gulf sturgeon or smalltooth sawfish critical habitat and in-water borrow sites do not impact turtle nesting beaches (PDC 2.e)
- ☐ Design and materials do not create entrapment or entanglement risks to ESA-listed species and do not block migration (PDC 2.f)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.g)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDCs 2.h)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

Construction of Non-Fishing Piers

◯ Yes ◉ No

- ☐ This project is designed to avoid locations listed in the non-fishing piers PDCs 1.a
- ☐ Spill prevention and response plan has been developed (PDC 2.a)
- ☐ Design and materials do not create entrapment or entanglement risks to ESA-listed species and do not block migration (PDC 2.b)
- ☐ Follows NMFS' Sea Turtle and Smalltooth Sawfish Construction Conditions (PDC 2.c)
- ☐ Follows NMFS' Vessel Strike Avoidance Measures and Reporting for Mariners (PDC 2.d)
- ☐ Follow Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat (PDC 2.e)
- ☐ In-water construction does not impede sea turtle access to or from nesting sites during nesting season (PDC 2.f)
- ☐ Follows methods and timing for pile driving (2.g)
- ☐ Follows construction sequencing and avoids propwashing (PDC 2.h)
- ☐ Water depth will not be altered (PDC 2.i)
- ☐ Lighting specifications are incorporated for piers on or adjacent to sea turtle nesting beaches (PDC 2.j)
- ☐ Follows educational and fishing signage requirements (PDC 2.k)
- ☐ Methods are employed to avoid turbidity impacts to ESA-listed species (PDC 2.l)
- ☐ Monitoring plan is included and final reports will be submitted to NMFS (PDC 3 and 4)

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

Name of person(s) completing this form:

Date form completed:

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

BIOLOGICAL EVALUATIONS FORM ATTACHMENT

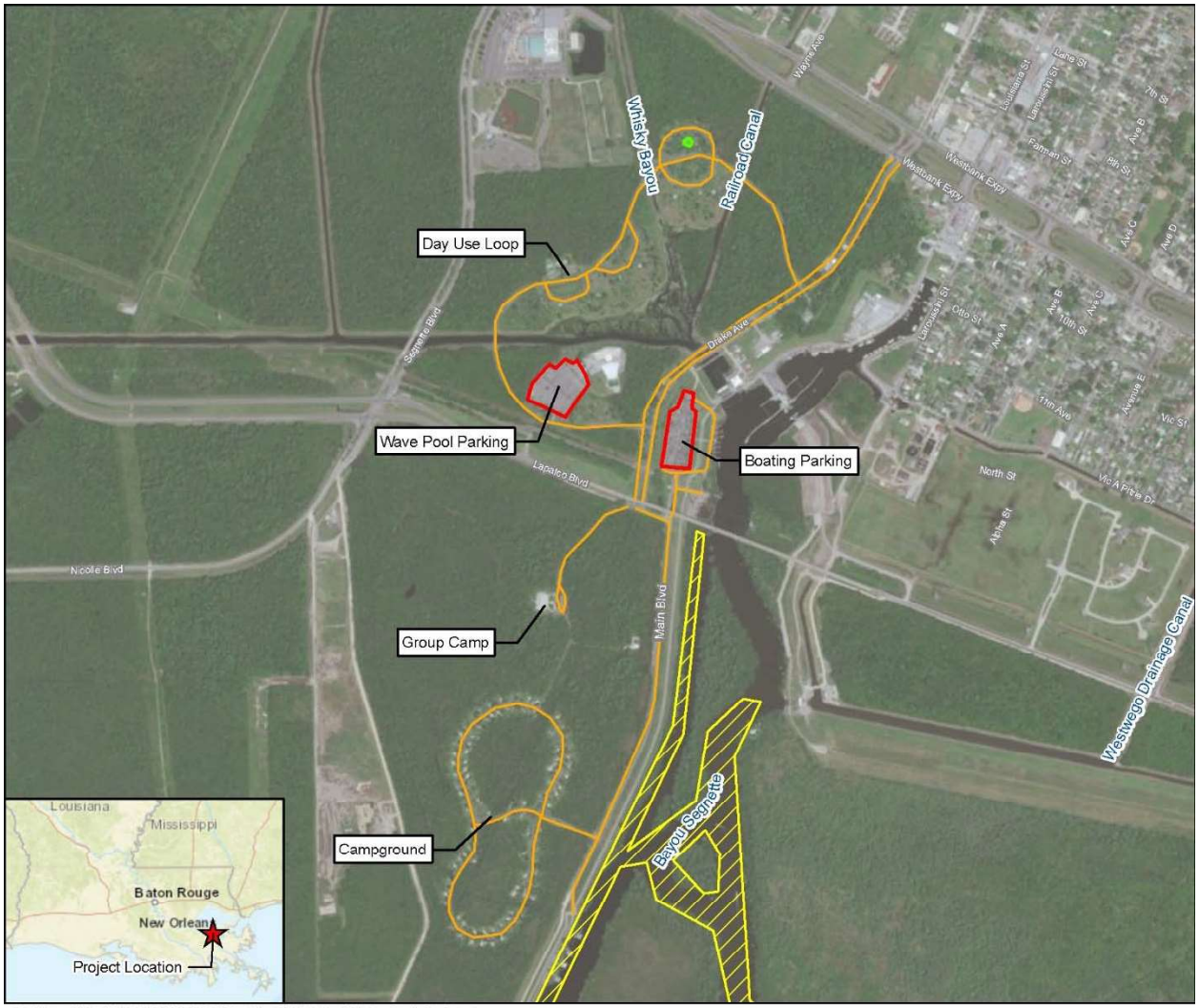
BIOLOGICAL EVALUATIONS FORM CONTINUATION SHEET

Section E.II. Describe the Proposed Action (continued)

The NRCS Soil Survey for Jefferson Parish, Louisiana (U.S. Department of Agriculture [USDA] 2018) identifies five soil map units where construction would occur within the Proposed Project area. The expected soil varieties are low-sloping, soft substrates predominantly composed of silt, clay, and muck, and include: Allemands muck, 0 to 0.2 percent slopes, very frequently flooded (AR); Barbary muck, 0 to 1 percent slopes (BB); Cancienne silt loam, 0 to 1 percent slopes (Cm); Kenner muck, 0 to 1 percent slopes, very frequently flooded (KE); and Larose muck, 0 to 0.5 percent slopes, tidal (LR).

The construction associated with the removal and replacement of the playground equipment and fall surfacing would be limited to the existing playground area located to the north of the day use area. This work would include the removal of existing play structures, fall surfacing with a containment barrier, and construction of a new foundation (likely concrete slab) with ADA-compliant fall surfacing (such as No-Fault), new playground structures, and connection to the existing ADA-accessible walkway. Some terrestrial piling work may be conducted at the playground area associated with these improvements. The existing concrete walkway was recently constructed for ADA compliance and would be protected.


Day Use Loop
Wave Pool Parking
Boating Parking
Group Camp
Campground
Whisky Bayou
Railroad Canal
Bayou Segnette
Westwego Drainage Canal
Main Blvd
Lapalco Blvd
Nicolle Blvd
Seimone Blvd
Louisiana
Mississippi
Baton Rouge
New Orleans
Project Location
BAYOU SEGNETTE STATE PARK
PROJECT DETAIL MAP
JEFFERSON PARISH, LOUISIANA
Proposed Alternative
Road
Playground
Parking Lot
1:18,000
Created By: JS
Project Number: 48078
Date: 3/19/2018
NAD 1983 StatePlane Louisiana South FIPS 1702 Feet
0
1,000
2,000 Feet
0
690
1,380
2,070 Feet



BAYOU SEGNETTE STATE PARK
ESSENTIAL FISH HABITAT AND
USFWS CRITICAL HABITAT MAP
JEFFERSON PARISH, LOUISIANA

Proposed Alternative
- Road
- Playground
- Parking Lot

Habitat Designation
- Essential Fish Habitat

1:18,000

Created By: JS
Project Number: 48078
Date: 4/20/2018
NAD 1983 StatePlane Louisiana South FIPS 1702 Feet

0 1,000 2,000 Feet
0 690 1,380 2,070 Feet

BAYOU SEGNETTE STATE PARK
NWI MAP
JEFFERSON PARISH, LOUISIANA

Proposed Alternative
- Road
- Playground
- Parking Lot

NWI Designation
- Emergent Wetland
- Forested/Shrub Wetland
- Freshwater Waterbody

1:18,000

Created By: JS
Project Number: 48078
Date: 4/20/2018
NAD 1983 StatePlane Louisiana South FIPS 1702 Feet

0 1,000 2,000 Feet
0 690 1,380 2,070 Feet

BEST PRACTICES FROM THE PDARP/PEIS

The following section is a direct excerpt from Section 6, Appendix A in Deepwater Horizon oil spill: Final Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental Impact Statement (DWH Trustees 2016)

Birds

Bald Eagles

If bald eagle breeding or nesting behaviors are observed or a nest is discovered or known, have all activities 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. Maintain this avoidance distance from the onset of breeding/courtship behaviors until any eggs have hatched and eaglets have fledged (approximately 6 months).

If a similar activity (such as driving on a roadway) is closer than 660 feet to a nest, maintain a distance buffer as close to the nest as the existing tolerated activity. 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 maintain a distance buffer as close to the nest as the existing tolerated activity.

In some instances activities conducted within 660 feet of a nest may result in disturbance, particularly for the eagles occupying the Mississippi barrier islands. If an activity appears to cause initial disturbance, stop the activity and move all individuals and equipment away until the eagles are no longer displaying disturbance behaviors. Contact the USFWS's Migratory Bird Permit Office to determine how to avoid impacts or if a permit may be needed.

Migratory Birds

Use care to avoid birds when operating machinery or vehicles near birds.

During the project design phase, coordinate with the USFWS and the state trust resource agency to site and design projects to avoid or minimize impacts to migratory bird nesting habitats or important feeding/loafing areas.

Avoid working in migratory bird nesting habitats during breeding, nesting, and fledging (approximately mid-February through late August). If project activities must occur during this timeframe and breeding, nesting, or fledging birds are present, contact the state trust resource agency to obtain the most recent guidance to protect nesting birds or rookeries, and their recommendations will be implemented.

Conservation areas may already be marked to protect bird nesting areas. Stay out of existing marked areas.

If vegetation clearing is necessary, clear vegetation outside the migratory bird nesting season (approximately mid-February through late August) or have a qualified biologist inspect for active nests. If no active nests are found, vegetation may be removed. If active nests are found, vegetation may be removed after the nest successfully fledges.

Avoid driving over the natural organic material ("wrack") line or areas of dense seaweed, as these habitats may contain hatchlings and chicks that are difficult to see.

Install pointy, white piling caps on exposed pilings to prevent bird roosting on piers, docks, and marinas.

Invasive Species

Develop and implement a Hazard Analysis and Critical Control Points (HACCP) plan to prevent and control invasive species. Use (ASTM E2590−08) or other version of HACCP or other similar planning tool.

Implement an Integrated Pest Management (IPM) approach to facility design, sanitation, and maintenance to prevent and control invasive and pest species.

Inspect sites, staging, and buffer areas for common invasive species prior to the onset of work. Map any invasive species detected and note qualitative or quantitative measures regarding abundance.

Implement a control plan, if necessary, to ensure these species do not increase in distribution or abundance at a site due to project implementation. Inspect sites periodically to identify and control new colonies/individuals of an invasive species not previously observed prior to construction.

Prior to bringing any equipment (including personal gear, machinery, vehicles, or vessels) to the work site, inspect each item for mud or soil, seeds, and vegetation. If present, clean the equipment, vehicles, or personal gear until they are free from mud, soil, seeds, and vegetation. Inspect the equipment, vehicles, and personal gear each time they are being prepared to go to a site or prior to transferring between sites to avoid spreading exotic, nuisance species.

Place and maintain predator-proof waste receptacles in strategic locations during project implementation to prevent an increase in predator abundance. For projects designed to enhance or increase visitor use, maintain predator-proof waste receptacles for the life of the project.

Have the appropriate state agency inspect any equipment or construction materials for invasive species prior to use.

Inspect and certify propagated or transplanted vegetation as pest and disease free prior to planting in restoration project areas.

General Construction Measures

Protected Species

Provide all individuals working on a project with information in support of general awareness of and means to avoid impacts to protected species and their habitats present at the specific project site.

Site Maintenance and Conduct

Use the nearest, existing staging, access and egress areas, travel corridors, pathways, and roadways (including those provided by the state, local governments, land managers, trustee, or private property

owner, with proper permissions) and do not create new staging areas, access (except dune walkovers) or egress, or travel corridors through dune habitats.

Minimize construction noise to the maximum extent practicable when working near protected species and their habitats.

Maintain or improve all lighting regimes. Methods include working during daylight hours only, prohibiting lighting on dune walkovers, and using wildlife-friendly lighting where lighting is necessary for human safety.

Land and Vegetation Protection

Develop and implement an erosion control plan to minimize erosion during and after construction and where possible use vegetative buffers (100 feet or greater), revegetate with native species or annual grasses, and conduct work during dry seasons.

Develop and implement a spill prevention and response plan, including conducting daily inspections of all construction and related equipment to ensure there are no leaks of antifreeze, hydraulic fluid, or other substances and cleaning and sealing all equipment that would be used in the water to rid it of chemical residue. Develop a contract stipulation to disallow use of any leaking equipment or vehicles.

Prohibit use of hazardous materials, such as lead paint, creosote, pentachlorophenol, and other wood preservatives during construction in, over or adjacent to, sensitive sites during construction and routine maintenance.

Where landscaping is necessary or desired, use native plants from local sources. If non-native species must be used, ensure they are noninvasive and use them in container plantings.

Wetland and Aquatic Resource Protection

Avoid and minimize, to the maximum extent practicable, placement of dredged or fill material in wetlands and other aquatic resources.

Design construction equipment corridors to avoid and minimize impacts to wetlands and other aquatic resources to the maximum extent practicable.

To the maximum extent possible, implement the placement of sediment to minimize impacts to existing vegetation or burrowing organisms.

Apply herbicide in accordance with the direction and guidance provided on the appropriate U.S. Environmental Protection Agency (EPA) labels and state statutes during land-based activities.

When local conditions indicate the likely presence of contaminated soils and sediments, test soil samples for contaminant levels and take precautions to avoid disturbance of, or provide for proper disposal of, contaminated soils and sediments. Evaluate methods prior to dredging to reduce the potential for impacts from turbidity or tarballs.

Perform maintenance of generators, cranes, and any other stationary equipment operated within 150 feet of any natural or wetland area, as necessary, to prevent leaks and spills from entering the water.

Designate a vehicle staging area removed from any natural surface water resource or wetland to perform fueling, maintenance, and storage of construction vehicles and equipment. Inspect vehicles and equipment daily prior to leaving the storage area to ensure that no petroleum or oil products are leaking.

Upon completion of construction activities, restore all disturbed areas as necessary to allow habitat functions to return. Create and manage public access developments to enhance recreational experience and educational awareness to minimize effects to habitat within wetland and shallow water areas and to the long-term health of related biological communities.

Use silt fencing where appropriate to reduce increased turbidity and siltation in the project vicinity. This would apply to both on land and in water work.

FUTURE BEST PRACTICES

Best Practices for EFH Under MSFCMA

At time of publication, practices to avoid and minimize effects to EFH were under development. Please check the following webpage for EFH best practices that may be developed: http://sero.nmfs.noaa.gov/habitat_conservation/documents/sero_hazmat_efh_consultation_bmps_ver201612.pdf

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