

Biological Evaluation Form

Deepwater Horizon Oil Spill Restoration

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

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

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

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

For assistance, please contact the compliance liaisons
USFWS: Erin Chandler at erin_chandler@fws.gov
NMFS: Christy Fellas at christina.fellas@noaa.gov

A. Project Identification

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

Implementing Trustee(s): Mississippi Department of Environmental Quality

Contact Name: Valerie Alley Phone: (601) 961-5182 Email: valley@mdeq.ms.gov

Project Name: Hancock County Marshes Coastal Preserve Habitat Management- Wachovia Tract

DIVER ID# [Click to enter text](#) TIG: Mississippi TIG Restoration Plan # Draft RP II/EA

B. Project Phase and Supporting Documentation

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

Planning/Conceptual Construction/Implementation Engineering & Design

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

[Click here to enter text.](#)

Supporting Documentation

Please attach any maps, aerial photographs, or design drawings that will support the information in this BE form. Examples of such supporting documentation include, but are not limited to:

Plan view of design drawings

Aerial images of project action area and surrounding area

Map of project area with elements proposed (polygons showing proposed construction elements)

Map of action area with critical habitat units or sensitive habitats overlaid

C. Project Location

I. State and County/Parish of action area

Hancock County, MS

II. Latitude/Longitude for action area (Decimal degrees and datum [e.g., 27.71622°N, 80.25174°W NAD83]
[online conversion: <https://www.fcc.gov/encyclopedia/degrees-minutes-seconds-tofrom-decimal-degrees>]
30.296979° -89.630434°

D. Existing Compliance Documentation

NEPA Documents

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

YES

NO

Examples:

-TIG Restoration Plan/EA or EIS (draft or final)

-USACE programmatic NEPA analysis

-USACE Clean Water Act individual permit for the project

-NEPA analysis provided by a federal agency that gave approval, funding or authorization

Permits

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

YES

NO

Permit Number and Type: Click or tap here to enter text

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

YES

NO

Permit Number and Type: Click or tap here to enter text.

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

DWH Trustees. 2020. Draft Mississippi Trustee Implementation Group Restoration Plan II/Environmental Assessment.

DWH Trustees. 2017. Mississippi Trustee Implementation Group 2016-2017 Restoration Plan/Environmental Assessment. <https://www.fws.gov/doiddata/dwh-ar-documents/1272/DWH-ARZ000488.pdf>. Section 3.1 to 3.6, Graveline Bay Land Acquisition and Management and Grand Bay Land Acquisition and Habitat Management

DWH Trustees. 2014. Deepwater Horizon Oil Spill Final Phase III Early Restoration Plan and Early Restoration Programmatic Environmental Impact Statement. <https://www.gulfspillrestoration.noaa.gov/sites/default/files/wp-content/uploads/ERP-PEIS-Part-3-Chapter-10-through-Chapter-11.pdf>. Section 10.4 & 10.5 Restoration Initiatives at INFINITY Science Center (pages 53-92).

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

Name of Person Completing this Form: Alane Young

Name of Project Lead: Valerie Alley

Date Form Completed: 02/02/2020

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

E. Description of Action Area

Provide a description of the existing environment (e.g., topography, vegetation type, soil type, substrate type, water quality, water depth, tidal/riverine/estuarine, hydrology and drainage patterns, current flow and direction), and land uses (e.g., public, residential, commercial, industrial, agricultural). Describe all areas that may be directly or indirectly affected by the action.

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

The Hancock County Coastal Preserve- Wachovia Tract Component is a 1,203 acre area located south of I-10, east of the Pearl River and west of the Possum Walk Trail which is managed by the Mississippi Department of Marine Resources Coastal Preserve Program (MDMR CPP). The action area includes the Wachovia Tract.

The action area is a mosaic of wetlands and uplands extending from the open water of the Pearl River. Brackish and freshwater marshes start on the east side of the Pearl River. Across the marshes, as the land gently rises in elevation to the east, there are bayheads and hardwood swamp in freshwater strands. Farther to the east is the pine flatwood/savanna forested uplands in the center and eastern side of the tract. The pine flatwood/savanna extends to the project boundary. The tract is comprised of the following habitat types: freshwater and brackish marsh, bottomland hardwood forest, hydric drains including bayhead habitats; and upland pine flatwood/savanna. Even though this habitat is subject to seasonally high-water tables, soils are typically moderately well drained. Overstory vegetation is characterized by slash pine (*Pinus elliottii*) with scattered loblolly pine (*Pinus taeda*). The property exhibits some heavy woody shrub cover or “Southern Rough” that typically results from decades of fire exclusion in the Mississippi coastal plain, although there are areas containing fire dependent species.

Surface soils in the project area consist of Holocene age coastal deposits of loam, sand, gravel, and clay. The USDA NRCS Web Soil Survey (USDA, 2019) identifies 12 soil-mapping units¹ within the footprint of the project. These soils include sandy loams, silt, silt loams, and mucky silt loams ranging from 0 to 5 percent slopes with hydrology regimes ranging from well drained in high relief areas to frequently flooded in low relief areas in brackish marsh, depressions, and along drainageways.

The Lower Pearl watershed (HUC 8 – 03180004) (Figure -3) includes portions of Hancock, Lamar, Marion, and Pearl River Stone counties; however, the project area for the alternative is exclusively in Hancock County.

a. Waterbody

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

Major waterbodies that flow or share boundaries with the project area include the Pearl River. Bogue Homa Creek, a small tributary of the Pearl River, runs through the tract. The Pearl River is included in the 2018 Mississippi Section 303(d) List of Impaired Water Bodies for Sediment, Total Nitrogen, Total Phosphorus.

Does the project area include a river or estuary?

YES NO

If yes, please approximate the navigable distance from the project location to the marine environment.

The Pearl River terminates at the western Mississippi Sound approximately twelve miles downstream from the tract.

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.

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.

Click here to enter text.

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.

Click here to enter text.

e. Corals

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

Click here to enter text.

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.).

Pine Flatwoods

g. Marine Mammals

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

Dolphins YES NO

Whales YES NO

Manatees YES NO

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

Click here to enter text.

h. Soils and Sediments

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

Data from the Mississippi State Geological Survey generally indicate that surface soils in the project area consist of Holocene age coastal deposits of loam, sand, gravel, and clay. The USDA NRCS Web Soil Survey (USDA, 2019) identifies 12 soil-mapping units within the footprint of the project. These soils include sandy loams, silt, silt loams, and mucky silt loams ranging from 0 to 5 percent slopes with hydrology regimes ranging from well drained in high relief areas to frequently flooded in low relief areas in brackish marsh, depressions, and along drainageways.

i. Land Use

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

The project area is owned by the State of Mississippi and is managed by Mississippi Department of Marine Resources under the Coastal Preserves Program. The land use is restricted to public recreational use.

Click or tap here to enter text.

j. Essential Fish Habitat

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

F. Project Description

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

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

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

The project will be implemented over a 10-year timeframe. Restoration measures and management activities are described here.

Prescribed Fire: This management activity would occur on a regular two to three-year interval, with a preference for prescribed burns during the growing season (March-October). Fire infrastructure has been established on the Wachovia Tract and completed a “first entry” burn in the spring of 2016. Burn Units are approximately 377 acres in size including pine flatwoods. Prescribed fire would focus on pine flatwoods which are composed of a mixture of southern pines (Slash, Longleaf, Loblolly), southern hardwoods, shrubs, and grass fuels. Environmental factors such as weather, access due to seasonal conditions and other factors, may affect the timing and frequency of prescribed fires.

Chemical Treatment: There are numerous invasive plants in the project area including : Chinese tallow (*Triadaca sebifera*), cogongrass (*Imperata cylindrical*), Cherokee Rose (*Rosa laevigata*), alligator weed (*Alternanthera philoxeroides*), torpedo grass (*Panicum repens*), water hyacinth (*Eichhornia crassipes*), common duckweed (*Lemna minor*), Chinese privet (*Ligustrum sinense*), Japanese honeysuckle (*Lonicera japonica*), Japanese climbing fern (*Lygodium japonicum*), common reed (*Phragmites australis*), rattlebox (*Sesbania punicea*), tung tree (*Vernicia fordii*), and Japanese wisteria (*Wisteria floribunda*).

Prescribed fire is intended to topkill some of these invasive plants as well as to open up the understory for direct non-native plant treatments. Chemical treatment would include application of herbicides for scattered populations of Chinese tallow and cogon grass control in the Wachovia Tract. In the Wachovia Tract, the current program includes 2 treatments of approximately 455 acres in 15 subunits. Chemical treatment would continue on approximately 455 acres and is anticipated to occur annually in years 1 to 10 of the project. Environmental factors such as weather, access due to seasonal conditions, and other factors, could affect the timing and frequency for chemical treatment.

Mechanical Treatment: Mechanical treatment on this tract requires smaller tracked equipment due to saturated conditions throughout much of the project area. Opportunities for mechanical treatment would likely be limited to a few months per year because of wet conditions. Approximately 377 acres of mechanical treatment is anticipated to occur in years 0 to 3 of the project. Environmental factors such as weather, access due to seasonal conditions, and other factors could affect the timing and frequency of mechanical treatment.

Short and long-term maintenance includes regular maintenance of access and fire lanes needed to routinely implement management activities including prescribed fire, chemical treatment, and mechanical treatment activities.

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

Restoration measures and management activities would take place over a 10-year period.

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

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

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

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

Click or tap here to enter text.

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

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

iii. Use of “Dock Construction Guidelines”? http://sero.nmfs.noaa.gov/protected_resources/section_7/guidance_docs/documents/dockkey2002.pdf

- iv. Type of decking: Grated – 43% open space; Wooden planks or composite planks – proposed spacing?
- v. Height above Mean High Water (MHW) elevation?
- vi. Directional orientation of main axis of dock?
- vii. Overwater area (sq ft)?

See Section F.

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

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

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

Click here to enter text.

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

Click here to enter text.

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

Click here to enter text.

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

Click here to enter text.

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

Click here to enter text.

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

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

Click here to enter text.

G. NOAA Species & Critical Habitat and Effects Determination Requested

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

- This project occurs in a location that does not contain any listed NOAA species or designated Critical Habitats.
- ESA effects have been accounted for under an existing consultation.

1. *List all species, critical habitat, proposed species and proposed critical habitat that may be found in the action area. Species that do not currently occur in the action area (but are listed on county species lists) do not need to be listed in drop downs.*

2. *Attach a separate map identifying species/critical habitat locations within the action area. For information on species and critical habitat under NMFS jurisdiction, visit:*

http://sero.nmfs.noaa.gov/protected_resources/section_7/threatened_endangered/Documents/gulf_of_mexico.pdf.

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

Species and/or Critical Habitat	CH Unit (if applicable)	Location (Sea turtles and Gulf Sturgeon only)	Determinations (see definitions below)	For “No Effect”, please select justification.
Gulf Sturgeon CH	Unit 1	Riverine/Freshwater	No Effect	No suitable habitat in action area
Gulf Sturgeon (T)		Riverine/Freshwater	No Effect	Species does not occur within action area

Choose an item.		Choose an item.	Choose an item.	Choose an item.
Choose an item.		Choose an item.	Choose an item.	Choose an item.
Choose an item.		Choose an item.	Choose an item.	Choose an item.
Choose an item.		Choose an item.	Choose an item.	Choose an item.
Choose an item.		Choose an item.	Choose an item.	Choose an item.
Choose an item.		Choose an item.	Choose an item.	Choose an item.
		Choose an item.	Choose an item.	Choose an item.
		Choose an item.	Choose an item.	Choose an item.

Determination Definitions

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

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

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

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

H. USFWS Species & Critical Habitat and Effects Determination Requested

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

- This project occurs in a location that does not contain any listed USFWS species or designated Critical Habitats.
- ESA effects have been accounted for under an existing consultation.

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

2. Attach a separate map identifying species/critical habitat locations within the action area. For information on species and critical habitat under NMFS jurisdiction, visit:

http://sero.nmfs.noaa.gov/protected_resources/section_7/threatened_endangered/Documents/gulf_of_mexico.pdf.

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

Species and/or Critical Habitat	CH Unit (if applicable)	Location (Sea turtles and Gulf Sturgeon only)	Determinations (see definitions below)	For "No Effect", please select justification.
Wood Stork		Terrestrial	May Affect, Not Likely to Adversely Affect	Select Most Appropriate
Eastern Black Rail		Terrestrial	May Affect, Not Likely to Adversely Affect	Choose an item.
Gopher Tortoise		Terrestrial	May Affect, Not Likely to Adversely Affect	Choose an item.
Dusky gopher frog		Terrestrial	May Affect, Not Likely to Adversely Affect	Choose an item.
		Choose an item.	Choose an item.	Choose an item.
		Choose an item.	Choose an item.	Choose an item.
		Choose an item.	Choose an item.	Choose an item.
		Choose an item.	Choose an item.	Choose an item.
		Choose an item.	Choose an item.	Choose an item.

Determination Definitions

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

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

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

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

I. Effects of the proposed project to the species and actions to reduce impacts

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

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

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

Potential impacts to threatened or endangered species and their critical habitat are presented in Table 1. None of the restoration activities for the alternatives would be completed in open water. There would be no impact as a result of any restoration activity to in-water species (and associated critical habitat), including Gulf sturgeon, West Indian manatee, inflated heelsplitter, and sea turtles; for this reason, they are not included in the environmental consequences discussion.

Table 1. Protected Species-Potential Impacts

Species/Critical Habitat	Applicable Habitats	Activity	Potential Impacts to Species/ Critical Habitat
Birds			
Wood Stork (<i>Mycteria Americana</i>)	Fresh and brackish forested wetlands (breeding); swamps, ponds, and marshes, especially those with an open canopy (foraging)	PF, MC, CT, PG, RR	It is not likely that suitable habitat exists in the project area because much of the habitat is characterized by dense canopy cover. However, if the habitat does exist, restoration measures may affect species habitat. If disturbed, this species can temporarily leave the area during the implementation of restoration measures and management activities. As such, the project is not likely to adversely affect the species.
Eastern Black Rail (<i>Laterallus jamaicensis ssp. Jamaicensis</i>)	High marsh; ecotones	PF	Prescribed fire may reach ecotonal boundaries, however, fire lanes are in place to avoid the spread of fire. As such, the project is not likely to adversely affect the species.
Reptiles			
Gopher Tortoise (<i>Gopherus Polyphemus</i>)	Well-drained, sandy soils; abundance of diverse herbaceous ground cover; and an open canopy and sparse shrub cover	PF, MC, CT, PG, RR	It is not likely that this habitat exists in the project area because the predominant soil type is poorly drained. There may be limited areas of gopher tortoise habitat; surveys would be conducted in areas where the species is likely to occur. If burrows are identified, conservation measures will be implemented to avoid or minimize impacts. As such, the project is not likely to adversely affect the species.
Amphibians			
Dusky gopher frog (<i>Rana sevosa</i>)	Upland, sandy areas covered with open longleaf	PF, MC, CT, PG, RR	The project area does not contain ephemeral ponds, which are essential to this species' life cycle. Therefore, the project is not likely to adversely affect the species.

Species/Critical Habitat	Applicable Habitats	Activity	Potential Impacts to Species/ Critical Habitat
	pine forest with abundant ground cover; and isolated, ephemeral, wetland breeding sites within the forested landscape.		
Plants			
PF=Prescribed Fire; MC=Mechanical Clearing; Chemical Treatment=CT; PG=Prescribed Grazing; RR=Road removal/repair and replacement			

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

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

- USFWS Standard Manatee In Water Conditions
- NMFS Sea Turtle and Smalltooth Sawfish Construction Conditions²
- NMFS Measures for Reducing the Entrapment Risk to Protected Species¹
- NMFS Vessel Strike Avoidance Measures and Reporting for Mariners¹

Additional BMPs or Conservation Measures

Chapter 6 of the PDARP included an important appendix (6.A) of best practices, see information starting on page 6-173. http://www.gulfspillrestoration.noaa.gov/sites/default/files/wp-content/uploads/Chapter-6_Environmental-Consequences_508.pdf

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

Click here to enter text.

J. Effects to critical habitats and actions to reduce impacts

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

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

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

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

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.

K. Marine Mammals

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

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

If yes, is your activity likely to cause large-scale, ecosystem level impacts to the quality (e.g. salinity, temperature) of marine or estuarine waters? NO YES

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

NO	YES	ACTIVITY
<input type="checkbox"/>	<input type="checkbox"/>	a) Use of active acoustic equipment (e.g., echosounder) producing sound below 200 kHz
<input type="checkbox"/>	<input type="checkbox"/>	b) In-water construction or demolition
<input type="checkbox"/>	<input type="checkbox"/>	c) Temporary or fixed use of active or passive sampling gear (e.g., nets, lines, traps; turtle relocation trawls)
<input type="checkbox"/>	<input type="checkbox"/>	d) In-water Explosive detonation
<input type="checkbox"/>	<input type="checkbox"/>	e) Aquaculture
<input type="checkbox"/>	<input type="checkbox"/>	f) Restoration of barrier islands, levee construction or similar projects
<input type="checkbox"/>	<input type="checkbox"/>	g) Fresh-water river diversions
<input type="checkbox"/>	<input type="checkbox"/>	h) Building or enhancing areas for water-related recreational use or fishing opportunities (e.g. fishing piers, bridges, boat ramps, marinas)
<input type="checkbox"/>	<input type="checkbox"/>	i) Dredging or in-water construction activities to change hydrologic conditions or connectivity, create breakwaters and living shorelines, etc.
<input type="checkbox"/>	<input type="checkbox"/>	j) Conducting driving of sheet piles or pilings
<input type="checkbox"/>	<input type="checkbox"/>	k) Use of floating pipeline during dredging activities

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

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

<input type="checkbox"/>	NMFS Southeast U.S. Marine Mammal and Sea Turtle Viewing Guidelines ³
<input type="checkbox"/>	NMFS Sea Turtle and Smalltooth Sawfish Construction Conditions ⁴
<input type="checkbox"/>	NMFS Measures for Reducing the Entrapment Risk to Protected Species ³
<input type="checkbox"/>	NFMS Vessel Strike Avoidance Measures and Reporting for Mariners ³
<input type="checkbox"/>	Reproducing and posting outreach signs: Dolphin Friendly Fishing Tips sign, Don't Feed Wild Dolphins sign ³

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

L. Bald Eagles

Are bald eagles present in the action area? NO YES

If YES, the following conservation measures should be implemented:

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

Will you implement the above measures? NO YES

If these measures cannot be implemented, then you must contact the Service’s Migratory Bird Permit Office.

Texas – (505) 248-7882 or by email: permitsR2MB@fws.gov

Louisiana, Mississippi, Alabama, Florida – (404) 679-7070 or by email: permitsR4MB@fws.gov

M. Request approval for use of NMFS PDCs for this project

Complete this section only if your project qualifies for streamlined ESA consultation under the ESA Framework Programmatic Biological Opinion completed by NMFS on February 10, 2016. To be eligible for streamlined ESA consultation with NMFS, you must implement all Project Design Criteria (PDCs) applicable to your project. Check “yes” for PDC categories that apply to the proposed project, and request PDC checklist from NMFS.

³ Documents can be found here: http://sero.nmfs.noaa.gov/protected_resources/outreach_and_education/index.html

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

NO	YES	ACTIVITY
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Oyster Reef Creation and Enhancement
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Marine Debris Removal
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Construction of Living Shorelines
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Marsh Creation and Enhancement
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Construction of Non-Fishing Piers

N. Submitting the BE Form

We request that all BE forms and consultation materials be placed on Sharepoint for review. Upon receipt, we will conduct a preliminary review and provide any comments and feedback, including any requests for modifications or additional information. If modifications or additional information is necessary, we will work with you until the Biological Evaluation form is considered complete. Once complete, we will use the Biological Evaluation form to initiate appropriate consultations.

Questions may be directed to:

NMFS ESA § 7 Consultation

Christy Fellas, National Oceanic Atmospheric Administration
 Email: Christina.Fellas@noaa.gov
 Phone: 727-551-5714

USFWS ESA § 7 Consultation

Erin Chandler, Department of the Interior
 Email: Erin_Chandler@fws.gov
 Phone: 470-361-3153

Best Practices

The following best practices would be implemented to the extent practicable in order to address dust, erosion and sedimentation controls:

- Allow revegetation of fire breaks or actively revegetation with native species or annual grasses, if prolonged period of greening up is anticipated.
- 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.
- Soft track or wide track equipment would be used in wet areas to the extent practicable. Alternatively, crews may remove vegetative material with chainsaws.
- 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. If required, a U.S. Army Corps of Engineers permit would be obtained; likely a Nationwide 27 (Aquatic Habitat Restoration, Establishment, and Enhancement Activities) as well as MDMR Coastal Wetlands Permit (if required). USACE permit and/or MDME Coastal Wetlands permit conditions (if required) would be adhered to in all operations.
- Controlling dust related to construction site activities through a Soil Erosion Sediment Control Plan that includes spraying of a suppressing agent on dust piles (non-hazardous, biodegradable).
- Covering trucks hauling loose materials.

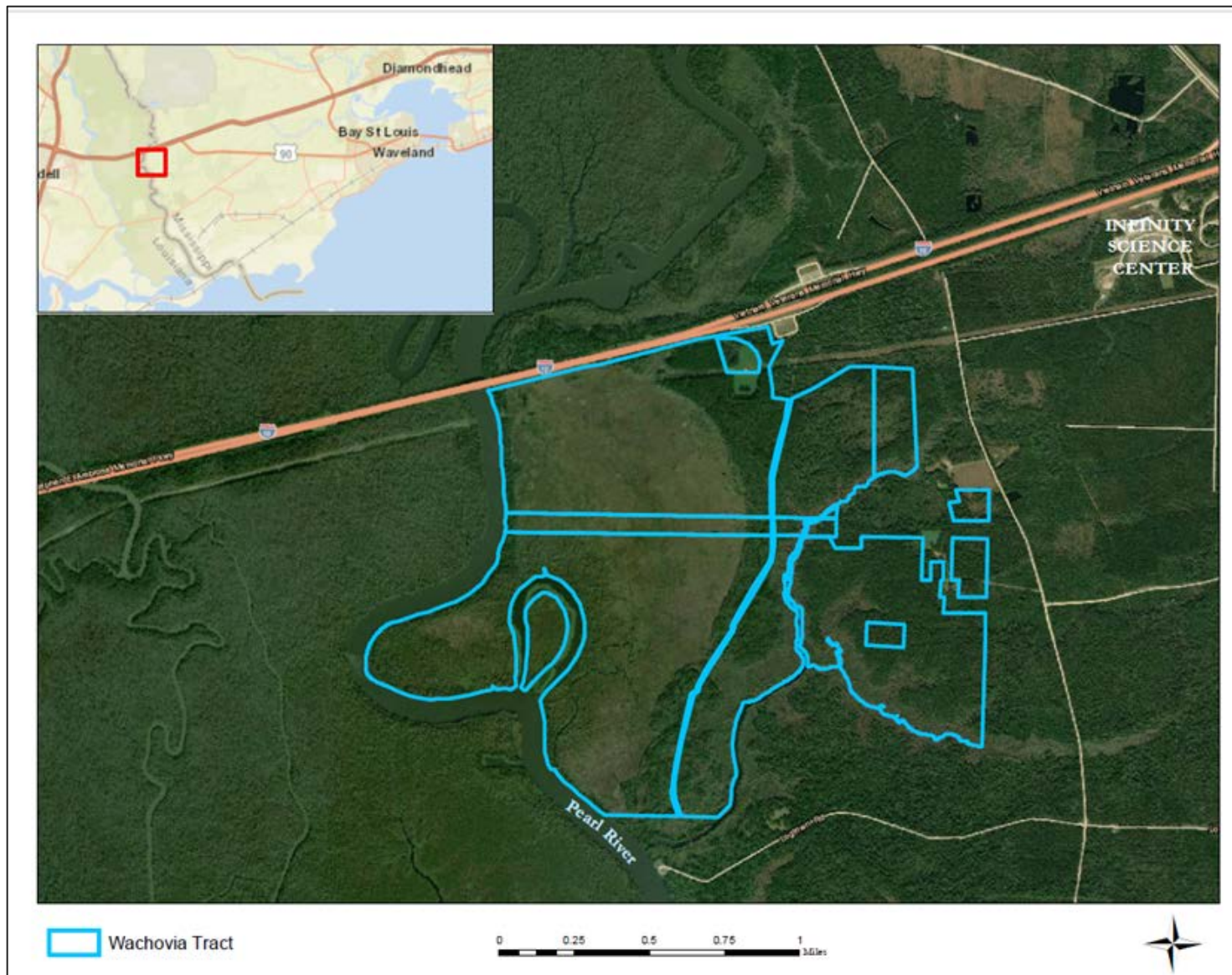


Figure 1: Proposed Hancock County Marsh Coastal Preserve-Wachovia Tract