In Reply Refer To:

Louisiana BICM (2022-2027)

5/18/2022

Memorandum

To: Chief, Planning and Consultation Branch, Gulf Restoration Office, Fairhope, AL
From: Acting Field Supervisor, Louisiana Ecological Services Field Office

BRIGETTE FIRMIN

Digitally signed by BRIGETTE FIRMIN
Date: 2022.05.19 16:39:15 -05'00'

Subject: Informal Consultation for the Proposed Louisiana Barrier Island Comprehensive Monitoring Program, Louisiana

This memorandum acknowledges our receipt of your memorandum on April 11, 2022. This response is in accordance with Section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.) (ESA). We have reviewed your proposed project(s) and concur with your January 3, 2022 determinations for endangered and threatened species, their critical habitat, and at-risk species (should they become listed). We based our concurrence on the justification below. Where more than one justification was applicable, multiple boxes are checked and additional comments are added.

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

_____

_____

_____

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

_____

_____

_____

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

_____

_____

_____

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

_____

_____

_____

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

_____
_____
_____

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

_____
_____
_____

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

If you have questions, please contact Joe Hodges at 337-291-3109 or email joe_hodges@fws.gov.

United States Department of the Interior

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

In Reply Refer To:
FWS/R4/DH NRDAR

Memorandum April 11, 2022

To: Field Supervisor, Ecological Services Office, Lafayette, LA

From: Assistant Restoration Manager, Deepwater Horizon Gulf Restoration Office

Subject: Informal Consultation Request for the Louisiana Trustee Implementation Group's Project: Louisiana Barrier Island Comprehensive Monitoring (BICM) Program (2022-2027)

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

The Louisiana TIG includes five Louisiana state trustee agencies and four federal trustee agencies: the Louisiana Coastal Protection and Restoration Authority (CPRA); the Louisiana Department of Natural Resources (LDNR); the Louisiana Department of Environmental Quality (LDEQ); the Louisiana Oil Spill Coordinator's Office (LOSCO); the Louisiana Department of Wildlife and Fisheries (LDWF); the United States Department of Commerce, represented by the National Oceanic and Atmospheric Administration (NOAA); the United States Department of the Interior (DOI), represented by the United States Fish and Wildlife Service (USFWS) and National Park Service (NPS); the United States Department of Agriculture (USDA); and the United States Environmental Protection Agency (EPA).

The Louisiana TIG has developed the following project: *Louisiana Barrier Island Comprehensive Monitoring (BICM) Program (2022-2027)*. We have reviewed this project in accordance with Section 7 of the Endangered Species Act (ESA) of 1973 as amended (16 U.S.S 1531-1544) and have made a May Affect, Not Likely to Adversely Affect determination. A brief description of the project and species determinations are provided in Tables 1 and 2 below for your information. A project specific description is contained in the attached Biological Evaluation (BE). This memo requests your concurrence with our determination for the proposed project.

Within the BE form, we have also reviewed the proposed project for impacts to bald eagles (*Haliaeetus leucocephalus*) in accordance with the Bald and Golden Eagle Protection Act of 1940 as amended (16 U.S.C. 668-668c) and impacts to migratory birds in accordance with the Migratory Bird Treaty Act of 1918 as amended (16 U.S.C. 703-712); we determined that take would be avoided.

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

Attachments (2)

- BE form including project maps (1)
- Template response letter

Table 1. Brief description of the project.

Proposed Project	Brief Description
Louisiana Barrier Island Comprehensive Monitoring (BICM) Program (2022-2027)	This Monitoring and Adaptive Management (MAM) activity is intended to support evaluation of regional restoration outcomes within the Louisiana Restoration Area; perform data aggregation and data management; resolve critical information gaps and uncertainties for restoration planning, inform restoration decision-making; and perform monitoring to inform the design and implementation of future restoration projects. The LA TIG can use the data provided by this effort to assess changes in the barrier shoreline ecosystem allowing for assessment of the influence of the comprehensive, integrated portfolio of restoration projects at a coast-wide or sub-region within Louisiana and relative to other drivers and long-term trends. The proposed MAM Activities Implementation Plan (MAIP) BICM project will complete the third BICM cycle providing additional datasets and analysis of current status and long-term impacts of restoration on the gulf shoreline. This BICM cycle 3 will provide a wide variety of datasets and analysis that include: 1) shoreline assessment photography and period comparisons, 2) coast-wide shoreline delineation and change analysis, 3) topography data and elevation change, 4) bathymetry data and elevation change, 5) habitat delineation with habitat and land/water changes, and 6) surficial sediment composition and change, 7) vegetation composition, 8) subsidence monitoring, and 9) shoreface overwash and recovery assessment, and 10) a final summary report. These tasks will include the continued maintenance and development of BICM program data delivery and formatting for all tasks. No construction would occur as part of this proposed project. Vessels will be used for some data collection, such as bathymetry surveys. This is implementation of an existing monitoring program. Activities in the project area may include a variety of field data collections and desktop analysis which include: 1) shoreline assessment photography, utilizing airplane flights, and photo period comparisons; 2) coast-wide shoreline delineation and change analysis utilizing digitization of existing CIR aerial photography; 3) topography data collection utilizing LiDAR and RTK surveying, with elevation change analysis; 4) bathymetry data collections from 2KM inshore to 5KM offshore, utilizing a variety of small vessels, with elevation change analysis; 5) habitat delineation from existing CIR aerial photography, with habitat and land/water change analysis; 6) surficial sediment petite ponar or hand scoop grab sample data collections, with composition/change analysis; 7) vegetation composition data collection utilizing ocular estimations of cover with vegetation characterization analysis; 8) subsidence monitoring utilizing RTK of existing survey monuments, with change analysis; and 9) Focused shoreface overwash and recovery assessments utilizing similar field

	methods as components above including bathymetry, topography, sediment, and vegetation sampling; and 10) a final summary report. These tasks will include the continued maintenance and development of BICM program data delivery and formatting for all tasks.

Table 2. Summary of ESA determinations for proposed project. *(NE = No Effect, NLAA = May Affect, Not Likely to Adversely Affect)*

ESA Species Under USFWS Jurisdiction	**Status**	**Weeks Bay Land Acquisition (Lloyd Tract)**
Piping Plover (*Charadrius melodus*)	Threatened	NE
Piping Plover CH		NE
Red Knot (*Calidris cantutus rufa*)	Threatened	NE
Red Knot CH		
Kemp's Ridley Sea Turtle (*Lepidochelys kempii*)	Endangered	NE
Loggerhead Sea Turtle (*Caretta caretta*)	Threatened	NE
Hawksbill Sea Turtle (*Eretmochelys imbricata*)	Endangered	NE
Leatherback Sea Turtle (*Dermochelys coriacea*)	Endangered	NE
West Indian Manatee (*Trichechus manatus*)	Threatened	NLAA

Biological Evaluation Form

Deepwater Horizon Oil Spill Restoration

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

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

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

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

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

A. Project Identification

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

Implementing Trustee(s): Louisiana Coastal Protection and Restoration Authority (CPRA)

Contact Name: Darin M. Lee Phone: 337-482-0662 Email: Darin.Lee@la.gov

Project Name: Louisiana Barrier Island Comprehensive Monitoring (BICM) Program (2022-2027)

DIVER ID# NA TIG: Louisiana TIG Restoration Plan # NA

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.

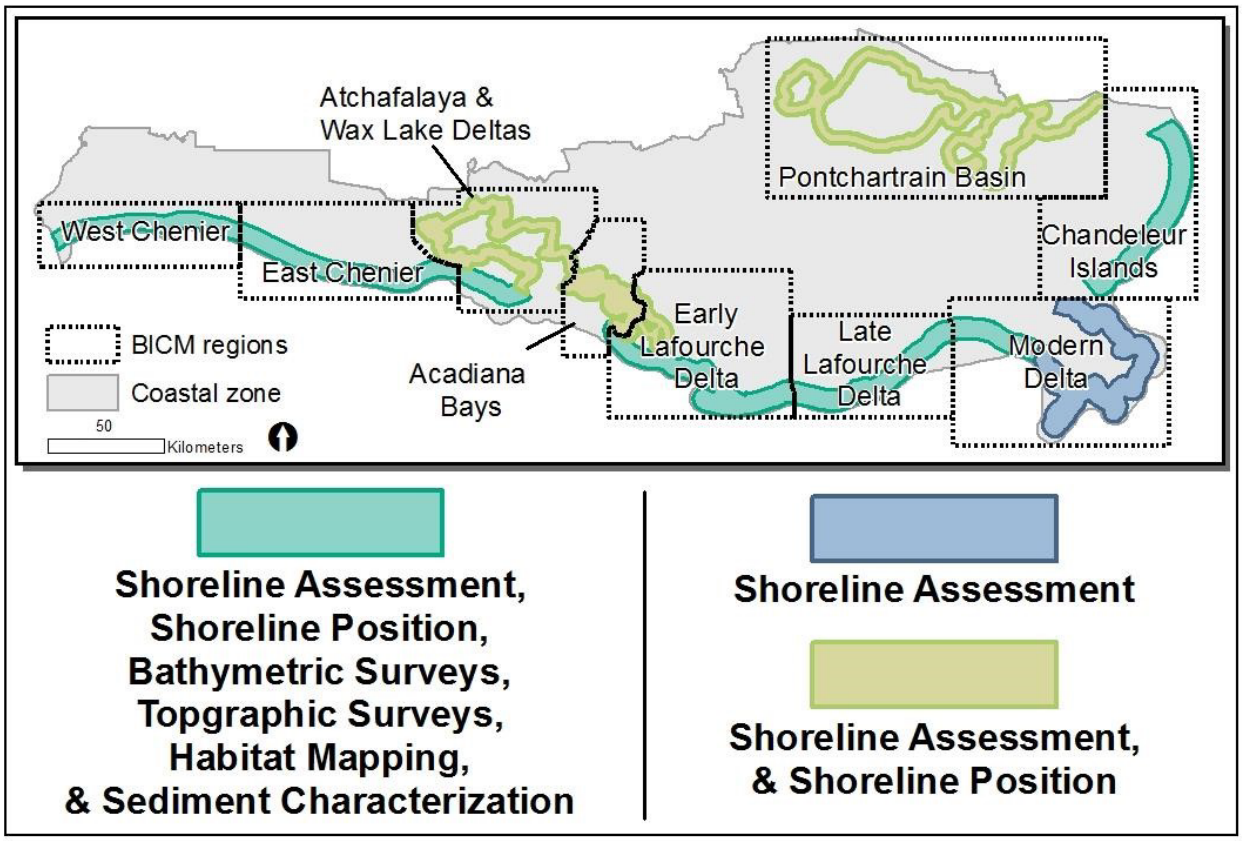

Figure - BICM Program deltaic regions with current data collection efforts and extents. Bathymetric,
Topographic, and Sediment Characterization efforts will require field data collection efforts. Shoreline Assessments are conducted via airplane flights, and all other efforts are desktop analysis approaches.

Louisiana's Barrier Island Comprehensive Monitoring (BICM) Program provides long-term data used in planning, design, maintenance, and evaluation of the Louisiana Gulf shoreline. See BICM Program webpage for program additional details of descriptions and area coverage - https://cims.coastal.la.gov/outreach/Projects/Bicm

C. Project Location

I. State and County/Parish of action area

Louisiana, including portions of the following Parishes –

Cameron, Vermillion, Iberia, St. Mary, Terrebonne, Lafourche, Jefferson, Plaquemines, St. Bernard

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]
NA

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 NRDA LA TIG MAIP - Louisiana Barrier Island Comprehensive Monitoring Program (BICM) Program (2022 2027)

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

Name of Person Completing this Form: Darin M. Lee

Name of Project Lead: Darin M. Lee
Date Form Completed: 11/19/2021
Date Form Updated: 01/03/2022

E. Description of Action Area

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

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.

Various, along the Louisiana gulf shore from approximately 5km offshore to 2km into the estuaries/bays.

Does the project area include a river or estuary?

YES☒ NO☐

Includes activities within portions of the nearshore Gulf of Mexico out to approximately 5km. Click or tap here to enter text.

b. Existing Structures

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

BICM Program has delineated shore protection structures as part of the shoreline delineation efforts. See program webpage for Shoreline Position datasets including structural components. Additionally, the habitat mapping efforts for the BICM program delineate structures within the program area. See the habitat mapping datasets and reports on the program webpage. However, the monitoring efforts conducted through this program should have no impacts on existing structures.
https://cims.coastal.la.gov/outreach/Projects/Bicm

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.

Seagrasses are only noted in the Chandeleur Sound area behind the Chandeleur Islands in St. Bernard Parish. NRDA LATIG is currently assessing the need and suitability of benthic sampling.

However, the monitoring efforts conducted through this program should have no impacts on existing Seagrasses.

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.

See the BICM program habitat mapping data and report for latest coverage of Black Mangrove (Avicennia germinans) in the program area (approximately 1900 ha in 2016). However, the monitoring efforts conducted through this program should have no impacts on existing Mangroves.

https://cims.coastal.la.gov/outreach/Projects/Bicm

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.

NA

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.).

See the BICM program habitat mapping data and report for latest coverage of upland habitats in the program area. Additionally, CH is designated for species along the gulf shoreline, including Piping Plover and Red Knot. However, the monitoring efforts conducted through this program should have no impacts on existing Uplands or Designated Critical Habitats. https://cims.coastal.la.gov/outreach/Projects/Bicm

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☒	YES☐

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

West Indian Manatee (*Trichechus manatus*) Bottlenose dolphin (*Tursiops truncatus*).

h. Soils and Sediments

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

See the BICM program bathymetry and topography data and reports for latest elevations in the program area, and also the sediment sampling data and reports for sediment types. However, the monitoring efforts conducted through this program should have no impacts on existing soils and sediments.
https://cims.coastal.la.gov/outreach/Projects/Bicm

i. Land Use

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

Land Use activities vary along the gulf shoreline within the program area. However, large portions of the Louisiana Gulf of Mexico shoreline have been recipients of sediment depositions via ecosystem restoration efforts. See the BICM program habitat mapping data and reports for habitat classifications in the program area. However, the monitoring efforts conducted through this program should have no impacts on existing Land Use classes.

https://cims.coastal.la.gov/outreach/Projects/Bicm

j. Essential Fish Habitat

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

The Gulf of Mexico Fishery Management Council delineated Essential Fish Habitat (EFH) for federally managed species in coastal Louisiana. The project area is within Eco-Region 3, and is likely to contain a variety of estuarine and marine habitat types designated as EFH including: open water, emergent saline and brackish marsh, submerged aquatic grass beds, sand/shell bottom, and mud/soft bottom. The National Marine Fishery Service (NMFS) also manages highly migratory species (e.g., sharks) for which EFH is identified by geographical area rather than habitat type.

The project area is in a portion of the estuarine and nearshore waters of Eco-Regions 3 and 4. The project area's emergent wetlands, SAV, water column, and mud substrates are EFH for various life stages of eleven species of fish, shrimp, and sharks. The following table lists the federally managed species potentially found within the project area.

Table 1. Federally Managed Species in the BICM Program Area.

Common Name	Scientific Name
REEF FISH	
Gray (mangrove) snapper	*Lutjanus griseus*
Lane snapper	*Lutjanus synagris*
SHRIMP	
Brown shrimp	*Farfantepenaeus aztecus*
White shrimp	*Litopenaeus setiferus*
SHARKS	
Atlantic sharpnose shark	*Rhizoprionodon terraenovae*
Blacktip shark	*Carcharhinus limbatus*
Bull shark	*Carcharhinus leucas*
Scalloped hammerhead shark	*Sphyrna lewini*
Spinner shark	*Carcharhinus brevipinna*
Silky shark	*Carcharhinus falciformis*
RED DRUM	
Red drum	*Sciaenops ocellatus*

F. Project Description

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

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

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

This MAM activity is intended to support evaluation of regional restoration outcomes within the Louisiana Restoration Area; perform data aggregation and data management; resolve critical information gaps and uncertainties for restoration planning, inform restoration decision-making; and perform monitoring to inform the design and implementation of future restoration projects. The Louisiana Trustee Implementation Group (LA TIG) can use the data provided by this effort to assess changes in the barrier shoreline ecosystem allowing for assessment of the influence of the comprehensive, integrated portfolio of restoration projects at a coast-wide or sub-region within Louisiana and relative to other drivers and long-term trends.

The proposed MAIP BICM project will complete the third BICM cycle providing additional datasets and analysis of current status and long-term impacts of restoration on the gulf shoreline. This BICM cycle 3 will provide a wide variety of datasets and analysis that include: 1) shoreline assessment photography and period comparisons, 2) coast-wide shoreline delineation and change analysis, 3) topography data and elevation change, 4) bathymetry data and elevation change, 5) habitat delineation with habitat and land/water changes, and 6) surficial sediment composition and change, 7) vegetation composition, 8) subsidence monitoring, and 9) shoreface overwash and recovery assessment, and 10) a final summary report. These tasks will include the continued maintenance and development of BICM program data delivery and formatting for all tasks.

No construction would occur as part of this proposed project. Vessels will be used for some data collection, such as bathymetry surveys. This is implementation of an existing monitoring program. Activities in the project area may include a variety of field data collections and desktop analysis which include: 1) shoreline assessment photography, utilizing airplane flights, and photo period comparisons; 2) coast-wide shoreline delineation and change analysis utilizing digitization of existing CIR aerial photography; 3) topography data collection utilizing LiDAR and RTK surveying, with elevation change analysis; 4) bathymetry data collections from 2KM inshore to 5KM offshore, utilizing a variety of small vessels, with elevation change analysis; 5) habitat delineation from existing CIR aerial photography, with habitat and land/water change analysis; 6) surficial sediment petite ponar or hand scoop grab sample data collections, with composition/change analysis; 7) vegetation composition data collection utilizing ocular estimations of cover with vegetation characterization analysis; 8) subsidence monitoring utilizing RTK of existing survey monuments, with change analysis; and 9) Focused shoreface overwash and recovery assessments utilizing similar field methods as components above including bathymetry, topography, sediment, and vegetation sampling; and 10) a final summary report. These tasks will include the continued maintenance and development of BICM program data delivery and formatting for all tasks.

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

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

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

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

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

attendants (if any).

NA

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)?*

NA

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.)*

NA

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.)*

NA

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.*

NA

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.*

NA

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.)*

NA

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.*

NA

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)).*

NA

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.**
Loggerhead Sea Turtle		Marine	No Effect	No construction activities
Kemp's Ridley Sea Turtle (E)		Marine	No Effect	No construction activities
Hawksbill Sea Turtle (E)		Marine	No Effect	No construction activities
Green Sea Turtle (T)		Marine	No Effect	No construction activities
Leatherback Sea Turtle (E)		Marine	No Effect	No construction activities
Gulf Sturgeon		Marine	No Effect	No construction activities
Gulf Sturgeon CH		Marine	No Effect	No construction activities
Giant Manta Ray		Marine	No Effect	No construction activities
		Choose an item.	Choose an item.	Choose an item.

Determination Definitions

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

designated/proposed critical habitat.

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

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

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

H. USFWS Species & Critical Habitat and Effects Determination Requested

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

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

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

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

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

(e.g. Loggerhead sea turtle CH - terrestrial).

Species and/or Critical Habitat	**CH Unit** (if applicable)	**Location** (Sea turtles and Gulf Sturgeon only)	**Determinations** (see definitions below)	**For "No Effect", please select justification.**
Piping Plover		Choose an item.	No Effect	No construction activities
Piping Plover CH			No Effect	No construction activities
Red Knot			No Effect	No construction activities
Red Knot CH			No Effect	No construction activities
Kemp's Ridley		Terrestrial	No Effect	No construction activities
Loggerhead Sea Turtle		Terrestrial	No Effect	No construction activities
Hawksbill Sea Turtle		Terrestrial	No Effect	No construction activities
Leatherback Sea Turtle		Terrestrial	No Effect	No construction activities
West Indian Manatee		Choose an item.	May Affect, Not Likely to Adversely Affect	No construction activities
		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.

No effects are expected for species under NMFS' jurisdiction.

West Indian manatees may occur transiently in shallow marine/estuarine waters as they move through coastal waters in the summer in search of preferred seagrass beds. While the presence of this species in the project area is considered unlikely, the proposed project may affect, but is not likely to adversely affect the West Indian manatee. Potential adverse direct effects to the West Indian manatee include minor noise impacts and collisions with watercraft.

This program does not include any construction activities and would be limited to data collection and monitoring needed for continued program implementation. Some efforts of program may cause direct, short-term, minor disturbance through associated fieldwork (e.g., including scooping into soil or sediment with a ponar dredge or other tool to remove surface sediment samples). These impacts would be very minor given how small such samples are in relation to an overall program area. Temporary disturbance to the biological and physical environment also could include short-term, temporary disturbance of habitats and species; minor emissions from vehicles; and minor disturbance to terrestrial, estuarine, and marine environments.

II. *Explain the actions to reduce adverse effects to each species listed above. For each species for which impacts were identified, describe any conservation measures (e.g. BMPs) that will be implemented to avoid or minimize the impacts. Conservation measures are designed to avoid or minimize effects to listed species and critical habitats or further the recovery of the species under review. Conservation measures are considered part of the proposed action*

and their implementation is required. Any changes to, modifications of, or failure to implement these conservation measures may result in a need to reinitiate this consultation.

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

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

Additional BMPs or Conservation Measures

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

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

N/A

J. Effects to critical habitats and actions to reduce impacts

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

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

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

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.

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

NA

K. Marine Mammals

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

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

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

estuarine waters? ☒NO ☐YES

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

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

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

Click here to enter text.

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

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

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

L. Bald Eagles

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

If YES, the following conservation measures should be implemented:

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

Will you implement the above measures? ☐NO ☒YES

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

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

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

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

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

N. Submitting the BE Form

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

Louisiana Coastal Protection and Restoration Authority (CPRA) Questions may be directed to:

NMFS ESA § 7 Consultation

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

USFWS ESA § 7 Consultation

Michael Barron, Department of the Interior
Email: michael_barron@fws.gov
Phone: 251-421-7030