



## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
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Daphne, Alabama 36526

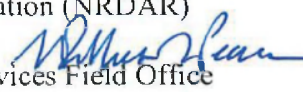
IN REPLY REFER TO:

2015-I-0649

JUL 09 2015

### Memorandum

To: Deputy Case Manager, *Deepwater Horizon* Department of the Interior Natural Resource Damage Assessment and Restoration (NRDAR)

From: Field Supervisor, Alabama Ecological Services Field Office 

Subject: Informal Consultation and Conference for the Proposed Point Aux Pins Living Shoreline Project in Mobile County

This memorandum acknowledges our receipt of your memorandum on June 18, 2015. 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 and concur with your June 18, 2015 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: Piping plover, red knot, and wood stork are unlikely to occur in the area due to the seawall and riprap. Construction equipment will be operating in seawater, therefore gopher tortoise, red-bellied turtle, Eastern indigo snake and black pine snake habitat is not present in the project area.

☒ 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: The Standard Manatee Conditions for In-Water Work (USFWS 2011) and The Sea Turtle and Small-tooth Sawfish Construction Conditions (NMFS 2006) will be used to minimize impacts to manatee, gulf sturgeon and sea turtles.

☐ 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: Piping plover critical habitat is located within 2 to 6 miles of the project area, and Gulf sturgeon critical habitat is located nearby. Any construction barges or tugs and boat traffic associated with the project will not be within critical habitat areas therefore no critical habitat will be effected by the project.

☐ 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 Shannon Holbrook at 251-441-5871 or email [Shannon\\_holbrook@fws.gov](mailto:Shannon_holbrook@fws.gov).

# Endangered Species Act Biological Evaluation Form

## Deepwater Horizon Oil Spill Restoration

### Fish and Wildlife Service & National Marine Fisheries Service

This form will be used to provide information for the initiation of informal Section 7 consultations under the Endangered Species Act, if required or to document a No Effect determination. In addition, information provided in this form may be used to inform other regulatory compliance processes such as Essential Fish Habitat (EFH), Marine Mammal Protection Act (MMPA), Section 106 of the National Historic Preservation Act (NHPA), Migratory Bird Treaty Act (MBTA), and Bald and Golden Eagle Protection Act (BGEPA). Further information may be required beyond what is captured in this form. Note: if you need additional space for writing, please attach pages as needed.

#### A. Project Identification

<i>Lead Agency</i>			
U.S. Fish and Wildlife Service/National Marine Fisheries Service		<i>Phone</i>	<i>Email</i>
<i>Agency Contact Person</i>		812-756-2712 and	Ashley_Buchanan@fws.gov and
Ashley Mills and Laurel Jennings		206-526-4601	Laurel.Jennings@noaa.gov
<i>I. Applicant Agency or Business Name</i>			
Alabama Department of Conservation and Natural Resources			
<i>II. Applicant Contact Person</i>	<i>III. Phone</i>	<i>Email</i>	
William H. Brantley	(334) 242-3484	Will.Brantley@dcnr.alabama.gov	
<i>IV. Project Name and ID# (Official name of project and ID number assigned by action agency)</i>			
Point aux Pins Living Shoreline Project			
<i>V. Project Type</i>			
Living Shorelines			
<i>VI. NMFS Office (Choose appropriate office based on project location)</i>			
NMFS Southeast Regional Office			
<i>VII. FWS Office (Choose appropriate office based on project location)</i>			
Alabama Ecological Services Field Office (Daphne)			

#### B. Project Location

<i>I. Physical Address of Project Site (If applicable)</i>
N/A
<i>II. State &amp; County/Parish of Project Site</i>
Mobile County, Alabama
<i>III. Latitude &amp; Longitude for Project Site (Decimal degrees and datum [e.g., 27.71622°N, 80.25174°W NAD83] [online conversion: <a href="http://transition.fcc.gov/mb/audio/bickel/DDDMSS-decimal.html">http://transition.fcc.gov/mb/audio/bickel/DDDMSS-decimal.html</a>])</i>
The project will extend from approximately 30.379823°N, -88.302374°W to 30.387322°N, -88.294254°W
<i>IV. Township, range and section of the project area</i>
T75, R3W, S32

## C. Description of Action Area

1. Attach a separate map delineating where the action will occur. 2. Describe ALL areas that may be affected directly or indirectly by the Federal action and not merely the immediate project site involved in the action, or just where species or critical habitat may be present. Provide a description of the existing environmental conditions and characteristics (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). 3. If habitat for species is present in the action area, provide a general description of the current state of the habitat. 4. Identify any management or other activities already occurring in the area. 5. Detailed map of the area of potential effect for ground disturbing activities if it is different from the project area

(1) This project will take place in the Portersville Bay portion of Mississippi Sound, Mobile County, Alabama.

(2) Description of the existing environmental conditions and characteristics in the action area:

**Topography, Soils, and Vegetation** -- Topography in the action area is limited to 0 to 1 percent slopes. Soils adjacent to the action area are mainly in the Axis mucky-sandy-clay-loam series, which consists of deep, very poorly drained, moderately permeable soils that formed in thick loamy marine sediments. These soils are typical of narrow to broad level coastal marshes. Vegetation near the action area consists of fringing bands of smooth cordgrass (*Spartina alterniflora*), saltmeadow cordgrass (*Spartina patens*), and patches of black rush (*Juncus roemerianus*).

**Water** -- Portersville Bay is an estuarine environment. The most recent data collected on water quality in Portersville Bay was in 2012. At that time, the water quality status was considered good for recreation, fishing, industrial and agricultural uses, and fish and wildlife propagation. However, the water quality was considered impaired for shell fishing due to the presence of *Enterococcus* bacteria. Water depth at the project site is approximately two feet. See seagrass section below for an SAV description.

**Land use** -- The action area is located in open water near emergent herbaceous wetlands.

(3) Current state of aquatic habitats:

The action area provides essential habitat to a number of aquatic prey species (e.g. Gulf menhaden, shad, croaker and spot) that are consumed by larger, commercially important species. In addition, the area provides habitat for spotted sea trout, striped mullet, southern flounder, Atlantic croaker, Gulf menhaden, and a number of migratory species, shrimp, and reef fish. The project is not located in Gulf sturgeon critical habitat.

(4) No known management activities occur in the action area. A living shoreline pilot project constructed from oyster shell exists in the action area. We do not anticipate disturbance to this existing project.

(5) The project will take place entirely in water. It will not contact terrestrial surfaces. Potential impacts due to noise or turbidity from equipment and boat operation associated with Wave Attenuation Units (WAU) placement may temporarily disturb any species present in the vicinity of the project area. However, the short duration of construction activities and localized nature of the project will aid in minimizing impacts.

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

This project will take place in the Portersville Bay portion of Mississippi Sound, Mobile County, Alabama, adjacent to estuarine emergent herbaceous wetlands. These wetlands are found directly north and west of the site. Emergent herbaceous wetlands are characterized by perennial non-woody plants, which can account for approximately 80 percent of the vegetative cover. The soil or substrate in these wetlands is periodically saturated or covered with water. Emergent wetlands include marshes, meadows, and fens.

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

None are known to exist

c. **Seagrasses & Other Marine Vegetation**  
*(If applicable. Describe seagrasses found in project 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 project area.)*

Widgeon Grass (*Ruppia maritima*) and shoal grass (*Ruppia maritima*) occur in the action area. Both species are submerged aquatic vascular plants. Breakwater segments will be located seaward of the grass beds. ADCNR will follow SAV BMPs prior to and during construction. In the long term SAV between the breakwater segments and the shoreline may benefit from the reduction in wave energy thus increasing the SAV coverage area.

d. **Mangroves**  
*(If applicable. Describe the mangroves found in project 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 project area.)*

N/A

e. **Corals**  
*(If applicable. Describe the corals found in project 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 project area.)*

N/A

f. **Uplands**  
*(If applicable. Describe the current terrestrial habitat in which the project is located (e.g. pasture, forest, meadows, beach and dune habitats, etc.).*

N/A



## D. Project Description

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

Construction activities would include placement of breakwater segments parallel to the shoreline. These in-water activities are expected to last approximately three months.

### II. Describe the Proposed Action: 1. What is the purpose and need of the proposed action? 2. How do you plan to accomplish it? Describe in detail the construction equipment and methods\*\* needed; permanent vs. temporary impacts; duration of temporary impacts; dust, erosion, and sedimentation controls; restoration areas; if the project is growth-inducing or facilitates growth; whether the project is part of a larger project or plan; and what permits will need to be obtained. 3. Attach a separate map showing project footprint, avoidance areas, construction accesses, staging/laydown areas. \*\*If construction involves overwater structures, pilings and sheetpiles, boat slips, boat ramps, shoreline armoring, dredging, blasting, or artificial reefs, list the method here, but complete the next section(s) in detail.

#### 1) Purpose and Need of the proposed action:

The proposed Point aux Pins Living Shoreline project is intended to provide ecological restoration and recovery of natural resource services lost as a result of the Deepwater Horizon (DWH) oil spill by employing living shoreline techniques that utilize artificial breakwater (and possibly natural) materials to stabilize shorelines along an area in Portersville Bay in the Mississippi Sound near Point aux Pins in Mobile County, Alabama. As the lead implementing Trustee, the Alabama Department of Conservation and Natural Resources (ADCNR) would create breakwaters to dampen wave energy and reduce shoreline erosion while also providing habitat and increasing benthic secondary productivity.

#### (2) Accomplishing the proposed action:

Natural and/or artificial breakwaters would be constructed to protect the shoreline and salt marsh habitat, and increase benthic secondary productivity. These breakwaters will be constructed by creating rows of approximately 200' segments of Wave Attenuation Units (WAUs) with approximately 50 WAUs in each 200' segment. Each segment would consist of two such rows. In total, 11 segments are proposed with approximate 20' gaps between each segment. The base width of the rows will be approximately ten (10) feet, and have a footprint of approximately 0.50 acres.

The specific breakwater elevations, construction techniques and design would be developed to maximize project success and meet regulatory requirements. Construction activities would include placement of nearshore intertidal breakwaters that will utilize artificial WAUs and would generally follow a +0.5 to +1.0 ft. Mean Lower Low Water (MLLW) target crest elevation. The breakwaters would likely have 10 ft. crest widths, based on desired wave reduction, and would be designed with a height that falls within the mean high and low water lines (intertidal). The specific breakwater elevations and technique designs would be selected to maximize shoreline protection and meet federal and state regulatory requirements.

A USACE Individual or Nationwide Permit and State Coastal Zone Management and Water Quality Certification would be required. Because the proposed project would expand on a previously permitted project at the same site, a permit modification may be possible, negating the need for a new permit. The previous project was constructed under a USACE Nationwide Permit held by the Dauphin Island Sea Lab. The proposed project may be covered under a modification of that permit or by obtaining separate coverage under a stand-alone USACE NWP.

#### 3) Project Location

The proposed Point aux Pins Living Shoreline project is located in south Mobile County in Coastal Alabama. The proposed project area is near an intertidal salt marsh south of the town of Bayou la Batre in Portersville Bay on the northern side of Mississippi Sound in Alabama State Waters. The shoreline in the project area is oriented to the southeast on Portersville Bay in Mississippi Sound in Alabama State waters. A continuous, fringing band of smooth cordgrass (*Spartina alterniflora*) is present along most of the shoreline. Escarpments only occur intermittently, particularly in the northern reaches of the site, where the coast bends to the northeast. Monospecific stands of saltmeadow cordgrass (*Spartina patens*) and patches of black needlerush (*Juncus roemerianus*) lie shoreward of the smooth cordgrass zone.

#### Proposed Point aux Pins Living Shoreline Restoration Project Location



III. *Specific In-Water Construction Methods (Provide a detailed account of construction methods. It is important to include step-by-step descriptions of how demolition or removal of structures is conducted and if any debris will be moved and how. Describe how construction will be implemented, what type and size of materials will be used and if machines will be used, manual labor, or both. Indicated if work will be done from upland, barge, or both.)*

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

- Is the proposed use of this structure for a docking facility or an observation platform?*
- If no, is this a fishing pier? Public or Private? How many people are expected to fish per day? How do you plan to address hook and line captures?*
- Use of "Dock Construction Guidelines"? <http://sero.nmfs.noaa.gov/pr/Endangered%20species/Section%207/DockGuidelines.pdf>*
- Type of decking: Grated – 43% open space; Wooden planks or composite planks – proposed spacing?*
- Height above Mean High Water (MHW) elevation?*
- Directional orientation of main axis of dock?*
- Overwater area (sqft)?*
- Use of "Sea Turtle and Smalltooth Sawfish Construction Conditions, March 2006"? <http://sero.nmfs.noaa.gov/pr/Endangered%20species/Sea%20Turtle%20and%20Smalltooth%20Sawfish%20Construction%20Conditions%203-23-06.pdf>*

All construction activities will be completed by shallow draft barge. Materials will consist of concrete wave attenuation units. The breakwaters would likely have 10 ft. crest widths, based on desired wave reduction, and would be designed with a height that falls within the mean high and low water lines (intertidal). The specific breakwater elevations and technique designs would be selected to maximize shoreline protection and meet regulatory requirements.

The implementation of the Point aux Pins Living Shoreline project is estimated to take less than a year and would include the following activities:

- Planning, site investigations, and design - approximately 6 months, concurrently it would take approximately 3-4 months for

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

N/A

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

N/A

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

N/A

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

#### Construction and Installation

The implementation of the Point aux Pins Living Shoreline project is estimated to take approximately 9 months and would include the following activities:

- Planning, site investigations, and design - approximately 6 months, concurrently it would take approximately 3-4 months for permitting and consultation.
- Construction – Approximately 3 months.



- f. *Dredging or digging (Provide details about dredge type (hopper, cutterhead, clamshell, etc.), maximum depth of dredging, area (ft<sup>2</sup>) to be dredged, volume of material (yd<sup>3</sup>) to be produced, grain size of material, sediment testing for contamination, spoil disposition plans, and hydrodynamic description (average current speed/direction)).*

N/A

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

N/A

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

N/A



## E. Species & Critical Habitat

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

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

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

Under NMFS jurisdiction,

visit: [http://sero.nmfs.noaa.gov/protected\\_resources/section\\_7/threatened\\_endangered/Documents/aulf\\_of\\_mexico.pdf](http://sero.nmfs.noaa.gov/protected_resources/section_7/threatened_endangered/Documents/aulf_of_mexico.pdf).

SPECIES and/or CRITICAL HABITAT (CH)	STATUS	CH UNIT
Gulf sturgeon ( <i>Acipenser oxyrinchus desotoi</i> ) - estuarine/marine	Threatened	
West Indian manatee ( <i>Trichechus manatus</i> )	Endangered	
Hawksbill sea turtle ( <i>Eretmochelys imbricata</i> ) - in-water	Endangered	
Leatherback sea turtle ( <i>Dermochelys coriacea</i> ) - in-water	Endangered	
Kemp's ridley sea turtle ( <i>Lepidochelys kempii</i> ) - in-water	Endangered	
Green sea turtle ( <i>Chelonia mydas</i> ) - in-water	Threatened	
Loggerhead sea turtle ( <i>Caretta caretta</i> ) - in-water	Threatened	
Alabama red-belly turtle ( <i>Pseudemys alabamensis</i> )	Endangered	
Piping plover ( <i>Charadrius melodus</i> )	Threatened	
Red knot ( <i>Calidris canutus rufa</i> )	Threatened	
Wood stork ( <i>Mycteria americana</i> )	Threatened	
Gopher tortoise ( <i>Gopherus polyphemus</i> )	Threatened	
Eastern indigo snake ( <i>Drymarchon corais couperi</i> )	Threatened	
Black pine snake ( <i>Pituophis melanoleucus lodingi</i> )	Proposed Threatened	
	Select One	
	Select One	

## F. Effects of the Proposed Project

- 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, interdependent, interrelated, connected actions, and cumulative impacts. Where possible, quantify effects. If species are present (or potentially present) and will not be adversely affected describe your rationale. If species are unlikely to be present in the general area or action area, explain why. This justification provides documentation for your administrative record, avoids the need for additional correspondence regarding the species, and helps expedite review.)

### Gulf Sturgeon:

Potential temporary impacts to the Gulf sturgeon include elevated noise levels and the presence of WAU placement equipment and turbidity generated during construction. This species is mobile and would likely exit the area during construction.

### West Indian Manatee:

Potential impacts due to noise from equipment and boat operation, and turbidity associated with WAU placement may temporarily disturb any manatees present in the vicinity of the project area. However, the mobility of these species reduces the risk of injury from construction activity. Furthermore, the short duration of construction activities and localized nature of the project will aid in minimizing impacts. All construction activities will follow the Standard Manatee Conditions for In-Water Work (USFWS 2011 ) to minimize impacts to West Indian manatees to an insignificant and discountable level.

### Turtles:

Potential temporary impacts to sea turtles include elevated noise levels and the presence of WAU placement equipment and turbidity generated during construction. However, these impacts are expected to be short-term, localized, and minor. Due to the species' mobility and the implementation of NMFS' Sea Turtle and Small-tooth Sawfish Construction Conditions (NMFS 2006), the risk of injury from construction will be negligible.

Since construction equipment would be operating in seawater, no potential impacts to the gopher tortoise are expected.

Since the Alabama red-bellied turtle rarely occurs in saltwater, and considering most of the populations occur in the backwaters of upper Mobile Bay, the project would have no effect on this species.

### Birds:

Piping plover and red knot may use nearby shoreline habitats for resting or foraging during winter months. Potential impacts to these species could include elevated noise levels during project construction. However, this project will take place at least 100 yards seaward of adjacent shorelines. Additionally, construction of the project will most likely take place during summer in order to take advantage of high tides during daylight hours. Therefore any impacts to piping plovers and red knot are unlikely and/or would be short-term, localized, and minor.

Wood Storks are not known to forage in the project area and there are no known wood stork breeding colonies or roost sites within close proximity of the project area. Therefore no effect on this species is expected. +

- II. Explain the potential beneficial and adverse effects to critical habitat listed above (Describe what, when, and how the critical habitat will be impacted and the likely response to the impact. Be sure to include direct, indirect, interdependent, interrelated, connected actions, and cumulative impacts. 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.

No designated critical habitats are found within the project area. However two species, piping plover and Gulf sturgeon have critical habitat near the project area.

Piping plover has designated critical habitat near the project area at Isle aux Herbes (unit AL-1) and Dauphin Island (unit AL-2). Unit AL-1 is at least 2 miles from any project activity and Unit AL-2 is at least 6 miles from any project activity. Construction barges, tugs and other watercraft will most likely be staged in either Bayou la Batre and/or Coden, and associated watercraft will have no reason to come within close proximity to either critical habitat unit. Given the prevailing waves and currents, the proposed breakwaters will have no impact on either critical habitat unit. Therefore, no impacts to piping plover critical habitat is anticipated.

Gulf sturgeon critical habitat is located nearby, but just west of the project area. The eastern boundary of unit 8, which includes a portion of Mississippi Sound, is -88.313333°W and does not include the eastern side of Point Aux Pins where the project will be located. Construction barges, tugs and other watercraft will most likely be staged in either Bayou la Batre and/or Coden, and associated watercraft will have no reason to enter Gulf Sturgeon critical habitat. Therefore, no impact to Gulf Sturgeon estuarine critical habitat is anticipated.

## G. Actions to Reduce Adverse Effects

I.	<p><i>Explain the actions to reduce adverse effects to each species listed above (For each species for which impacts were identified, describe any conservation measures (e.g. BMPs) that will be implemented to avoid or minimize the impacts. Conservation measures are designed to avoid or minimize effects to listed species and critical habitats or further the recovery of the species under review. Conservation measures are considered part of the proposed action and their implementation is required. Any changes to, modifications of, or failure to implement these conservation measures may result in a need to reinitiate this consultation.)</i></p> <p><b>Gulf Sturgeon:</b> Noise associated with the project will be limited to mainly engine noise from small shallow draft tug boat and a small barge-based track hoe used to place the WAUs as well as small watercraft used to conduct site visits and transport personnel. Turbidity from vessel operations and WAU placement will be minimal and short-term. To reduce these impacts, WAU placements will take place at high tide as much as possible to avoid propeller contact with the bottom. All work will take place in less than 5' of water in areas of silty sand to stiff clay waterbottoms. These shallow waterbottoms are not known to be favored Gulf Sturgeon foraging areas. Additionally, work will most likely take place during the spring and summer months when Gulf Sturgeon are not likely to be present in inshore shallow waters.</p> <p><b>West Indian Manatee:</b> The Standard Manatee Conditions for In-Water Work (USFWS 2011) will be used to minimize impacts to an insignificant and discountable level for the West Indian manatee. All vessels associated with the construction project will operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible. Siltation or turbidity barriers will be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers will not impede manatee movement. All in-water operations, including vessels, will be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Temporary signs concerning manatees will be posted prior to and during all in-water project activities.</p> <p><b>Turtles:</b> The National Marine Fisheries Service's Sea Turtle and Small-tooth Sawfish Construction Conditions (NMFS 2006) will be used to minimize adverse impacts to sea turtles. All vessels associated with the construction project will operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All project work would be in-water and no sea turtle nesting habitat exists in the project area. All construction personnel will be trained on what they are to do if the presence of a sea turtle is detected. All construction personnel would be notified of the potential presence of sea turtles in the water and would be reminded of the need to avoid sea turtles. If any sea turtles are found to be present in the immediate project area during activities, construction would be halted until species moves away from project area. Construction activities would occur during daylight hours to the maximum extent possible and noise would be kept to the minimum feasible. All construction personnel would be notified of the criminal and civil penalties associated with harassing, injuring, or killing sea turtles. Sea turtle entrapment is a concern with certain types of WAU's and/or similarly shaped artificial reefs, especially large units placed on +</p>
II.	<p><i>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.)</i></p> <p><b>Piping Plover:</b> Piping plover has designated critical habitat near the project area at Isle aux Herbes (Unit AL-1). Additional designated critical habitat is located on Dauphin Island (Unit AL-2). Unit AL-1 is at least 2 miles from any project activity and Unit AL-2 is at least 6 miles from any project activity. Construction barges, tugs and other watercraft will most likely be staged in either Bayou la Batre and/or Coden, and associated watercraft will have no reason to come within close proximity to either Unit. Additionally, given these distances combined with prevailing winds and currents, the presence of the living shorelines breakwaters will have no impact on these designated critical habitats.</p> <p><b>Gulf Sturgeon:</b> This project is not taking place within Gulf Sturgeon critical habitat. Construction barges, tugs and other watercraft will most likely be staged in either Bayou la Batre and/or Coden, and associated watercraft will have no reason to enter Gulf Sturgeon critical habitat. Therefore, no impact to Gulf Sturgeon estuarine critical habitat is anticipated.</p>

## H. Effect Determination Requested

From the sections above, there should be enough detailed information to provide clear and obvious support for your determinations in the section below. If the rationale for the determination is not clear, additional information must be added to one of the sections. Identify if gulf sturgeon are in saltwater, estuarine, 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 - saltwater). 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	DETERMINATION (see definitions below)
Gulf sturgeon ( <i>Acipenser oxyrinchus desotoi</i> ) - estuarine/marine	May Affect, Not Likely to Adversely Affect
West Indian manatee ( <i>Trichechus manatus</i> )	May Affect, Not Likely to Adversely Affect
Hawksbill sea turtle ( <i>Eretmochelys imbricata</i> ) - in-water	May Affect, Not Likely to Adversely Affect
Leatherback sea turtle ( <i>Dermochelys coriacea</i> ) - in-water	May Affect, Not Likely to Adversely Affect
Kemp's ridley sea turtle ( <i>Lepidochelys kempii</i> ) - in-water	May Affect, Not Likely to Adversely Affect
Green sea turtle ( <i>Chelonia mydas</i> ) - in-water	May Affect, Not Likely to Adversely Affect
Loggerhead sea turtle ( <i>Caretta caretta</i> ) - in-water	May Affect, Not Likely to Adversely Affect
Alabama red-belly turtle ( <i>Pseudemys alabamensis</i> )	No Effect
Piping plover ( <i>Charadrius melodus</i> )	May Affect, Not Likely to Adversely Affect
Red knot ( <i>Calidris canutus rufa</i> )	May Affect, Not Likely to Adversely Affect
Wood stork ( <i>Mycteria americana</i> )	No Effect
Gopher tortoise ( <i>Gopherus polyphemus</i> )	No Effect
Piping Plover Critical Habitat	No Effect
Gulf Sturgeon Critical Habitat	No Effect
Eastern indigo snake ( <i>Drymarchon corais couperi</i> )	No Effect
Black pine snake ( <i>Pituophis melanoleucus lodingi</i> )	No Effect

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

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

LAA = likely to adversely affect. This determination is appropriate when the proposed action is likely to adversely impact any listed, proposed, candidate species or designated/proposed critical habitat. Response requested for listed species is "Formal Consultation". Response requested for proposed and candidate species is "Conference." 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 should be "is likely to adversely affect." Such a determination requires formal section 7 consultation and will require additional information.

JP = likely to jeopardize proposed species/adversely modify proposed critical habitat. For proposed species and proposed critical habitats, the Service is required to evaluate whether the proposed action is likely to jeopardize the continued existence of the proposed species or adversely modify an area proposed for designation as critical habitat. If you reach this conclusion, a section 7 conference is required.

JC = likely to jeopardize candidate species. For candidate species, the Service is required to evaluate whether the proposed action is likely to jeopardize the continued existence of the candidate species. If this conclusion is reached, intra-Service section 7 conference is required.



## I. 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 within 660 feet of a nest may result in disturbance, particularly for the eagles occupying the Mississippi barrier islands. If an activity appears to cause initial disturbance, the activity shall stop and all individuals and equipment will be moved away until the eagles are no longer displaying disturbance behaviors.

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](mailto:permitsR2MB@fws.gov)

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

## J. Migratory Birds

Identify the species anticipated in the project area and behaviors (breeding, roosting, foraging) anticipated during project implementation. You may list similar species on a single line and categorize by type (e.g., Wading birds - great blue heron, snowy egret, reddish egret). Use additional tables on the next page if needed.

I.

SPECIES/SPECIES GROUP	BEHAVIOR	SPECIES/HABITAT IMPACTS
Waterfowl/Shorebirds/ Wading Birds/Marsh Birds/Raptors	Foraging, feeding, resting, roosting, breeding	Project construction will have short-term temporary noise from the use of heavy machinery in-water, during daylight hours. Noise and human disturbance could disrupt foraging, resting and breeding and could cause birds to flush from nests in nearby habitats.

If species or habitat impacts could occur, identify avoidance and minimization measures to prevent incidental take. Incidental take of Migratory Birds cannot be authorized.

SPECIES/SPECIES GROUP	CONSERVATION MEASURES TO MINIMIZE IMPACTS
All Species/Groups	<p>All operations will be water-based, at least 100 yards from the marsh shoreline and in approximately 2-3' of water, avoiding migratory bird nesting areas, marsh and shoreline bird foraging, nesting and resting areas. Water depths are generally unsuitable for wading bird foraging.</p> <p>Construction activities would occur during daylight hours to the maximum extent possible and noise would be kept to the minimum feasible.</p> <p>Work will most likely take place during the spring and summer when waterfowl are not normally present.</p>



## Migratory Birds

Continuation page if needed.

II.

SPECIES/SPECIES GROUP	BEHAVIOR	SPECIES/HABITAT IMPACTS

If species or habitat impacts could occur, identify avoidance and minimization measures to prevent incidental take. Incidental take of Migratory Birds cannot be authorized.

SPECIES/SPECIES GROUP	CONSERVATION MEASURES TO MINIMIZE IMPACTS

III.

SPECIES/SPECIES GROUP	BEHAVIOR	SPECIES/HABITAT IMPACTS

If species or habitat impacts could occur, identify avoidance and minimization measures to prevent incidental take. Incidental take of Migratory Birds cannot be authorized.

SPECIES/SPECIES GROUP	CONSERVATION MEASURES TO MINIMIZE IMPACTS

**Pre-existing NEPA Documents**

Yes



No



Does this project have any pre-existing, site specific NEPA analysis? If YES, then provide final NEPA analysis, if not final then provide draft. If tiered from a programmatic EIS or EA, then provide the programmatic document or a link below.

Tiered from the Deepwater Horizon Early Restoration Phase 3 PEIS

**NMFS ESA §7 Consultation**

We request that all ESA §7 consultation requests/packages be submitted electronically to:

**Laurel.Jennings@noaa.gov**. Questions about consultation status may be directed to the same email address or by phone, 206-526-4601 or 206-794-4761 (cell).

**FWS ESA § 7 Consultation**

We request that all consultation requests/packages to FWS be submitted electronically to:

**Ashley\_Buchanan@fws.gov**. You will be notified when we receive your Biological Evaluation. Upon receipt, we will conduct a preliminary review and provide any comments and feedback, including any requests for modifications or additional information. If modifications or additional information is necessary, we will work with you until the Biological Evaluation form is considered complete. Once complete, we will send your Biological Evaluation to the appropriate Field Office to conduct consultation. If you have questions about consultation status, please contact Ashley Mills by phone 812-756-2712 or email Ashley\_Buchanan@fws.gov.

Name of Person Completing this Form:

Derrick W. Rosenbach

Name of Project Lead:

Date Form Completed:

06/12/2015

## Alabama Point aux Pins Living Shoreline Project Location Figures

Figure 1. Site Location



Figure 2. Proposed Project Layout.

