



**UNITED STATES DEPARTMENT OF COMMERCE**  
 National Oceanic and Atmospheric Administration  
**NATIONAL MARINE FISHERIES SERVICE**  
 Southeast Regional Office  
 263 13th Avenue South  
 St. Petersburg, Florida 33701-5505  
<http://sero.nmfs.noaa.gov>

NOV 02 2016

F/SER31:MT

MEMORANDUM FOR: F/HC3 – Leslie Craig

FROM: F/SE – Roy E. Crabtree, Ph.D.

SUBJECT: *Deepwater Horizon*-Early Restoration Plan Phase IV,  
 Endangered Species Act Section 7 Consultations for  
 4 rookery island restoration projects in Texas  
 coastal waters in the Gulf of Mexico

Project	Applicants	SER Number	Project Name/Type
1	National Marine Fisheries Service (NMFS) Restoration Center (RC) and Texas Parks and Wildlife Department (TPWD)	SER-2015-16945	Dickinson Bay Island II
2	NMFS RC and TPWD	SER-2015-16946	Rollover Bay Island
3	NMFS RC and TPWD	SER-2015-16947	Smith Point Island
4	NMFS RC and TPWD	SER-2015-16948	Dressing Point Island

This memorandum responds to the NMFS Restoration Center’s July 7, 2015, memorandum and supporting materials for the 4 rookery islands projects in Texas coastal waters in the Gulf of Mexico, requesting concurrence under Section 7 of the Endangered Species Act (ESA) with the project-effects determinations associated with this project. On July 8, 2015, we determined that these projects should be batched into a single consultation based on similarities among the projects (e.g. construction activities, locations, and habitat types/effects). You determined that the proposed projects may affect, but are not likely to adversely affect, green, hawksbill, Kemp’s ridley, leatherback, and loggerhead sea turtles.

NMFS Protected Resources Division (PRD) provided pre-consultation technical assistance and requested additional information from the applicant/natural resources trustee, Texas Parks and Wildlife Department (TPWD), via email on March 17 and 18, 2015, April 22, 2015, September 3, 2015, and May 25, 2016. We received the responses on April 3, 2015, May 5, 2015, and June 12, 2015. NMFS PRD requested additional information on September 3, 8, and 22, 2015, and May 24, 2016. NMFS PRD received all necessary information in a response on June 6, 2016, and we initiated consultation on that day. NMFS PRD’s determinations regarding the effects of the proposed action are based on the description of the action in this informal consultation. Any changes to the proposed action may negate the findings of the present consultation and may require reinitiation of consultation with NMFS PRD.



### Project Locations

Project	Latitude/Longitude (North American Datum 1983)	Water body
1	<p><b>Potential Project Area 1 OR Potential Project Area 2</b></p> <p><b>Bounding Coordinates</b></p> <p>29.465772°N, 94.937719°W [N]      29.460479°N, 94.935053°W [N]</p> <p>29.464282°N, 94.938704°W [E]      29.459017°N, 94.932387°W [E]</p> <p>29.464496°N, 94.934760°W [W]      29.459183°N, 94.936119°W [W]</p> <p>29.462893°N, 94.935640°W [S]      29.457627°N, 94.933374°W [S]</p> <p><b>Dredging Source Site Bounding Coordinates</b></p> <p>29.455368°N, 94.907344°W [NW]      29.455229°N, 94.899705°W [NE]</p> <p>29.452484°N, 94.907575°W [SW]      29.452400°N, 94.900052°W [SE]</p>	Dickinson Bay Island II Dickinson Bay, Galveston County, Texas
2	<p><b>Breakwater North Coordinates</b></p> <p>29.521215°N, 94.507619°W [1]</p> <p>29.521717°N, 94.506556°W [2]</p> <p>29.523254°N, 94.501593°W [3]</p> <p>29.523222°N, 94.501000°W [4]</p> <p><b>North Access Channel Coordinates</b></p> <p>29.526829°N, 94.507907°W [N]</p> <p>29.522394°N, 94.504917°W [S]</p> <p><b>Fill Site Bounding Coordinates</b></p> <p>29.521472°N, 94.507031°W [1]</p> <p>29.521719°N, 94.506564°W [2]</p> <p>29.523157°N, 94.501857°W [3]</p> <p>29.522873°N, 94.502117°W [4]</p> <p>29.522694°N, 94.502080°W [5]</p> <p>29.522552°N, 94.501957°W [6]</p> <p><b>Dredging Source Site Bounding Coordinates</b></p> <p>29.527291°N, 94.514514°W [NW]      29.529849°N, 94.505020°W [NE]</p> <p>29.525247°N, 94.513632°W [SW]      29.527722°N, 94.504237°W [SE]</p> <p><b>Breakwater South Coordinates</b></p> <p>29.520725°N, 94.507702°W [1]</p> <p>29.520925°N, 94.506291°W [2]</p> <p>29.522535°N, 94.501394°W [3]</p> <p>29.522891°N, 94.500729°W [4]</p> <p><b>South Access Channel Coordinates</b></p> <p>29.521724°N, 94.503771°W [N]</p> <p>29.520302°N, 94.502963°W [S]</p> <p>29.522530°N, 94.501400°W [7]</p> <p>29.520927°N, 94.506286°W [8]</p> <p>29.520880°N, 94.506657°W [9]</p> <p>29.521061°N, 94.506591°W [10]</p> <p>29.521188°N, 94.506584°W [11]</p> <p>29.521433°N, 94.506788°W [12]</p>	Rollover Bay Island East Galveston Bay, Galveston County, Texas

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<b>Dredging Source Site Bounding Coordinates</b> 29.580864°N, 94.860348°W [NW]      29.580890°N, 94.850883°W [NE] 29.559738°N, 94.860682°W [SW]      29.559771°N, 94.851220°W [SE]										

Project	Latitude/Longitude (North American Datum 1983)	Water body
4	<p><b>Breakwater Coordinates</b>  28.731774°N, 95.762911°W [1]      28.731829°N, 95.758067°W [7]  28.732689°N, 95.761946°W [2]      28.731561°N, 95.757879°W [8]  28.733294°N, 95.761007°W [3]      28.731327°N, 95.757817°W [9]  28.733145°N, 95.759971°W [4]      28.730989°N, 95.758112°W [10]  28.732510°N, 95.758888°W [5]      28.729570°N, 95.761070°W [11]  28.732009°N, 95.758407°W [6]      28.729140°N, 95.762206°W [12]  28.729022°N, 95.762884°W [13]</p> <p><b>Internal Access Channel Coordinates</b>  28.731215°N, 95.759342°W [N]      28.730749°N, 95.758518°W [S]</p> <p><b>External Access Channel Coordinates</b>  28.729924°N, 95.762739°W [1]      28.731475°N, 95.757746°W [10]  28.729714°N, 95.762937°W [2]      28.731709°N, 95.757891°W [11]  28.729189°N, 95.763213°W [3]      28.731900°N, 95.758031°W [12]  28.728940°N, 95.762851°W [4]      28.732033°N, 95.758354°W [13]  28.729088°N, 95.762112°W [5]      28.732240°N, 95.758537°W [14]  28.729428°N, 95.761239°W [6]      28.732583°N, 95.758877°W [15]  28.730549°N, 95.758866°W [7]      28.733217°N, 95.759972°W [16]  28.731006°N, 95.757994°W [8]      28.733351°N, 95.761046°W [17]  28.731298°N, 95.757737°W [9]      28.732742°N, 95.761998°W [18]  28.731841°N, 95.762948°W [19]</p> <p><b>Island Restoration Fill Site Bounding Coordinates</b>  28.732184°N, 95.760219°W [1]      28.730757°N, 95.760333°W [13]  28.732165°N, 95.759362°W [2]      28.730848°N, 95.760123°W [14]  28.731836°N, 95.758851°W [3]      28.730929°N, 95.759863°W [15]  28.731281°N, 95.758666°W [4]      28.731124°N, 95.759603°W [16]  28.730872°N, 95.758899°W [5]      28.731257°N, 95.759372°W [17]  28.730338°N, 95.760014°W [6]      28.731382°N, 95.759248°W [18]  28.730261°N, 95.760953°W [7]      28.731444°N, 95.759275°W [19]  28.730395°N, 95.761264°W [8]      28.731481°N, 95.759432°W [20]  28.730583°N, 95.761160°W [9]      28.731577°N, 95.759570°W [21]  28.730661°N, 95.760908°W [10]      28.731671°N, 95.759747°W [22]  28.730653°N, 95.760729°W [11]      28.731819°N, 95.759854°W [23]  28.730692°N, 95.760580°W [12]      28.731967°N, 95.760014°W [24]</p> <p><b>Marsh Habitat Fill Site Bounding Coordinates</b>  28.732328°N, 95.758720°W [1]      28.729591°N, 95.761028°W [7]  28.732008°N, 95.758406°W [2]      28.729618°N, 95.761033°W [8]  28.731828°N, 95.758066°W [3]      28.729923°N, 95.760651°W [9]  28.731561°N, 95.757878°W [4]      28.730214°N, 95.760104°W [10]  28.731327°N, 95.757817°W [5]      28.730623°N, 95.759247°W [11]  28.730989°N, 95.758112°W [6]      28.731185°N, 95.758400°W [12]  28.731906°N, 95.758711°W [13]</p> <p><b>Shell Hash Fill Site Bounding Coordinates</b>  28.730111°N, 95.763093°W [1]      28.729925°N, 95.762301°W [5]  28.730277°N, 95.763059°W [2]      28.729816°N, 95.762531°W [6]  28.730361°N, 95.763004°W [3]      28.729980°N, 95.762809°W [7]  28.730042°N, 95.762486°W [4]      28.730065°N, 95.762935°W [8]</p> <p><b>Dredging Source Site Bounding Coordinates</b>  28.720254°N, 95.764030°W [NW]      28.727104°N, 95.747179°W [NE]  28.716718°N, 95.762159°W [SW]      28.723395°N, 95.745242°W [SE]</p>	Dressing Point Island East Matagorda Bay, Matagorda County, Texas



Figure 1. Approximate location of four rookery island projects

### Project Description

The TPWD proposes to restore 4 previously existing islands by placing earthen fill onto the degraded islands and protecting them with armored shorelines and breakwaters. The purpose of these actions is to provide habitat that will support colonial nesting waterbirds.

Dredged sediments will be placed on submerged bay bottom at the project locations to build emergent islands. Temporary levees may be constructed first to contain fluidized dredged sediments so that desired elevations can be reached, and to allow the material to settle and dewater. Portions of the shorelines of the restored islands will be protected with armoring and/or breakwaters to ensure stability. Graded stone, typically limestone, will be used to construct the breakwaters or armoring. The amount and size of rock used will be dependent on expected wave and current energy, and whether the armored shorelines will be used for containment and dewatering of sediments or only for erosion protection. Those for containment are typically higher in elevation and larger than those used solely for erosion protection.

The dredged material for each project will be obtained from one of the following sources:

- Material generated by maintenance dredging of nearby federally maintained navigation channels (i.e., the Houston Ship Channel (HSC) or the Galveston Intracoastal Water Way (GIWW)), including mining from designated placement areas used for disposal of material from these maintenance dredging projects;
- Dedicated dredge borrow areas near the island restoration sites (see Figures 2, 5, 6 and 8 below), or;
- Upland borrow sites (no upland sites will be used that affect wetlands or ESA-listed species).

With regard to the U.S. Army Corps of Engineers' maintenance dredging programs listed in the first bullet above (HSC and GIWW), the effects of these dredging programs on ESA listed species has been previously analyzed and authorized in the Gulf of Mexico Regional Biological Opinion, most recently updated in 2007

([http://sero.nmfs.noaa.gov/protected\\_resources/section\\_7/freq\\_biop/documents/dredge\\_bo/f13817\\_revision\\_2\\_grbo.pdf](http://sero.nmfs.noaa.gov/protected_resources/section_7/freq_biop/documents/dredge_bo/f13817_revision_2_grbo.pdf)).

Material from source areas (other than the HSC and GIWW) would be mechanically excavated or hydraulically dredged. Mechanical excavators used may include a dragline or a long-arm excavator to place material on barges for transport to the island restoration sites. If hydraulic dredging is used, temporary pipelines will be used to transport dredged material from the borrow sites to the islands. The pipelines will be routed to avoid sensitive resource areas such as marshes, oyster reefs and seagrass beds, and all construction equipment will avoid these sensitive resource areas as well. Any areas containing such resources in the construction and transport area of each project site will be visibly marked prior to start of construction. The TPWD proposes dredging activities to be conducted both day and night. Construction activities that require precision, such as moving or placing rock, would be limited to daylight hours. The volumes of earthen fill material listed below are the maximum estimated quantities of material needed for each project:

- For Dickinson Bay Island II, TPWD proposes to dredge 76,000 cubic yards (yd<sup>3</sup>) which is expected to take approximately 22 days of non-stop (24 hr.) dredging.
- For Rollover Bay Island, TPWD proposes to dredge 80,000 yd<sup>3</sup> which is expected to take approximately 23 days of non-stop (24 hr.) dredging.
- For Smith Point Island, TPWD proposes to dredge 70,000 yd<sup>3</sup> which is expected to take approximately 20 days of non-stop (24 hr.) dredging.
- For Dressing Point Island, TPWD proposes to dredge 70,000 yd<sup>3</sup> which is expected to take approximately 20 days of non-stop (24 hr.) dredging.

If hydraulic dredging is used, a pipeline barge will bring pipe to a staging area and another barge with a crane will be used to connect the pipe into strings of 6-7 pipes. These strings of pipe will be floated on pontoons to the pipeline location. After connection, the pipe will be lowered by crane to the bottom. The pipelines will not block the entire water column or otherwise hinder sea turtle movement. During removal, the pipe will be raised by crane from the bottom and placed on pontoons, where it will be disconnected into separate pipe sections and placed on the pipe barge for transport. Mobilization and demobilization of the dredge and pipeline will take 1.5-2 months for each dredge site.

Construction will require the use of barges, small watercraft, trackhoe excavators, earth moving equipment, hydraulic or mechanical dredges, and dockside staging areas. Equipment and materials for the construction activities will be transported via roads and existing waterways. Any water-based staging sites will be located to avoid sensitive resource areas such as oyster reefs and seagrass beds. Equipment may be staged at these locations for several months. No hazardous waste would be created during construction. All hazardous substances, such as oils, hydraulic fluids, and fuels, handled during construction would be contained and appropriate

barriers would be in place to ensure the protection of adjacent water resources from potential spills and leaks. NMFS' *Sea Turtle and Smalltooth Sawfish Construction Conditions and Measures for Reducing Entrapment Risk to Protected Species* will be followed for all aspects of this project

([http://sero.nmfs.noaa.gov/protected\\_resources/section\\_7/guidance\\_docs/documents/sea\\_turtle\\_and\\_smalltooth\\_sawfish\\_construction\\_conditions\\_3-23-06.pdf](http://sero.nmfs.noaa.gov/protected_resources/section_7/guidance_docs/documents/sea_turtle_and_smalltooth_sawfish_construction_conditions_3-23-06.pdf);

[http://sero.nmfs.noaa.gov/protected\\_resources/section\\_7/guidance\\_docs/documents/entrapment\\_bmps\\_final.pdf](http://sero.nmfs.noaa.gov/protected_resources/section_7/guidance_docs/documents/entrapment_bmps_final.pdf)). Activities associated with construction, including in-water work are not expected to take longer than 6 months at each site.

### **Dickinson Bay Island II**

The Dickinson Bay Island II project is located 1.0 mile (mi) southwest of the community of San Leon in Dickinson Bay, Galveston County, Texas (Figure 1). The Dickinson Bay Island site is located in subtidal habitat with an average water depth of approximately 4 feet (ft). There are 2 potential locations to restore the previously eroded island (Figure 2). Only one of the sites will be selected for use following on-site investigations and surveys.

Approximately 76,000 yd<sup>3</sup> of earthen fill will be placed on submerged bay bottom at the project location to build a 4-acre emergent island. The shoreline of the new island will be protected on 3 sides with a total of approximately 2,000 linear ft of armoring to ensure stability (Figure 4). One end of the island will be left un-armored and open to the bay (Figure 3). The project will use material from any of the following sources: the dedicated dredge borrow source area (Figure 2), the Mid-Bay Reach of the federally-maintained HSC, or an upland borrow site. The dedicated dredge source area is much larger than needed (57.7 acres). The TPWD will survey this area to locate an appropriate borrow site with desirable sediments and lacking sensitive resources such as marshes, oyster reefs and seagrass beds. The footprint of the actual borrow site within the dedicated dredge borrow source area will be no larger than approximately 13 acres, with a depth of no more than 5 ft below grade. For any of these borrow sites, the material would be mixed with water, requiring a settlement period and the controlled discharge of decanted water from the placement area. Construction of temporary access channels is not anticipated at this site.



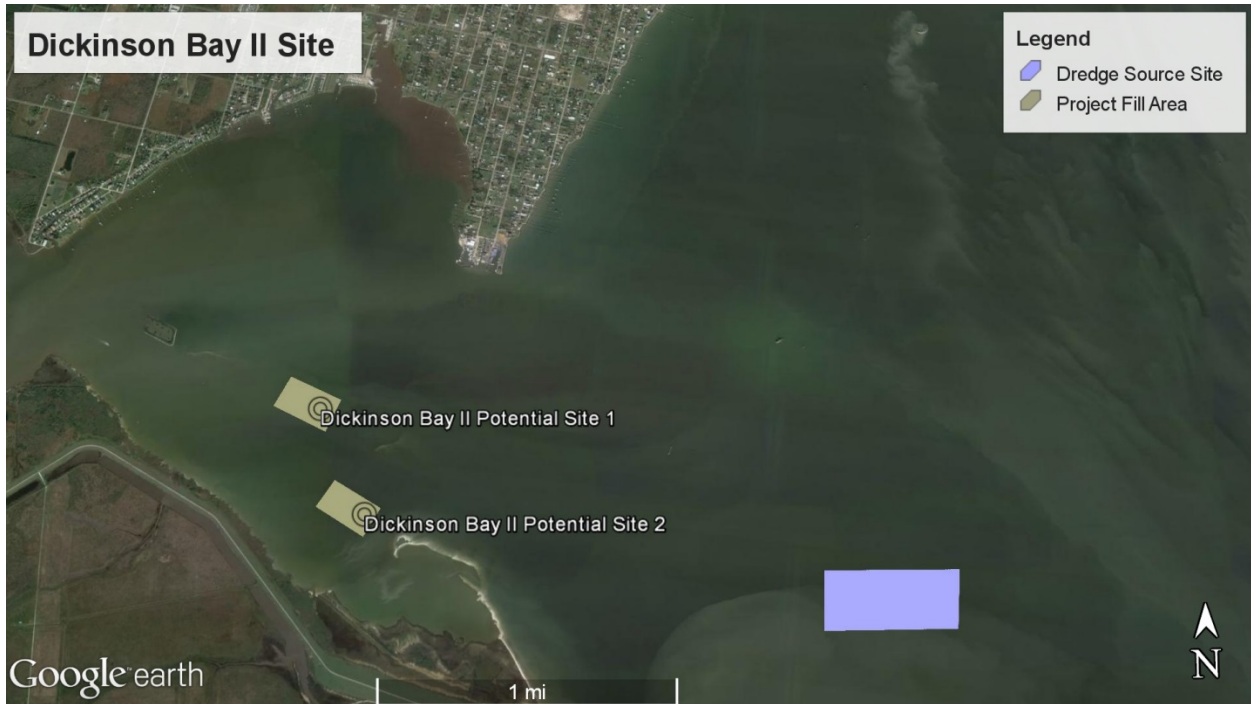


Figure 2. Google image of Dickinson Bay Island II with shapefiles provided by TPWD. Image illustrates the dredge source site, and the 2 possible project site locations from which the final restored island will be selected (Google Earth, 2016).

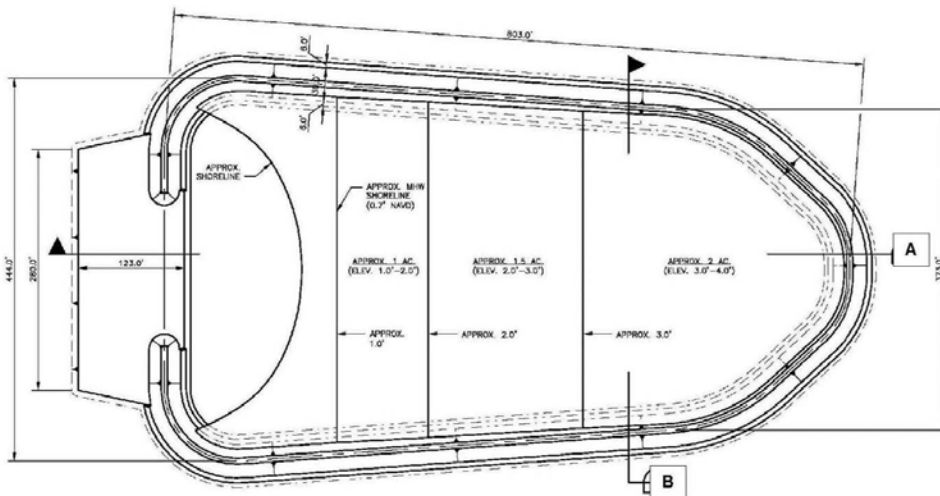


Figure 3. Preliminary design of Dickinson Bay Island II (TPWD, 2016)

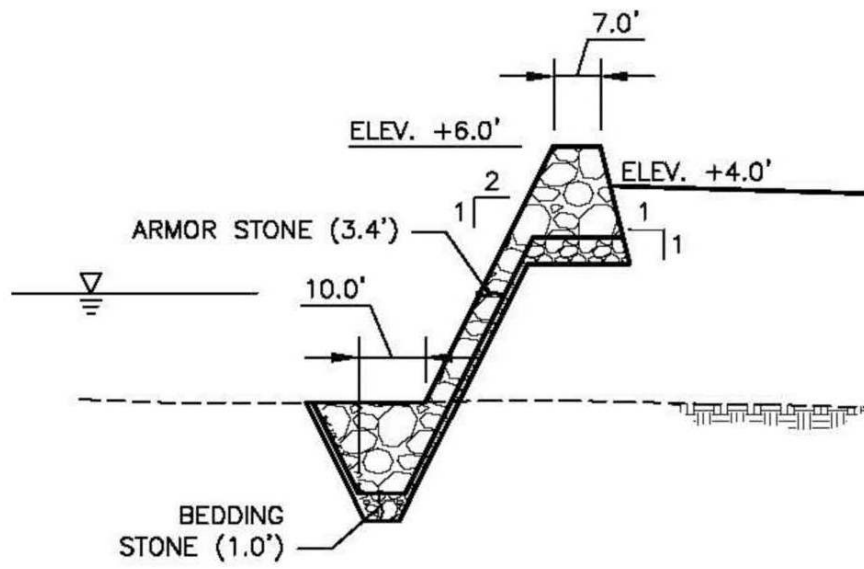


Figure 4. Typical shoreline armoring design (TPWD, 2016)

## Rollover Bay Island

The Rollover Bay Island site is located in subtidal habitat with an average water depth of approximately 4 ft. Approximately 80,000 yd<sup>3</sup> of earthen fill will be placed on submerged bay bottom to build a 10-acre emergent island. The shoreline will be protected with approximately 4,600 linear ft of armored shoreline/breakwaters along the north and south sides of the island, with openings to the bay at the east and west ends of the island (Figure 5).

The project will use material from any of the following sources: the dedicated dredge borrow source area (Figure 5), federally maintained navigation channels (e.g., GIWW, HSC or designated placement areas), or an upland borrow site. The dedicated dredge source area is much larger than needed (58 acres). The TPWD will survey this area to locate an appropriate borrow site with desirable sediments and lacking sensitive resources such as marshes, oyster reefs and seagrass beds. The footprint of the actual borrow site within the dedicated dredge borrow source area will be no larger than approximately 13 acres, with a depth of no more than 5 ft below grade. For any of these borrow sites, the material would be mixed with water, requiring a settlement period and the controlled discharge of decant water from the placement area. A temporary access channels will be required from the GIWW to the island site (about 600 feet) to allow access for construction barges and equipment. If the dedicated borrow source area is used as a source of fill material, an additional temporary access channel will be needed between the dedicated borrow source area and the island (about 3,100 ft; Figure 5). These channels would be mechanically excavated and would be no more than 50 feet wide and no more than 5 feet deep. The temporary access channels would be backfilled at the end of construction activities.



Figure 5. Rollover Bay Island restoration site. Image illustrates the dredge source site, armored shoreline/breakwaters, access channels, and hard bottom mitigation area (image provided by TPWD).

### Smith Point Island

The Smith Point Island site is located on the upper Texas coast within Galveston Bay, approximately 1.25 mi southwest of Smith Point Peninsula which separates Trinity and East Bay (Figure 1). The proposed site is located in subtidal habitat with an average water depth of approximately 0-5 ft. Approximately 70,000 yd<sup>3</sup> of earthen fill will be placed on submerged bay bottom at the project location to build a 6-acre emergent island. The shoreline will be protected with armoring and breakwaters to ensure stability. One new 285 ft breakwater will be constructed and an existing 2,076 ft breakwater will be restored to protect the restored and existing islands (Figure 7). The project may use fill material from several sources including a dedicated dredge borrow source area (Figure 6), the Mid-Bay Reach of the HSC, or an upland borrow site. The dedicated dredge source area is much larger than needed (531 acres). The TPWD will survey this area to locate an appropriate borrow site with desirable sediments and lacking sensitive resources such as marshes, oyster reefs and seagrass beds. The actual borrow site within the dedicated dredge borrow source area will be no larger than approximately 13 acres, with a depth of no more than 5 ft below grade. For any of these borrow sites, the material would be mixed with water, requiring a settlement period and the controlled discharge of decant water from the placement area. A short temporary access channel of approximately 250 feet by 50 feet may be required from the adjacent navigation channel to the existing island site (Figure 7). This channel would be mechanically excavated to no more 5 feet deep and will be backfilled when construction activities are completed.

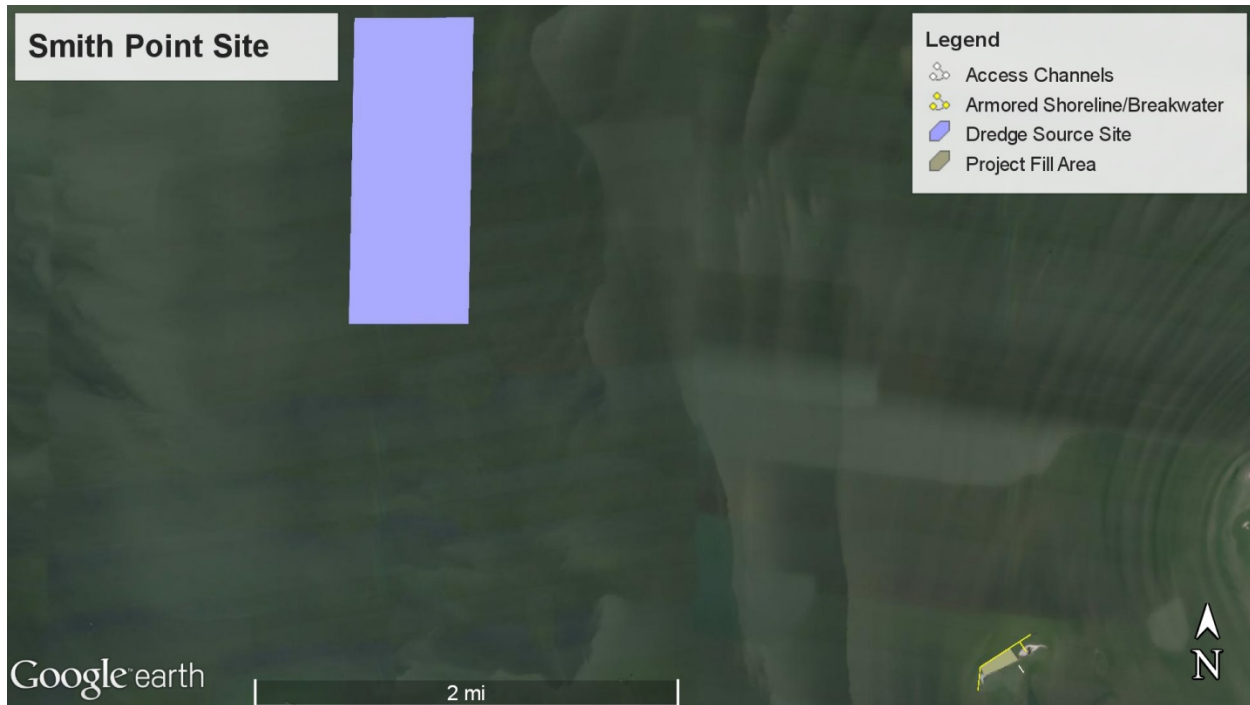


Figure 6. Google image of Smith Point Island with shapefiles provided by TPWD. Image illustrates the dredge source site, armored shoreline/breakwaters, and the project site location (Google Earth, 2016).



Figure 7. Google image of Smith Point Island with shapefiles provided by TPWD. Image illustrates the armored shoreline/breakwaters, access channels, and the project fill site location (Google Earth, 2016).

### Dressing Point Island

Dressing Point Island is situated in East Matagorda Bay, and is part of the Big Boggy National Wildlife Refuge. It lies approximately 1.5 mi south of the community of Chinquapin and 21 mi southeast of Bay City, in Matagorda County, Texas (Figure 1). Past surveys have indicated the presence of seagrass in the vicinity of the island and updated seagrass surveys will occur prior to construction. Exact locations of any oyster reefs or scattered shell that contain live oysters will also be identified prior to construction. Final designs will avoid impacts to seagrasses, productive reefs and scattered shell areas. The proposed site is located in shallow open water with an average water depth of approximately 3 ft. The project proposes to raise the elevation and expand the foot print of the island, from its current 7 acres to 12 acres, by placing approximately 70,000 yd<sup>3</sup> of earthen fill on 5 acres of submerged lands and on a 2-acre section of the existing island. In addition, approximately 2,500 yd<sup>3</sup> of shell material would be placed and integrated with the existing shell knoll (emergent shell substrate) southwest of the island (Figure 9) to raise the elevation and expand the size of the shell knoll to approximately 0.35 acres. The island will be protected by a new 5,000 ft breakwater which will be constructed around 3 sides of the island, leaving the southwest end of the island open to the bay (Figure 9).

The project may use fill material from several sources including a dedicated dredge borrow source area (Figure 8), the GIWW (including designated placement areas), or an upland borrow site. The dedicated dredge source area is much larger than needed (198 acres). The TPWD will survey this area to locate an appropriate borrow site with desirable sediments and lacking sensitive resources such as marshes, oyster reefs and seagrass beds. The footprint of the actual



borrow site within the dedicated dredge borrow source area will be no larger than approximately 13 acres, with a depth of no more than 5 ft below grade. For any of these borrow sites, the material would be mixed with water, requiring a settlement period and the controlled discharge of decant water from the placement area. Three temporary access channels may be excavated to allow access for construction related vessels. The first channel (approximately 350 ft long) would be constructed from the island into deeper waters of East Matagorda Bay, the second channel (approximately 5,000 ft long) would be constructed around the outer edge of the breakwater (Figure 10), and the third channel (approximately 2,500 ft long) would be constructed from the eastern entrance of the GIWW to East Matagorda Bay (Figure 9). All access channels would be mechanically excavated to no more 50 ft wide and 5 ft deep, and will be backfilled when construction activities are completed.

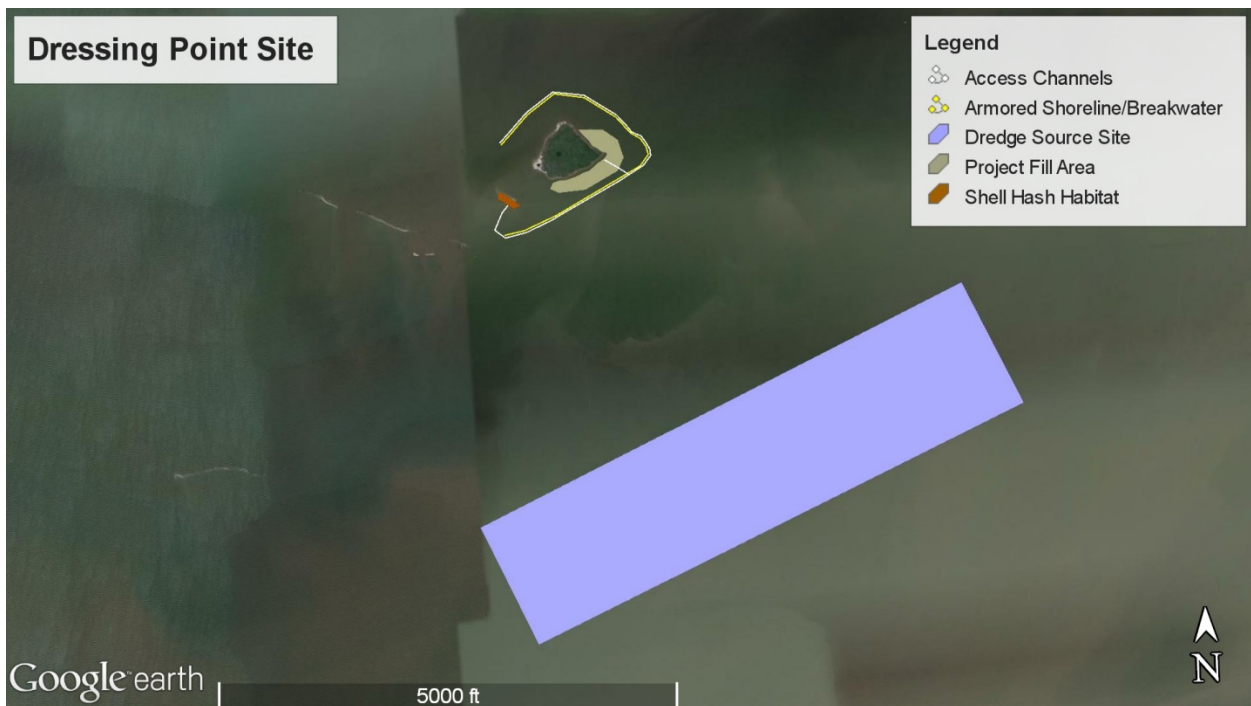


Figure 8. Google image of Dressing Point Island site with shapefiles provided by TPWD. Image illustrates the dredge source site, armored shoreline/breakwaters, access channels, and the project fill site location (Google Earth, 2016).



Figure 9. Google image of Dressing Point Island with shapefiles provided by TPWD. Image illustrates the armored shoreline/breakwaters, access channels, and the project fill site location (Google Earth, 2016).

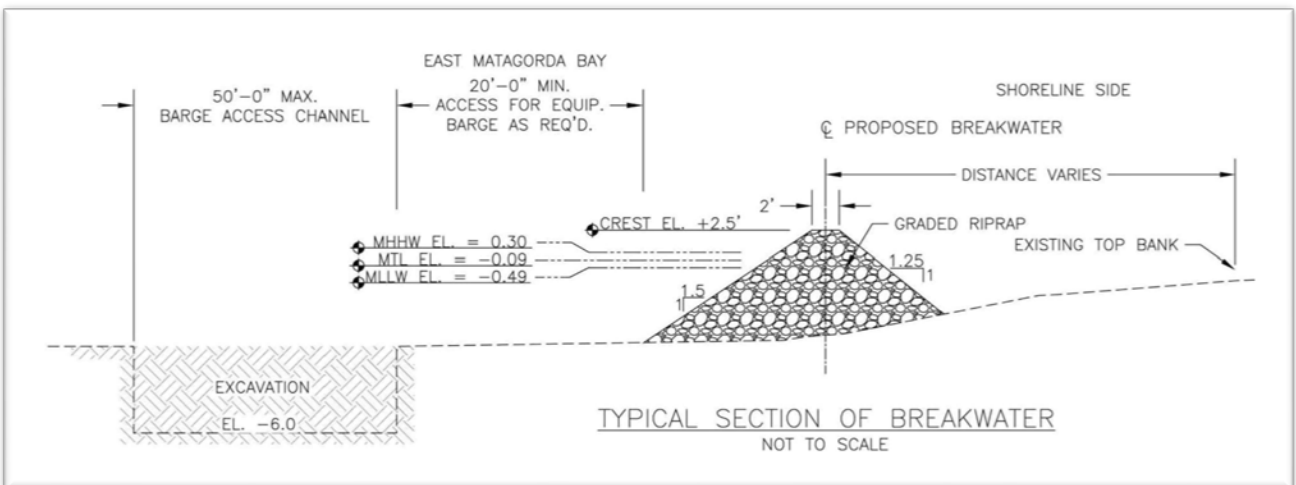


Figure 10. Typical breakwater design and temporary access channel (TPWD 2016)

**Effects Determinations for Species the Action Agency or NMFS Believes May Be Affected by the Proposed Action**

Species	ESA Listing Status	Action Agency Effect Determination	NMFS Effect Determination
<b>Sea Turtles</b>			
Green (North and South Atlantic distinct population segments [DPS])	T	NLAA	NLAA
Kemp’s ridley	E	NLAA	NLAA
Leatherback	E	NLAA	NLAA
Loggerhead (Northwest Atlantic Ocean DPS)	T	NLAA	NLAA
Hawksbill	E	NLAA	NLAA
E = endangered; T = threatened; NLAA = may affect, not likely to adversely affect			

**Critical Habitat**

The project is not located in designated critical habitat, and there are no potential routes of effect to any designated critical habitat.

**Analysis of Potential Routes of Effects to Species**

NMFS PRD has identified the following potential effects to sea turtles from implementing the proposed projects and concluded that these species are not likely to be adversely affected.

1. Sea turtles may be injured if struck by construction equipment or materials (e.g. backhoe bucket or rock placed for breakwaters). The risk of this adverse effect occurring is discountable because these species are highly mobile and are expected to avoid the noise and disturbance associated with construction activities. The applicant’s implementation of NMFS’s *Sea Turtle and Smalltooth Sawfish Construction Conditions* will further reduce the risk by requiring all construction workers watch for sea turtles. Operation of any mechanical construction equipment will cease immediately if a sea turtle is seen within a 50-ft radius of the equipment. Activities will not resume until the protected species has departed the project area of its own volition.
2. Sea turtles may be injured if struck by construction related vessels. Due to the species’ mobility and the applicant’s compliance with the *Sea Turtle and Smalltooth Sawfish Construction Conditions* including the requirement that all vessels maintain slow transit speed (5 knots or less), the risk of a vessel-strike injury discountable.
3. Sea turtles may be temporarily unable to use the construction sites for forage or refuge habitat due to the effects of construction activities (noise, increased turbidity, deployment of turbidity curtains, etc.). The project sites are relatively shallow (0-5 ft) and consist primarily of sand/clay/silt substrates with little or no SAV. These areas do not provide high quality habitat for sea turtles because they lack physical features preferred for foraging or shelter (SAV and hard bottom/structural relief). The affected areas are also relatively small compared to the vast areas of habitat surrounding them, these effects will be localized, and the duration of effects is expected to be relatively short (6-months or



less). For these reasons, any potential effects to sea turtles from temporary avoidance/exclusion from construction areas will be insignificant.

Sea turtles may become entrapped within areas that are enclosed by turbidity curtains, containment levees or breakwaters. It is extremely unlikely that sea turtles will be entrapped due to the implementation of NMFS's *Measures for Reducing Entrapment Risk to Protected Species*, dated May 22, 2012. Thus, we believe that the risk of entrapment is discountable.

4. Sea turtles may be affected by direct interaction with dredging equipment. If source material is not obtained from the HSC and GIWW, the applicant proposes to use only mechanical (clamshell and bucket dredging) or hydraulic (suction) cutterhead/pipeline dredging. The potential for impacts to sea turtles from these dredging methods is discountable, as the equipment used advances very slowly, enabling sea turtles to safely move away.<sup>1</sup>
5. Sea turtle foraging and sheltering may be impacted by the alteration of biological and physical conditions in dredged areas. Dredging removes the top layer of material from an area, including vegetation, sediment, topographic features and any sessile or slow moving benthic organisms. Dredging can also create noise and turbidity and contribute to the formation of localized anoxic or hypoxic conditions depending on the depth and location of the borrow sites. The applicant proposes to conduct dredging activities in previously disturbed areas (the HSC, GIWW, or designated placement areas for these maintenance dredging projects) and to avoid sensitive resources such as sea grass beds if dredging is conducted in other dedicated dredge source areas. The applicant also proposes to dredge no deeper than 5 ft below grade to avoid creating anoxic or hypoxic conditions. Given these project criteria and the small areas to be dredged (approximately 13 acres at each project site) compared to the extensive habitat areas surrounding the proposed dredge sites, any effects to sea turtles from the alteration of biological and physical conditions in dredged areas will be insignificant.

NMFS has also considered the effects of this project in conjunction with the effects associated with the Phase I, Phase III, and Phase IV projects that involve construction activities and that have previously undergone Section 7 consultations.<sup>2</sup> NMFS concludes there are no additive effects of the overall projects that rise above the level of effects considered for each of the individual projects. The potential impacts to listed species from construction activities are limited in time and place, and they cease to exist once the projects are complete.

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<sup>1</sup> NMFS. 2007. Revision 2 to the National Marine Fisheries Service (NMFS) November 19, 2003, Gulf of Mexico Regional Biological Opinion (GRBO) to the U.S. Army Corps of Engineers (COE) on Hopper Dredging of Navigation Channels and Borrow Areas in the U.S. Gulf of Mexico. National Marine Fisheries Service, Southeast Regional Office, Protected Resources Division, St. Petersburg, Florida. January 9, 2007. 15 pp.

<sup>2</sup> All of the early restoration projects that have previously undergone Section 7 consultations are described below in "Background: Deepwater Horizon Oil Spill Early Restoration"

**Conclusion**

Because all potential project effects to listed species were found to be discountable or insignificant, we conclude that the proposed action is not likely to adversely affect listed species under NMFS's purview. This concludes your consultation responsibilities under the ESA for species under NMFS's purview. Consultation must be reinitiated if a take occurs or new information reveals effects of the action not previously considered, or if the proposed action is subsequently modified in a manner that causes an effect to the listed species or critical habitat in a manner or to an extent not previously considered, or if a new species is listed or critical habitat designated that may be affected by the proposed action.

We look forward to further cooperation with you on other projects to ensure the conservation of our threatened and endangered marine species and designated critical habitat. If you have any questions about this consultation, please contact Mike Tucker, Consultation Biologist, at (727) 209-5981, or by email at [michael.tucker@noaa.gov](mailto:michael.tucker@noaa.gov).

File: 1514-22C.

*Background: Deepwater Horizon Oil Spill Early Restoration*

Under the Oil Pollution Act, designated agencies of the federal government and affected state governments act as trustees on behalf of the public. The Trustees are charged with recovering damages from the responsible parties to restore the public's natural resources that sustained injuries. NOAA shares trusteeship with the other natural resource trustees over all of the resources that will benefit from these restoration actions. The Trustees developed the Early Restoration selection process to be responsive to the purpose and need for conducting Early Restoration. Early Restoration project selection is a process requiring several steps: (1) project solicitation, (2) project screening, (3) negotiation with BP, and (4) public review and comment.

The Trustees released a Phase I Early Restoration Plan (ERP) in April 2012, a Phase II ERP in December 2012, a draft Phase III ERP on May 6, 2013, and a final Phase III Plan on June 26, 2014. On February 17, 2015, the Trustees released a Phase IV ERP. These plans contain a series of restoration actions that may be selected independently by the Trustees. NMFS PRD has previously completed consultations on the Phase I ERP projects and 39 of the projects included in the Phase III ERP.<sup>1</sup> To date, NMFS PRD has completed 4 consultations on 15 individual projects included in Phase IV.

The Phase I ERP consists of 8 projects that address an array of injuries and are located throughout the Gulf of Mexico (GOM) (see Appendix 1). Specifically, Phase I includes 2 oyster projects (1 in Louisiana and 1 in Mississippi), 2 marsh projects (1 in Louisiana and 1 in Alabama), a nearshore artificial reef project in Mississippi, and 2 dune projects and a boat ramp enhancement project in Florida. Consultation on the Phase I projects was completed on April 2, 2012. NMFS PRD determined that 1 of the marsh projects and both dune projects would have no effect on listed species and that the other projects are not likely to adversely affect listed species or designated critical habitat under NMFS PRD's purview. NMFS PRD evaluated potential impacts on listed sea turtles, Gulf sturgeon, and smalltooth sawfish from placement of material, site exclusion, and dredging. It determined that these effects will be discountable or insignificant because of the species' mobility and ability to find suitable habitat for foraging in the surrounding areas. NMFS PRD also evaluated potential impacts to sea turtles and Gulf sturgeon from fishing activities associated with the artificial reef project. It determined that the effects are discountable because the enhancement of the existing artificial reefs is not expected to induce new fishing effort or increase the risk of harmful interactions between recreational fishers and listed species. The boat ramp project will enhance 2 existing boat ramps and create 2 new public boat ramps that will allow the launch of an additional 92 vessels. The purpose of these projects is to relieve traffic and congestion at other boat ramps in the area. NMFS PRD determined that any increase in vessel-strike risk to sea turtles is discountable because the new boat ramps are likely to be used by people who currently have vessels. A previous NMFS PRD analysis concluded that a typical dock or marina project in Florida that introduces fewer than 300 new vessels to an area will have an insignificant or discountable effect on sea turtles.<sup>2</sup>

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<sup>1</sup> None of the Phase II ERP projects involved in-water work and, therefore, NMFS PRD did not receive a request for Section 7 consultation.

<sup>2</sup> Barnette, M. Threats and Effects Analysis for Protected Resources on Vessel Traffic Associated with Dock and Marina Construction. NMFS SERO PRD Memorandum. April 18, 2013.

Three of the Phase I projects (1 boat ramp, 1 oyster project, and the nearshore artificial reef project) are located in Gulf sturgeon critical habitat. The boat ramp is located in Unit 9, while the oyster and artificial reef projects are located in Unit 8. NMFS PRD determined that the boat ramp project is not likely to adversely affect Gulf sturgeon critical habitat in Unit 9 because the construction will occur in the same footprint and will be the same dimensions as the existing boat ramp. Any increases in suspended sediments in the water column (i.e., turbidity) are expected to be localized, temporary, and insignificant, and the texture and quality of the sediments and its ability to support prey items are expected to be the same pre- and post-project. NMFS PRD similarly concluded that the oyster project and artificial reef project will not adversely affect Gulf sturgeon critical habitat in Unit 8 because the placement of clean, toxin-free material will not alter the water or sediment quality. Also, the addition of this material to existing hard bottom will not alter prey availability.

NMFS PRD completed 20 consultations on 35 individual projects out of a total of 39 projects<sup>1</sup> included in Phase III (see Appendix 2). These projects are:

- 4 artificial reef projects (3 in Texas and 1 in Florida)
- 2 oyster projects (1 in Florida and 1 in Alabama)
- 4 living shoreline projects (1 in Alabama, 1 in Mississippi, and 2 in Florida)
- 10 Florida boat ramp/dock projects
- 1 Florida scallop-enhancement project
- 1 Florida beach-enhancement project
- 1 Louisiana-North Breton Island restoration project
- 1 Mississippi fishing pier project
- 2 Florida observation/canoe launch dock projects
- 1 Florida erosion-control project
- 1 Florida small fishing pier project
- 1 Florida oyster reef and salt marsh-enhancement project
- 1 Florida fish hatchery project
- 1 Florida-St. George Island bulkhead improvements project
- 1 Texas ship artificial reef
- 1 Florida Mexico Beach marina project
- 1 Florida Gulf Island National Seashore ferry service project
- 1 Louisiana outer coast restoration-Chenier Ronquille barrier island project

As with the Phase I projects, NMFS PRD evaluated potential impacts on listed sea turtles and Gulf sturgeon from placement of material, site exclusion, and dredging, and determined that these effects will be discountable or insignificant because of the species' mobility and ability to find suitable habitat for foraging in the surrounding areas. NMFS PRD also evaluated the impacts of noise created from construction, where applicable, and determined that the risk of short- or long-term exposure to harmful noise is discountable, and any sound heard by the ESA-listed species will have insignificant health effects. NMFS PRD determined that the potential impacts to sea turtles and Gulf sturgeon from fishing activities associated with the 4 artificial

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<sup>1</sup> Five additional restoration projects were included on September 12, 2014.

reef projects are discountable because the enhancement of the existing artificial reefs is not expected to produce new fishing effort. NMFS PRD also determined that the risk of vessel strike impacts to turtles from future use of the artificial reef sites is discountable because use of the site will generally coincide with fair weather patterns and calm sea states that will allow boaters to detect and avoid any sea turtles in their path. Subsequently, in the consultation on the Texas ship artificial reef, NMFS PRD recognized that the effects of recreational fishing for reef fish and reef fish vessels on sea turtles were analyzed in NMFS's GOM Reef Fish Fishery Biological Opinion, dated September 30, 2011. NMFS PRD concluded that because the artificial reef would not result in any net increase in fishing activities and would not result in any measurable change in the Gulf-wide distribution of fishing effort or the distribution of turtles, the Texas ship artificial reef project would not result in any fishing or vessel impacts beyond those described in the 2011 Biological Opinion.

There were 16 of the Phase III projects located in Gulf sturgeon critical habitat:

- 3 living shoreline projects
- 1 Florida artificial reef project
- 1 Florida fish hatchery
- 3 Florida boat ramp projects
- 1 Florida beach-enhancement project
- 2 Florida oyster reef projects
- 1 scallop-enhancement project
- 1 erosion-control project
- 2 observation/canoe launch docks
- 1 Florida St. George Island bulkhead improvements project

The living shoreline projects are located in Units 8, 9, and 13. The Florida fish hatchery is located in Unit 9. The boat ramp projects are located in Units 9 and 13. The beach enhancement project is located in Unit 11. The oyster projects are located in Units 9 and 13. The scallop enhancement project is located in Units 9, 10, 12, and 13. The erosion control project is located in Unit 12, the observation/canoe launch dock projects are in Units 10 and 12, and the St. George Island bulkhead improvements project is located in Unit 13.

NMFS PRD determined that the scallop-enhancement project and Florida fish hatchery project will have no effect on Gulf sturgeon critical habitat and that the other projects are not likely to adversely affect the essential features of Gulf sturgeon critical habitat (water quality, sediment quality, prey abundance, and safe and unobstructed migratory pathways). The oyster reef projects will place clean, non-toxic material over existing hard bottom, which will make any impacts to water quality, sediment quality, or prey abundance discountable. The beach-enhancement project will improve sediment quality and effects to prey abundance, water quality and migratory pathways will be insignificant because the work will take place in water more shallow than normal foraging depths. Any increased turbidity will be temporary and within natural background levels and sand placement in the shallow waters along the beach will not interfere with migration. The Florida artificial reef project will have no effect on the sediment quality. The effects to water quality and prey abundance will be insignificant because turbidity

will be temporary and within natural background levels and will not reduce prey availability overall in the areas surrounding the modules. Any impacts to migratory pathways will be discountable because the reef structures are in open water and spaced out sufficiently for Gulf sturgeon to move. The installation of the 8-in-diameter seawater intake pipe for the fish hatchery project will have no effect on sediment quality. The effects to water quality and prey abundance will be insignificant because the turbidity will be temporary, within natural background levels, and will not reduce prey availability in the areas surrounding the pipe.

Similarly, the boat ramp and dock projects will have no effect on sediment quality. The effects to water quality and prey abundance will be insignificant because turbidity will be temporary and within natural background levels and will not reduce prey availability overall in the areas surrounding the ramps or docks. The erosion-control structure project will have no effects on sediment quality as the composition of the dredge materials to be placed behind the groins are expected to be similar or identical to what is currently present. The effects to water quality and prey abundance will be insignificant because turbidity will be temporary and within natural background levels and will not reduce prey availability overall in the areas surrounding the modules. The living shoreline projects may temporarily increase turbidity and displace some prey species, but we expect these impacts to be insignificant. With respect to prey abundance, the living shoreline projects are expected to have long-term beneficial impacts by increasing prey abundance in adjacent areas. The St. George Island bulkhead improvements project may affect water and sediment quality from construction activities, but effects will be short-lived and localized. Similarly, any impacts to prey abundance will be localized but are not expected to reduce overall prey abundance in the project area or critical habitat unit.

Only 4 projects of the Phase III projects (3 Texas artificial reefs and 1 ship artificial reef project) are located in loggerhead critical habitat LOGG-S-02-Gulf of Mexico (*Sargassum*). NMFS PRD determined that none of the project actions would affect the location of convergence zones, surface-water downwelling areas, or other locations where there are concentrated components of the *Sargassum* community in water temperatures suitable for optimal growth of *Sargassum* and inhabitation of loggerheads. None of the 4 artificial reef project actions would adversely affect the availability of prey for hatchling loggerhead sea turtles or other material associated with *Sargassum* habitat. Neither will they affect the water depth or proximity to currents necessary for offshore transport, foraging, and cover. While the vessels associated with these projects may transit through *Sargassum* habitats, those vessel tracks are not anticipated to scatter *Sargassum* mats to the point of appreciably affecting the functionality of the primary constituent elements (PCEs). Therefore, any adverse effects to the PCEs of *Sargassum* habitat will be insignificant.

As with the Phase I and III projects, NMFS PRD evaluated potential impacts from Phase IV Pelagic Longline (PLL) Bycatch Reduction project on ESA-listed turtles and marine mammals and determined that these effects from the proposed action will be completely beneficial. The PLL Bycatch Reduction project promotes both the cessation of PLL fishing and the use of greenstick gear and buoy gear in a fishery that currently allows the use of this gear as authorized by the HMS FMP. Reducing PLL fishing and increasing the use of the authorized greenstick gear and buoy gear will reduce the extent of the adverse effects to ESA-listed sea turtles and marine mammals that are anticipated from the continued harvest of PLL species as previously analyzed in the relevant Biological Opinions and Memoranda. Thus, the proposed action is not

likely to adversely affected ESA-listed sea turtles and marine mammals. With respect to ESA-listed corals, NMFS PRD had previously determined that both green-stick and buoy gear do not come into contact with the ocean floor or any benthic habitats; thus, they are anticipated to have no effect on listed corals. With regard to scalloped hammerhead sharks, the distribution and range of the threatened Central and Southwest Atlantic DPS of scalloped hammerhead shark does not overlap the PLL Bycatch Reduction Project area in the GOM. Therefore, the proposed action will not affect the Central and Southwest Atlantic DPS of the scalloped hammerhead shark.

The PLL Bycatch Reduction project is also located in loggerhead critical habitat LOGG-S-02-Gulf of Mexico (*Sargassum*). NMFS PRD determined that none of the project activities would affect the location of convergence zones, surface-water downwelling areas, or other locations where there are concentrated components of the *Sargassum* community in water temperatures suitable for optimal growth of *Sargassum* and inhabitation of loggerheads. The project activities would not affect the availability of prey for hatchling loggerhead sea turtles or other material associated with *Sargassum* habitat. They will not affect the water depth or proximity to currents necessary for offshore transport, foraging and cover. To the extent PLL fishing vessels may impact the *Sargassum* habitat, the voluntary repose period in PLL fishing each year would reduce the impact, resulting in effects that are completely beneficial, and the increase in use of greenstick gear and buoy gear on these vessels would have no effect on the habitat. Thus, we concluded that the proposed action is not likely to adversely affect the *Sargassum* loggerhead critical habitat.

NMFS PRD also evaluated potential impacts from implementation of a multi-faceted Sea Turtle Stranding and Salvage Network (STSSN) enhancement program that was proposed under Phase IV. The proposed STSSN enhancement program consists of 4 components. The first funds a Kemp's Ridley sea turtle nest detection and enhancement project. The second component provides for enhancement of the STSSN and development of a sea turtle emergency response program for threatened and endangered sea turtles. The third component promotes Gulf of Mexico shrimp trawl bycatch reduction, and the fourth component provides for increased enforcement of fisheries bycatch reduction regulations in Texas.

For all of these STSSN enhancement program components, the potential effects to listed species and critical habitats were either previously analyzed and authorized under existing consultations and permits, or were determined to be completely beneficial and therefore not likely to adversely affect listed species or critical habitat.

NMFS PRD evaluated potential impacts from 3 batched living shoreline projects submitted under Phase IV. All 3 projects are located in Portersville Bay, Mobile County, Alabama. None of the projects are located within, nor will they have any effects on critical habitat designated for species under NMFS's purview. The Alabama Department of Conservation and Natural Resources proposes to deploy Wave Attenuation Units at depths of 2-3 ft (or 0.6-0.9 meters [m]) below MLLW using a small trackhoe located on a shallow-draft barge or from shore using a wide-tracked long-arm trackhoe. NMFS PRD determined that potential effects from listed species that are struck by construction materials, equipment, or vessels were discountable, and

any effects from temporary increases in turbidity or displacement from the action area would be insignificant.

Finally, NMFS PRD evaluated potential impacts from 10 batched living shoreline and intertidal/subtidal reef projects in Mississippi coastal waters in the Gulf of Mexico submitted under Phase IV. None of the projects are located within, nor will they have any effects on critical habitat designated for species under NMFS's purview. The project proponent proposes to create approximately 22,000 linear feet of breakwater/living shoreline at 5 different sites, 267 acres of subtidal oyster reef at 5 different sites, and 5 acres of intertidal oyster reef at 2 different sites. All construction materials would be stockpiled at existing staging areas. All construction materials would be loaded onto barges and transported to the work areas. Breakwater materials would be deployed by a crane and/or long armed trackhoe located on an adjacent equipment barge, subtidal reef cultch material would be deployed using a high pressure water jet, and intertidal reef shell bags would be deployed by hand. The subtidal reef cultch material would be deployed in water depths ranging from 0 to -10 MLLW with a thickness between 1 and 12 inches. Navigational hazard signage may be required by Coast Guard which would result in vibratory pile driving of up to 120 new 12-in wooden piles. NMFS PRD determined that potential effects from listed species that are struck by construction materials, equipment, or vessels were discountable and any effects from temporary increases in turbidity or displacement from the action area would be insignificant. Noise effects to ESA-listed species as a result of noise created by construction activities can physically injure these animals or change their behavior in the affected areas. Nonetheless, due to the mobility of these species, we expect them to move away from noise disturbances. Because there is an abundance similar habitat throughout the surrounding area, we determined that behavioral effects will be insignificant, as they would not prevent animals from migrating, feeding, resting, or reproducing.



**Appendix 1. Phase I Early Restoration Plan Projects with Corresponding Public Consultation Tracking System (PCTS)**

<b>Reference</b>	<b>PCTS Tracking Number</b>	<b>Project</b>	<b>Description</b>	<b>NMFS PRD Determinations</b>
P1-1	SER-2012-889	Louisiana Lake Hermitage Marsh Creation – NRDA Early Restoration Project	Project proposed involves the creation of marsh within the project footprint of the larger Lake Hermitage Marsh Creation Project. The primary goals of the project are the following: (1) to restore the eastern Lake Hermitage shoreline to reduce erosion and prevent breaching into the interior marsh, and (2) to re-create marsh in the open water areas south and southeast of Lake Hermitage. The marsh creation project will substitute approximately 104 acres of created brackish marsh for approximately 5-6 acres (7,300 linear ft) of earthen terraces.	The project is not likely to adversely affect sea turtles or Gulf sturgeon. The project is not located in designated critical habitat. All activities associated with the Lake Hermitage Restoration project are outside the known range of Gulf sturgeon. Sea turtles are not likely to be at the dredge site in the Mississippi River, which is 70 mi from the Gulf of Mexico. Additionally, sea turtles are not likely to be at the marsh restoration site.
P1-2	SER-2012-889	Louisiana Oyster Cultch Project	Project involves (1) the placement of oyster cultch onto approximately 850 acres of public oyster seed grounds throughout coastal Louisiana, and (2) construction of an oyster hatchery facility that will produce supplemental larvae and seed. The project consists of placing oyster cultch material on public oyster seed grounds to produce seed- and sack-sized oysters to compensate the public for impacts to oyster areas exposed to oil, dispersant, and response activities.	The project is not likely to adversely affect sea turtles or Gulf sturgeon. The project is not located in designated critical habitat.
P1-3	SER-2012-889	Mississippi Oyster Cultch Restoration	Project consists of placing oyster cultch material on public oyster seed grounds in the footprint of existing oyster cultch areas to produce seed- and sack-sized oysters to compensate the public for impacts to oyster areas exposed to oil, dispersant, and response activities.	The project is not likely to adversely affect sea turtles, Gulf sturgeon, or Gulf sturgeon critical habitat.
P1-4	SER-2012-889	Mississippi Artificial Reef Habitat	Project includes the deployment of artificial reefs in bays and nearshore Mississippi Sound waters in and off of Hancock, Harrison, and Jackson Counties, Mississippi.	The project is not likely to adversely affect sea turtles, Gulf sturgeon, or Gulf sturgeon critical habitat.
P1-5	SER-2012-889	Mississippi Marsh Island (Portersville Bay) Marsh Creation	Project involves the addition 50 acres of salt marsh to the existing 24 acres along Marsh Island in the Portersville Bay portion of Mississippi Sound in south Mobile County, Alabama. This entails the construction of a permeable segmented breakwater, the placement of sediments, and the planting of native marsh vegetation.	The project is not likely to adversely affect sea turtles or Gulf sturgeon. The project is not located in designated critical habitat.

<b>Reference</b>	<b>PCTS Tracking Number</b>	<b>Project</b>	<b>Description</b>	<b>NMFS PRD Determinations</b>
P1-6	SER-2012-889	Alabama Dune Restoration Cooperative Project	Project will restore 55 acres of dune habitat by installing sand fencing and planting native dune vegetation in Orange Beach and Gulf Shores, Alabama.	The project will have no effect on listed species or designated critical habitat under NMFS PRD's jurisdiction. NMFS PRD does not believe there will be any direct or indirect effects to our listed species or designated critical habitat, as all activities will occur solely in upland areas.
P1-7	SER-2012-889	Florida Boat Ramp Enhancement and Construction Project	Project will entail repairing the existing Navy Point Park public boat ramp, located in a developed residential area in Pensacola Bay, and constructing the new Mahogany Mill public boat ramp that will be located in a commercial and industrial area in Pensacola Bay.	The project is not likely to adversely affect sea turtles, Gulf sturgeon, smalltooth sawfish, or Gulf sturgeon critical habitat. The Navy Point project is not likely to adversely affect Gulf sturgeon critical habitat in Unit 9, Pensacola Bay. The remaining boat ramp projects are not located in designated critical habitat.
P1-8	SER-2012-889	Florida (Pensacola Beach) Dune Restoration	Native dune vegetation will be planted on the primary dune on Pensacola Beach in Escambia County, Florida.	This project will have no effect on listed species or designated critical habitat under NMFS PRD's jurisdiction. NMFS PRD does not believe there will be any direct or indirect effects to listed species or designated critical habitat, as all activities will occur solely in upland areas.

**Appendix 2. Phase III Early Restoration Plan Projects with Corresponding Public Consultation Tracking System (PCTS)**

<b>Reference</b>	<b>PCTS Tracking Number</b>	<b>Project</b>	<b>Description</b>	<b>NMFS PRD Determinations</b>
P3-1	SER-2014-12910	Texas, Artificial Reefs, Corpus	The applicant will propose 3 projects to install artificial reefs in Texas coastal waters. They are not located within designated Gulf sturgeon critical habitat but are located in loggerhead sea turtle critical habitat (LOGG-S-02-Gulf of Mexico [ <i>Sargassum</i> ]).	These projects are not likely to adversely affect ESA-listed species (leatherback, Kemp’s ridley, hawksbill, loggerhead, or green sea turtles) or loggerhead sea turtle critical habitat (LOGG-S-02-Gulf of Mexico [ <i>Sargassum</i> ]).
P3-2	SER-2014-12916	Texas, Artificial Reefs, Freeport		
P3-3	SER-2014-12920	Texas, Artificial Reefs, Matagorda		
P3-4	SER-2014-12924	Alabama, Oyster Cultch	The applicant proposes to restore and enhance 319 acres of oyster reefs within historic footprint of oyster reefs in Mobile Bay. It is not located within any designated critical habitat.	The project is not likely to adversely affect ESA-listed species (leatherback, Kemp’s ridley, hawksbill, loggerhead, or green sea turtles, or Gulf sturgeon).
P3-5	SER-2014-12925	Florida, Hancock County Living Shorelines	The applicant proposes to reduce shoreline erosion and restore oyster and marsh habitat by (1) use of breakwater materials to reduce shoreline erosion, (2) creation of 46 acres of salt marsh, and (3) enhancement of 46 acres of oyster reef habitat that have historically supported oysters. It is located within designated Gulf sturgeon critical habitat Unit 8 but not within loggerhead sea turtle critical habitat.	The project is not likely to adversely affect ESA-listed species (Kemp’s ridley, loggerhead, or green sea turtles, or Gulf sturgeon) or designated Gulf sturgeon critical habitat. Leatherback and hawksbill sea turtles were withdrawn from the ESA consultation process.
P3-6	SER-2014-12926	Florida, Swift Tract Living Shorelines	The applicant proposes to reduce shoreline erosion by creating breakwaters (8,500 ft) from natural materials (15,800 tons of riprap and 2,200 yd <sup>3</sup> of bagged oyster shell) covering 2.9 acres of fine-grained sediment. It is not located within any designated critical habitats.	The project is not likely to adversely affect ESA-listed species (Kemp’s ridley, loggerhead, or green sea turtles, or Gulf sturgeon). Leatherback and hawksbill sea turtles were withdrawn from the ESA consultation process.



<b>Reference</b>	<b>PCTS Tracking Number</b>	<b>Project</b>	<b>Description</b>	<b>NMFS PRD Determinations</b>
P3-7	SER-2014-13016	Florida, Pensacola Bay Living Shorelines	The applicant proposes to reduce shoreline erosion by expanding existing breakwaters at 2 sites (25,000 tons of riprap, covering 5 acres of fine-grained sediment total) and backfilling marsh areas with 102,000 yd <sup>3</sup> of fill, total. It is located within designated Gulf sturgeon critical habitat Unit 9 but not within loggerhead sea turtle critical habitat.	The project is not likely to adversely affect ESA-listed species (Kemp's ridley, loggerhead, or green sea turtles, smalltooth sawfish, or Gulf sturgeon) or designated Gulf sturgeon critical habitat. Leatherback and hawksbill sea turtles and smalltooth sawfish were withdrawn.
P3-8	SER-2014-13083	Florida, Cat Point Living Shorelines	The applicant proposes to reduce shoreline erosion by expanding an existing breakwater structure (up to 0.3 mi) and creating 1 acre of salt marsh habitat. It is located within designated Gulf sturgeon critical habitat Unit 13, but not within loggerhead sea turtle critical habitat.	The project is not likely to adversely affect ESA-listed species (Kemp's ridley, loggerhead, or green sea turtles, smalltooth sawfish, or Gulf sturgeon) or designated Gulf sturgeon critical habitat. Leatherback and hawksbill sea turtles and smalltooth sawfish were withdrawn.
P3-9	SER-2014-13017	Florida, Beach Enhancement Project at Gulf Island National Seashore	The applicant proposes to remove fragments of asphalt and road-base material from a long, thin area approximately 20 ft wide by 2 mi long (211,200 ft <sup>2</sup> or ~ 4.8 acres) in the inter- and sub-tidal zone within the GUI. The project is located within Gulf sturgeon critical habitat Unit 11 and is not in loggerhead sea turtle critical habitat.	The project is not likely to adversely affect ESA-listed species (leatherback, Kemp's ridley, hawksbill, loggerhead, or green sea turtles, or Gulf sturgeon) or designated critical habitats for these species.
P3-10	SER-2014-13018	Louisiana, North Breton Island Restoration	The applicant proposes to dredge 3.7 million yd <sup>3</sup> (2.8 x 10 <sup>6</sup> m <sup>3</sup> ) of sand, silt, and clay materials, using a cutterhead dredge, from 1 or more sites within offshore shoals borrow sites from a water depth range of 6-20 ft or 1.8-6.1 m mean lower low water (MLLW). The in-water project footprint is 38 square miles (mi <sup>2</sup> ) or 98.4 square kilometers (km <sup>2</sup> ); 41.4 mi <sup>2</sup> (or 106.4 km <sup>2</sup> ) including proposed North Breton Island restoration. The project is not located within Gulf sturgeon critical habitat or loggerhead sea turtle	The project is not likely to adversely affect ESA-listed species (leatherback, Kemp's ridley, hawksbill, loggerhead, or green sea turtles, or Gulf sturgeon).

<b>Reference</b>	<b>PCTS Tracking Number</b>	<b>Project</b>	<b>Description</b>	<b>NMFS PRD Determinations</b>
			critical habitat.	
P3-11	SER-2014-13026	Mississippi, Popp's Ferry Causeway Park	The applicant proposes to install 4 fishing piers and 1 overlook pier, covering approximately 5,000 ft <sup>2</sup> of open water with vibratory hammering. It is not located within any designated critical habitat.	These projects are not likely to adversely affect ESA-listed species (Kemp's ridley, loggerhead, or green sea turtles, or Gulf sturgeon). Leatherback and hawksbill sea turtles were withdrawn.
P3-12	SER-2014-13079	Florida, Oysters Cultch	The applicant proposes to restore and enhance oyster populations in Pensacola and Apalachicola Bays in Florida (total placement of 42,000 yd <sup>3</sup> of cultch material over 210 acres of previous oyster reefs). It is located within designated Gulf sturgeon critical habitat Units 9 and 13. It is not located in loggerhead sea turtle critical habitat.	These projects are not likely to adversely affect ESA-listed species (leatherback, Kemp's ridley, hawksbill, loggerhead, or green sea turtles, or Gulf sturgeon) or Gulf sturgeon-designated critical habitat.
P3-13	SER-2014-13080	Florida, Scallop Enhancement	The applicant proposes to restore and enhance scallop production by the placement of scallop spat into Florida coastal waters. It is located within designated Gulf sturgeon critical habitat Units 9, 10, 12, and 13. It is not located in loggerhead sea turtle critical habitat.	The project is not likely to adversely affect ESA-listed species (leatherback, Kemp's ridley, hawksbill, loggerhead, or green sea turtles, smalltooth sawfish, or Gulf sturgeon) and there will be no effect on Gulf sturgeon-designated critical habitat.
P3-14	SER-2014-13081	Florida, Artificial Reefs	The applicant proposes to build and deploy artificial reefs offshore in Florida coastal waters in 5 Florida counties: Escambia, Santa Rosa, Okaloosa, Walton, and Bay counties. The project spans 123 mi (107 nautical miles or 198 km) along the coast of Florida in the nearshore as well as the offshore zone. Although some project sites are located within Gulf sturgeon critical habitat Unit 11, there are no sites in loggerhead sea turtle critical habitat.	These projects are not likely to adversely affect ESA-listed species (leatherback, Kemp's ridley, hawksbill, loggerhead, or green sea turtles) and are not likely to adversely affect Gulf sturgeon critical habitat Unit 11.

<b>Reference</b>	<b>PCTS Tracking Number</b>	<b>Project</b>	<b>Description</b>	<b>NMFS PRD Determinations</b>
P3-15	SER-2014-13077	Florida, Gulf Coast Marine Fisheries Hatchery/ Enhancement Center	The applicant proposes to construct and operate a saltwater sportfish hatchery on a 10-acre vacant lot to enhance recreational fishing opportunities through aquaculture in Pensacola Bay, Escambia County, Florida.	The project is not likely to adversely affect ESA-listed species (leatherback, Kemp's ridley, hawksbill, loggerhead, or green sea turtles) and is not likely to adversely affect Gulf sturgeon critical habitat Unit 9.
P3-16	SER-2014-13124	Florida, Big Lagoon State Park Boat Ramp	The applicant proposes to renovate existing boat ramps and/or adjacent boat docks in Florida coastal waters located in Gulf sturgeon critical habitat Unit 9.	The project is not likely to adversely affect sea turtles, Gulf sturgeon, or Gulf sturgeon critical habitat Unit 9.
P3-17	SER-2014-13131	Florida, Gulf Breeze, Wayside Park Boat Ramp	The applicant proposes to renovate existing boat ramps and/or adjacent boat docks in Florida coastal waters located in Gulf sturgeon critical habitat Unit 9.	The project is not likely to adversely affect sea turtles, Gulf sturgeon, or Gulf sturgeon critical habitat Unit 9.
P3-18	SER-2014-13127	Florida, Franklin County Waterfront Park Improvements	The applicant proposes to renovate existing boat ramps and/or adjacent boat docks in Florida coastal waters located in Gulf sturgeon critical habitat Unit 13.	The project is not likely to adversely affect sea turtles, Gulf sturgeon, or Gulf sturgeon critical habitat Unit 13.
P3-19	SER-2014-13135	Florida, Enhancement of Franklin County Parks and Boat Ramps, Indian Creek Park	The applicant proposes to renovate existing boat ramps and/or adjacent boat docks in Florida coastal waters.	The project is not likely to adversely affect sea turtles or Gulf sturgeon.
P3-20	SER-2014-13119	Florida, Port St. Joe, Frank Pate Boat Ramp Improvements	The applicant proposes to renovate existing boat ramps and/or adjacent boat docks in Florida coastal waters.	The project is not likely to adversely affect sea turtles or Gulf sturgeon.
P3-21	SER-2014-13140	Florida, Walton County, Lafayette Creek Boat Dock Improvements	The applicant proposes to renovate existing boat ramps and/or adjacent boat docks in Florida coastal waters.	The project is not likely to adversely affect sea turtles or Gulf sturgeon.

<b>Reference</b>	<b>PCTS Tracking Number</b>	<b>Project</b>	<b>Description</b>	<b>NMFS PRD Determinations</b>
P3-22	SER-2014-13277	Florida, Panama City, St. Andrews Marina Boat Ramp	The applicant proposes to renovate existing boat ramps and/or adjacent boat docks in Florida coastal waters.	The project is not likely to adversely affect sea turtles or Gulf sturgeon.
P3-23	SER-2014-13272	Florida, Parker Earl Gilbert Boat Ramp	The applicant proposes to renovate existing boat ramps and/or adjacent boat docks in Florida coastal waters.	The project is not likely to adversely affect sea turtles or Gulf sturgeon.
P3-24	SER-2014-13085	Florida, Wakulla County, Marshes Sand Park Improvements	The applicant proposes to renovate existing boat ramps and/or adjacent boat docks in Florida coastal waters.	The project is not likely to adversely affect sea turtles or Gulf sturgeon.
P3-25	SER-2014-13278	Florida, City of St. Marks, Boat Ramp	The applicant proposes to renovate existing boat ramps and/or adjacent boat docks in Florida coastal waters.	The project is not likely to adversely affect sea turtles or Gulf sturgeon.
P3-26	SER-2014-13270	Florida, Bayside Ranchettes Park Improvements	The applicant proposes the construction of a new parking area, a picnic table, an observation dock, and steps from the shoreline into the water allowing access to the bay.	The project is not likely to adversely affect sea turtles, Gulf sturgeon, or Gulf sturgeon critical habitat Unit 12.
P3-27	SER-2014-13275	Florida, Navarre Beach Park Coastal Access and Dune Restoration	The applicant will construct new infrastructure to increase the public's opportunities to safely access coastal resources, including the beach and waters of Santa Rosa Sound. The project includes design and construction of 2 new beach-access boardwalks from the existing pavilion/parking lots to the Santa Rosa Sound and a new dock for launching canoes/kayaks.	The project is not likely to adversely affect sea turtles, Gulf sturgeon, or Gulf sturgeon critical habitat Unit 10.
P3-28	SER-2014-13086	Florida, Norriego Point Restoration	The applicant will enhance and increase the public's enjoyment of the natural resources by stabilizing ongoing erosion and re-establishing Norriego Point using erosion control structures (groins) and placement of dredged sand fill.	The project is not likely to adversely affect sea turtles, Gulf sturgeon, or Gulf sturgeon critical habitat Unit 12.

Reference	PCTS Tracking Number	Project	Description	NMFS PRD Determinations
P3-29	SER-2014-13101	Florida, Apalachicola River Fishing Viewing – Cash Bayou	The applicant will improve public access at Cash Bayou by providing a small fishing and wildlife observation pier, a parking area with an entrance kiosk, and an information station along State Route 65, east of the Cash Creek Bridge.	The project is not likely to adversely affect sea turtles or Gulf sturgeon.
P3-30	SER-2014-13276	Florida, Estuarine Habitat Restoration, Protection, and Education	The applicant will improve and lengthen the existing interactive boardwalks, expand existing inter-tidal oyster reefs, and restore a degraded salt marsh.	The project is not likely to adversely affect sea turtles, Gulf sturgeon, or Gulf sturgeon critical habitat Unit 10.
P3-31	SER-2014-13886	Florida, St. George Island Bulkhead Improvements	The applicant will repair approximately 275 ft of degraded bulkhead by removing existing, damaged/collapsed sections of the concrete sheet bulkhead, placing new sections of sheet pile, and constructing a new cap. The project is located in Gulf sturgeon critical habitat Unit 13.	The project is not likely to adversely affect sea turtles, Gulf sturgeon, smalltooth sawfish, or Gulf sturgeon critical habitat Unit 13.
P3-32	SER-2014-12923	Texas, Ship Artificial Reef Project	The applicant will acquire a 1,000-ft (304.80-m) ship that is a complete product ready for immediate use as an artificial reef (i.e., turnkey ship). The applicant will clean the vessel of any hazardous toxins and make any hull modifications as necessary or determined by the Texas Parks and Wildlife Department, transport the vessel to the deployment site, and subsequently sink the vessel on barren sand and silt substrate at a water depth of 135 ft (41.15 m) at MLLW. The project is not located in Gulf sturgeon critical habitat, but it is situated in loggerhead sea turtle critical habitat (LOGG-S-02-Gulf of Mexico [ <i>Sargassum</i> ]).	The project is not likely to adversely affect leatherback, Kemp’s ridley, loggerhead, or green sea turtles, or loggerhead critical habitat LOGG-S-02-Gulf of Mexico ( <i>Sargassum</i> ).



Reference	PCTS Tracking Number	Project	Description	NMFS PRD Determinations
P3-33	SER-2014-13144	Florida, City of Mexico Beach Marina, Bay County	<p>The applicant proposes to construct a 1,700-linear-ft steel sheet-pile retaining wall approximately 2 ft in front of the existing wooden retaining wall. The proposed volume of fill between the wall and the shore will be 440.7 yd<sup>3</sup>. The project also includes replacing 18 existing finger piers along the northern side as well as 3 finger piers along the western side, and creating 8 new finger piers (16 slips) located along the western edge of the canal, for a total of 56 boat slips. The finger piers will be 16 ft long by 3 ft wide, with a terminal pile to be installed approximately 17 ft from the terminal pier. No seagrasses or mangroves were documented at the project site. Construction will take place from the uplands for the majority of the project; a small barge will be used for pier placement and dock construction. Piles will be installed primarily by low-pressure jet, although a drop hammer may be used to finish installing the piles when necessary.</p>	<p>The project is not likely to adversely affect sea turtles, smalltooth sawfish, and Gulf sturgeon.</p>

Reference	PCTS Tracking Number	Project	Description	NMFS PRD Determinations
P3-34	SER-2014-15032	Florida, Gulf Island National Seashore Ferry Project	<p>The National Park Service completed a permanent pier in the Fort Pickens Area of the GINS to accommodate a pedestrian ferry service to Fort Pickens from the mainland. The 2 ferryboats that will provide the service will travel a 3-stop loop, in opposite directions, 3 times a day. Ferry traffic will follow a designated navigational route. NPS anticipates that the 2 ferries combined will run 6 round-trips per day during a 15-week peak season, depending on weather conditions and demand. Ferry service will operate 6 days a week, Tuesday through Sunday, during daylight hours only. The passenger ferry vessels will be approximately 65 ft long, hold up to 150 passengers, and cruise at a maximum 12-20 knots.</p>	<p>The project is not likely to adversely affect sea turtles, smalltooth sawfish, Gulf sturgeon, and Gulf sturgeon critical habitat Unit 9.</p>
P3-35	SER-2014-15033	Louisiana, Chenier Ronquille Barrier Island Restoration Project	<p>The project purpose is to restore the integrity of the Chenier Ronquille barrier island by creating 309 acres of marsh and 189 acres of dune and beach. Approximately <math>11.1 \times 10^6</math> yd<sup>3</sup> of material may be dredged (a minimum of <math>2.9 \times 10^6</math> yd<sup>3</sup> will be dredged) from 4 borrow sites (S-1, S-2, D-1, and Quatre Bayou), consisting of 832 acres of unvegetated borrow site in the Gulf of Mexico southwest of Chenier Ronquille. The borrow sites will be dredged from the current depth of approximately -8 to -30 ft (North American Vertical Datum 1988) to a maximum of -37 ft. Dredged sediments will be pumped to the marsh via a dredge pipeline.</p>	<p>These projects are not likely to adversely affect ESA-listed species (leatherback, Kemp's ridley, loggerhead, or green sea turtles).</p>

**Appendix 3. Phase IV Early Restoration Plan Projects with Corresponding Public Consultation Tracking System (PCTS)**

Reference	PCTS Tracking Number	Project	Description	NMFS PRD Determinations
P4-1	SER-2015-16919	Pelagic Longline Bycatch Reduction Project	The project's purpose is to reduce Pelagic Longline fishing bycatch and compensate fishers to not fish with PLL gear. A compensation-based, voluntary, 6-month temporary repose period in PLL fishing, having a duration between 5-10 years, will prevent bycatch of ESA-listed species from PLL gear. The repose period would be from January to June of each year. The project would promote the use of buoy gear and green-stick gear, which is more discriminate than PLL gear in regards to the species targeted, and has been shown to have low post-release mortality of bycatch, and regulatory discards. The PLL Bycatch Reduction Project repose period will reduce PLL effort, resulting in fewer PLL hook sets. In doing so, the repose period will eliminate dead discarded bycatch from participating PLL vessels that would have otherwise been caught.	This project has no effect on marine mammals, and is not likely to adversely affect ESA-listed species (leatherback, Kemp's ridley, loggerhead, or green sea turtles, or Gulf sturgeon), nor likely to adversely affect the <i>Sargassum</i> loggerhead critical habitat.
P4-2	SER-2015-16817	Alabama, Point aux Pins/Living Shoreline	The Alabama Department of Conservation and Natural Resources proposes to deploy Wave Attenuation Units at depths of 2-3 ft (or 0.6-0.9 m) below mean lower low water using a small trackhoe located on a shallow draft barge.	The project is not likely to adversely affect sea turtles or Gulf sturgeon
P4-3	SER-2015-16818	Alabama, Shell Belt Road/Living Shoreline	The Alabama Department of Conservation and Natural Resources proposes to deploy Wave Attenuation Units at depths of 2-3 ft (or 0.6-0.9 m) below mean lower low water using a small trackhoe located on a shallow draft barge or from shore using a wide-tracked long-arm trackhoe.	The project is not likely to adversely affect sea turtles or Gulf sturgeon

P4-4	SER-2015-16819	Alabama, Coden Belt Road/Living Shoreline	The Alabama Department of Conservation and Natural Resources proposes to deploy Wave Attenuation Units at depths of 2-3 ft (or 0.6-0.9 meters [m]) below mean lower low water using a small trackhoe located on a shallow draft barge.	The project is not likely to adversely affect sea turtles or Gulf sturgeon
P4-5	SER-2015-16957	Mississippi, Wolf River Living Shoreline and Subtidal Reef	The Mississippi Department of Environmental Quality (MDEQ) proposed the construction of approximately 1,388 ft of breakwater along an island at the mouth of the Wolf River in St. Louis Bay. The project also includes construction of approximately 30 acres of subtidal reef habitat in St. Louis Bay, adjacent to current reef projects at the mouth of the Wolf River. Construction of the subtidal reef would permanently cover approximately 30 acres of this substrate and the breakwater would permanently cover an additional 1.3 acres. To the extent practicable, subtidal habitat would be sited in locations where there is existing or adjacent historic hard bottom habit.	All potential project effects are not likely to adversely affect listed species under NMFS's purview.
P4-6	SER-2015-16956	Mississippi, Bay St. Louis Living Shoreline	The MDEQ proposed the construction of approximately 10,812 ft of breakwater in western St. Louis Bay near the city of Diamondhead.	All potential project effects are not likely to adversely affect listed species under NMFS's purview.
P4-7	SER-2015-16960	Mississippi, Graveline Bay Subtidal Reefs	The MDEQ proposed the construction of up to 70 acres of subtidal reef within Graveline Bay, between the cities of Biloxi and Pascagoula, Mississippi. Approximately 70 acres of hard- and soft bottom habitat would be replaced with hard structure.	All potential project effects are not likely to adversely affect listed species under NMFS's purview.

P4-8	SER-2015-16959	Mississippi, Graveline Bay Intertidal Reefs	The MDEQ proposed the construction of up to 2 acres of subtidal reefs within Graveline Bay, between the cities of Biloxi and Pascagoula, Mississippi. Approximately 2 acres of hard- and soft bottom habitat would be replaced with hard structure. To the extent practicable, intertidal reef would be sited where there is existing adjacent or historic intertidal reef habitat.	All potential project effects are not likely to adversely affect listed species under NMFS's purview.
P4-9	SER-2015-16955	Mississippi, Grand Bay Subtidal Reefs	The MDEQ proposed the construction of up to 77 acres of subtidal reefs in Bangs Lake at the far western end of Grand Bay, east of the city of Pascagoula, Mississippi. Approximately 77 acres of hard- and soft bottom habitat would be covered with hard structure. To the extent practicable, subtidal habitat would be sited in locations where there is existing or adjacent historic hard bottom habit.	All potential project effects are not likely to adversely affect listed species under NMFS's purview.
P4-10	SER-2015-16990	Mississippi, Grand Bay Intertidal Reefs	The MDEQ proposed the construction of up to 3 acres of subtidal reefs at several locations in Bangs Lake at the far western end of Grand Bay, east of the city of Pascagoula, Mississippi. Approximately 3 acres of soft bottom habitat would be covered with hard structure.	All potential project effects are not likely to adversely affect listed species under NMFS's purview.
P4-11	SER-2015-16958	Mississippi, Back Bay Little Island Living Shoreline	The MDEQ proposed the construction of approximately 2,316 linear ft of breakwater along the southern facing shoreline of Little Island, north of the city of Biloxi, Mississippi. Construction of the breakwater would permanently cover approximately 1.6 acres of soft bottom habitat.	All potential project effects are not likely to adversely affect listed species under NMFS's purview.

P4-12	SER-2015-16963	Mississippi, Back Bay Deer Island Subtidal Reef	The MDEQ would expand an existing MDEQ reef project to create approximately 20 acres of additional subtidal reef habitat north of Deer Island and southeast of the city of Biloxi, Mississippi. The project area falls within Unit 8 of Gulf sturgeon critical habitat (68 FR 13370 2003). Approximately 20 acres of hard and soft bottom habitat would be covered with hard structure. To the extent practicable, subtidal habitat would be sited in locations where there is existing or adjacent historic hard bottom habit.	All potential project effects are not likely to adversely affect listed species under NMFS's purview.
P4-13	SER-2015-16962	Mississippi, Back Bay Channel Island Living Shoreline and Subtidal Reefs	The MDEQ proposed the construction of approximately 2,385 ft of breakwater along the shoreline, along with approximately 70 acres of subtidal reef habitat which would connect the breakwater structure to an existing subtidal reef on the north and south sides of Channel Island in the Back Bay of Biloxi, northeast of the city of Biloxi, Mississippi. Construction of the breakwater would permanently cover approximately 1.6 acres of soft bottom habitat (sand, muddy sand, and mud bottom) and the subtidal reef would cover a total of approximately 70 acres of hard and soft bottom habitat with hard structure. To the extent practicable, subtidal habitat would be sited in locations where there is existing or adjacent historic hard bottom habit.	All potential project effects are not likely to adversely affect listed species under NMFS's purview.
P4-14	SER-2015-16961	Mississippi, Back Bay Big Island Living Shoreline	The MDEQ proposed the construction of approximately 5,011 linear ft of breakwater along the southern facing shoreline of Big Island in the Back Bay of Biloxi, northeast of the city of Biloxi, Mississippi. Construction of the breakwater would permanently cover approximately 1.6 acres of soft bottom habitat (sand, muddy sand, and mud bottom).	All potential project effects are not likely to adversely affect listed species under NMFS's purview.

P4-15	SER-2015-17050	Sea Turtle Stranding and Salvage Network Project	<p>The project funds a multi-faceted Sea Turtle Stranding and Salvage Network enhancement program. The program consists of 4 components. The first funds a Kemp's Ridley sea turtle nest detection and enhancement project. The second component provides for enhancement of the STSSN and development of a sea turtle emergency response program for threatened and endangered sea turtles. The third component promotes Gulf of Mexico shrimp trawl bycatch reduction, and the fourth component provides for increased enforcement of fisheries bycatch reduction regulations in Texas.</p>	<p>All potential project effects were either previously analyzed and authorized under existing consultations and permits, or were determined to be completely beneficial and therefore not likely to adversely affect listed species or critical habitat.</p>
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