

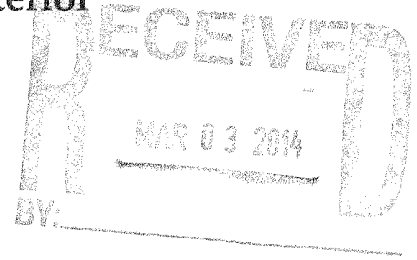


## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
1875 Century Boulevard  
Atlanta, Georgia 30345

In Reply Refer To:  
FWS/R4/DH NRDAR

FEB 26 2014



### Memorandum

To: Field Supervisor, Panama City Ecological Services Office

From: Deputy Deepwater Horizon, Department of the Interior Natural Resource Damage Assessment and Restoration (NRDAR), Case Manager *Roberta L. MCE*

Subject: Informal Consultation Request for the Proposed Norriego Point Restoration and Recreation Project, Florida



As you are no doubt aware, on or about April 20, 2010, the mobile offshore drilling unit *Deepwater Horizon* experienced an explosion, leading to a fire and its subsequent sinking in the Gulf of Mexico (the Gulf). These events resulted in the discharge of millions of barrels of oil into the Gulf over a period of 87 days. In addition, various response actions were undertaken in an attempt to minimize impacts from spilled oil. These events are hereafter collectively referred to as the Oil Spill.

The Department of the Interior (DOI), acting through the U.S. Fish and Wildlife Service (the Service) and other Bureaus, is a designated natural resource trustee agency authorized by the Oil Pollution Act of 1990 (OPA) and other applicable federal laws to assess and assert a natural resource damages claim for this Oil Spill. DOI is only one of several Trustees, including agencies of the State of Florida, so authorized. Consistent with their federal and state authorities, the Trustees are investigating the resource injuries and losses that occurred as a result of the Oil Spill and have initiated restoration planning to identify the actions that will be needed or appropriate to restore injured resources and to make the public whole for the injuries and losses that occurred. This process is known as a Natural Resource Damage Assessment (NRDA).

On April 20, 2011, DOI, National Oceanic and Atmospheric Administration, and the Trustees for the five Gulf states affected by the Oil Spill entered into an agreement with BP, a responsible party for the Oil Spill, under which BP agreed to provide \$1 billion for early restoration projects in the Gulf to address injuries to natural resources caused by the Oil Spill. The subject project is being evaluated by the Trustees as a potential early restoration project. The early restoration project has been proposed in a draft early restoration plan that was released for public comment and review on December 6, 2013. If the Trustees select the project after consideration of public comment and a stipulated agreement is reached with BP, the early restoration project will be implemented by the State of Florida. DOI, acting through the Service, will be a co-Trustee for the project, if it is selected and implemented.

The above facts lead us to the conclusion that consultation under Section 7 of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 *et seq.*), is required for the proposed project and we wish to engage in such consultation. Accordingly, we have reviewed the proposed Norriego Point Restoration and Recreation Project, Florida, project for potential

impacts to listed, candidate, and proposed species and designated and proposed critical habitats in accordance with Section 7 of the ESA. We determined the proposed project may affect, but is not likely to adversely affect, West Indian manatee and have provided our analysis in the attached Biological Evaluation. We have also reviewed the proposed project for impacts to bald eagles and migratory birds in accordance with the Bald and Golden Eagle Protection Act (BGEPA) of 1940 (16 U.S.C. 668-668e) and the Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-712), respectively. Consultation will also be initiated with National Marine Fisheries Service for species where ESA regulatory authority is shared and in regards to Marine Mammal Protection Act (MMPA) of 1972, as amended (16 U.S.C. 1461 *et seq.*).

We request your review of and concurrence with the attached intra-Service Section 7 Biological Evaluation form describing the proposed project, potential effects, conservation measures and justifications for our determinations. If you have questions or concerns regarding this request for consultation, please contact Holly Herod, Fish and Wildlife Biologist, at 404-679-7089 or [holly\\_herod@fws.gov](mailto:holly_herod@fws.gov).

Attachment

**SOUTHEAST REGION  
INTRA-SERVICE SECTION 7  
BIOLOGICAL EVALUATION FORM**

**Originating Person:** Holly Herod; prepared by David Mills (representing the State of Florida Natural Resource Trustees – The Florida Department of Environmental Protection and the Florida Fish and Wildlife Conservation Commission)

**Telephone Number:** Holly Herod: 404-679-7089; Dave Mills 303 381 8248

**E-Mail:** [holly\\_herod@fws.gov](mailto:holly_herod@fws.gov); [dmills@stratusconsulting.com](mailto:dmills@stratusconsulting.com)

**Date:** February 24, 2014

**PROJECT NAME (Grant Title/Number):** Norriego Point Restoration and Recreation Project

**I. Service Program:**

- NRDAR**
- Ecological Services**
- Federal Aid**
  - Clean Vessel Act**
  - Coastal Wetlands**
  - Endangered Species Section 6**
  - Partners for Fish and Wildlife**
  - Sport Fish Restoration**
  - Wildlife Restoration**
- Fisheries**
- Migratory Birds**
- Refuges/Wildlife**

**II. State/Agency:** Florida Department of Environmental Protection (DEP) and Florida Fish and Wildlife Conservation Commission (FWC)

**III. Station Name:** DOI Deepwater Horizon Case Management Team, USFWS Southeast Regional Office, Atlanta, Georgia 30345

**IV. Location (attach map):** See Figure 1 at the end of this document for a map indicating the general area of activity for the project. Figure 2 provides additional project detail.

**A. Ecoregion Number and Name:** Southeast Region

**B. County and State:** Okaloosa County, Florida

**C. Section, township, and range (or latitude and longitude):** See Figure 1

**D. Distance (miles) and direction to nearest town:** see map (Figure 1)

## V. Description of Proposed Action (attach additional pages as needed):

### Project Overview

The purpose of this project is to protect, stabilize, enhance and reestablish the currently eroding spit of land at the end of Norriego Point that is at the opening to Destin Harbor. Norriego Point is a natural sand feature in the inlet of East Pass, Destin, Florida. It serves as the protective barrier for the boat channel entering Destin Harbor. In addition, it is the hub and focal point for Destin's water-based recreational opportunities. The restoration of Norriego Point is critical for the expansion and maintenance of its recreational use and the continued integrity of Destin Harbor. Construction of associated park amenities would enhance the public use of Norriego Point.

### Construction and Installation

The restoration and protection of Norriego Point involves the construction of several erosion control structures to dissipate wave energy and protect dredged fill that will be placed landward of the revetment to restore approximately 8 acres of land that has eroded over time. Two new embayments formed by the placement of the erosion control structures would provide additional swimming areas as well as more space for boats and kayaks to pull in. See **Error! Reference source not found.** for the proposed layout of these improvements.

Additional facilities would be constructed as part of the project, including a picnic pavilion with restrooms, showers, and drinking fountains; educational signage to encourage appreciation of this natural environment; and a multi-use trail, bike racks, and vehicle parking along the access road adjacent to the park land (Note - this road is to be built by a private property owner as part of the owner's development order).

Sand fill material would be placed behind the renovated and new erosion control structures; the source of the fill material would be dredge material obtained during already permitted maintenance dredging of the navigation channels in the area. This dredging activity has already been reviewed and an active U.S. Army Corps of Engineers permit for this activity is held by the City of Destin (permit number SAJ-2012-007-02 (SP-TPH)). Standard construction methods would be used for all aspects of the project. All permits and best management practices (BMPs) would be followed to minimize any adverse effects of the construction.

During construction of the erosion control structures, material from the old structures would be removed and sediment would be excavated from the old and new sites to prepare the area for the new structures. For upland construction, material planned for removal includes soil, rubble, and vegetation in the area where facilities, trails, and roads would be built.

Much or all of the erosion control structure work and embayment construction would be completed in-water. Other work would be done from uplands, possibly using the existing parking lot as a staging ground (this area is at the Southeast end of Norriego Point in Figure 1 where the development ends).

Sheet piling would be installed as part of the erosion control structures. Jetting methods may be used within 2 feet of the required elevation; the final 2 feet would be driven without the use of jetting. The final pile-driving method would be approved before the selected contractor mobilizes to begin work. The size and number of sheet pilings would be finalized with final engineering designs, based on the size of material available and the amount required. Pilings would be made of rolled steel. Coal Tar Epoxy would be applied to all steel sheet piles in a controlled production facility before installation. The steel sheet pile would be covered with a concrete cap.

The project includes repair of existing erosion control (groin) structures and construction of several new erosion control (groin) structures to expand the protected area to include the eastern portion of Norriego Point. Existing erosion control groins placed along the southern side of Norriego Point include two that are approximately 200 linear feet and one that is approximately 500 linear feet. The existing erosion control groins would be excavated and reconstructed. The old material would be reused and reinforced with new sheet pilings and armoring rock. The new erosion control groins would be built by excavating the area where the groins would be built, and placing a marine mattress constructed of geogrid materials and filled with material dredged from the site. Stone fill would be placed on top of the marine mattress; armor stone would be placed over the foundation to create a structure approximately 4 feet above North American Vertical Datum (NAVD) at the highest point and would be in the shape of a trapezoid. The finished erosion control groins would vary in size depending on the location; together, the five erosion control groins would be approximately 1,000 linear feet.

Detailed construction methods and plans have not yet been developed for the construction of the park amenities and would be subject to the final design and contractor approach. The remainder of the project would occur in uplands. Standard BMPs for this type of construction with limited in-water work would be used to minimize impacts (e.g., using silt fencing, staging and refueling vehicles away from waterways).

A range of heavy construction equipment and tools would be required for construction of this project. Equipment would include bulldozers, graders, backhoes, bobcats, and so on. Dredge equipment would be required to remove material and create new land areas to support groin structures. The specific equipment used would vary with the different phases of the project. Up to several feet of ground would be disturbed during construction. In the area where land would be added, sediment and other materials (e.g., gravel, rip rap, other fill) would be placed. The area to be covered would be determined by final design and includes the planned facilities, trails, bike racks, parking areas, and access road. Ground would need to be graded and in some cases removed as part of the construction activities. Material planned for removal includes soil, rubble, and vegetation in the area where facilities, trails, and roads would be built.

The timing of in-water construction has not been finalized. The selected contractor would provide a construction schedule prior to beginning work. Project construction would take approximately 9 to 12 months, including in-water and upland work. All appropriate permit conditions and BMPs would be followed to ensure that potential impacts to species are adequately addressed and minimized.

**VII. Species and Habitat:**

**A. Complete the following table:**

Table 1, provided at the end of this document, provides a summary of the different species that were identified and initially considered for the project's potential impacts. The information in this table was adopted from the U.S. Fish and Wildlife, Panama City office website: <http://www.fws.gov/panamacity/specieslist.html> which provides a county-based list of federal threatened, endangered, and other species of concern likely to occur in the Florida Panhandle.

**VIII. Determination of Effects:**

**A. Explanation of effects of the action on species and critical habitats in item VII.A (attach additional pages as needed):**

Table 2 presents a summary of the potential species/critical habitat that could be impacted from the proposed project. The species/critical habitat in Table 2 were identified after considering where there was potential overlap from information on identified natural communities in Table 1 with the potential locations where the project could be implemented and areas adjacent to the immediate project locations.

**Table 2. Potential Impacts to Species/Critical Habitats**

SPECIES/CRITICAL HABITAT	SPECIES/CRITICAL HABITAT IMPACTS
Green turtle, Hawksbill turtle, Kemp's ridley turtle; Leatherback turtle, Loggerhead turtle	Norriego Point is not expected to be suitable nesting habitat for sea turtles due to slope of the shore above the high tide line. No effects to sea turtles while in terrestrial habitats are anticipated. Consultation will be initiated with NMFS to address potential impacts to in-water turtles as this agency has jurisdiction to review impacts to sea turtles in the estuarine and marine environments.
West Indian manatee	Okaloosa County is not one of the 36 Florida counties identified where manatees regularly occur in coastal and inland waters (U.S. Department of the Interior, 2011). However, manatees could be present in the project waters. The main risk to manatees during implementation of this project include noise and construction activities or boat collisions, all of which could harm or kill a manatee. We anticipate the conservation measures will minimize adverse effects to manatees from proposed project.
Piping plover and Red knot	Though there is sandy shoreline with prey suitable for both species, Norriego Point does not currently serve as habitat for piping plover or red knot due to substantial recreational use. Because these species are highly unlikely to be present, no effects to these species are anticipated.
Gulf sturgeon	NMFS is providing consultation for Gulf sturgeon and its Critical Habitat in the estuarine environment. As a result, Gulf Sturgeon will not be considered in the consultation with the USFWS.

*in place/around entire spit that historically was optimal habitat. for spin-matted? CSA could end ("already in place")*

\* Critical habitat areas for these species are identified at <http://sero.nmfs.noaa.gov/pr/GISDataandMaps.htm>

**B. Explanation of actions (Conservation Measures) to be implemented to reduce adverse effects:**

SPECIES	CONSERVATION MEASURES TO MINIMIZE IMPACTS
All Species	No lighting is currently proposed for this project. If lighting were to become necessary, wildlife friendly lighting will be used.
Green turtle, Hawksbill turtle, Kemp's ridley turtle, Leatherback turtle, Loggerhead turtle	No additional terrestrial measures are necessary.  To minimize risks in the aquatic environment, all construction conditions identified in the <i>Sea Turtle and Smalltooth Construction Conditions</i> (NOAA, 2006) would be implemented and adhered to during project construction to minimize the risk of collisions.
West Indian manatee	All construction conditions identified in the <i>Standard Manatee Conditions for In-water Work</i> (FWC, 2011) would be implemented and adhered to during project construction.
Piping plover and red knot	No additional conservation measures are necessary.
Gulf sturgeon	See note in above table about the review of potential Gulf sturgeon impacts being coordinated through NMFS instead of through the USFWS.

**VIII. Effect Determination and Response Requested:**

<sup>1</sup>DETERMINATION/ RESPONSE REQUESTED:

Species	Species Impacts					Response Requested*
	NE	NLAA	MAA	JP	JC	
Green turtle	X					Concurrence (terrestrial); Consultation with NMFS (in-water)
Hawksbill turtle	X					Concurrence (terrestrial); Consultation with NMFS (in-water)
Kemp's ridley turtle	X					Concurrence (terrestrial); Consultation with NMFS (in-water)
Leatherback turtle	X					Concurrence (terrestrial); Consultation with NMFS (in-water)
Loggerhead turtle	X					Concurrence (terrestrial); Consultation with NMFS (in-water)

Species	Species Impacts					Response Requested*
	NE	NLAA	MAA	JP	JC	
West Indian manatee		X				Concurrence
Piping plover	X					Concurrence
Red knot	X					Conference
Gulf sturgeon <sup>a</sup>	---	---	---	---	---	n/a – see table note a

\*Concurrence, Formal Consultation, Formal Conference

<sup>a</sup> NMFS is providing consultation for Gulf sturgeon and its CH in the estuarine environment so this species will not be considered in the consultation with the USFWS.

### X. Bald Eagles

Are bald eagles present in the action area?  No  Yes

If "Yes," can you implement the conservation measures below?  Yes  No

1. If bald eagle breeding or nesting behaviors are observed or a nest is discovered or known, all activities (walking, camping, cleanup, 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 (like 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 not, contact the Service's Migratory Bird Permit Office to determine how to avoid impacts or if a permit may be needed.

### XI. Migratory Birds

- A. Identify the species anticipated in the project area and behaviors (breeding, roosting, foraging) anticipated during project implementation.

SPECIES	BEHAVIOR	SPECIES/HABITAT IMPACTS



SPECIES	BEHAVIOR	SPECIES/HABITAT IMPACTS
Shorebirds	Foraging, feeding, resting,	Shorebirds forage, feed, and rest on Norriego point. As such, they may be impacted locally and temporarily by the project. Norriego Point is not currently used as nesting habitat because of the frequency and level of human use.
Seabirds	Resting, nesting	Seabirds forage in water and rest in terrestrial habitats at Norriego Point. As such, they may be impacted locally and temporarily by the project. Norriego Point is not currently used as nesting habitat because of the frequency and level of human use.

**B. 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
Shorebirds and Seabirds	We expect foraging and resting birds would be able to move to another nearby location to continue foraging and resting. Care will be taken to minimize noise and physical disruptions near areas where foraging or resting birds are encountered. All disturbances will be localized and temporary. The general behavior of these birds is to mediate their own exposure to human activity when given the opportunity, which they will have.

**XII. Signatures from the station preparing the Intra-Service Biological Evaluation:**

/s/ Holly N. Blalock-Herod

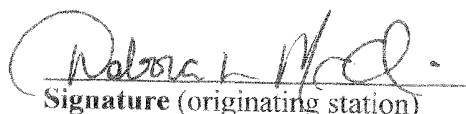
Signature (originating station - preparer)

February 24, 2014

date

ESA Coordinator, DWH Case Management Office

Title



Signature (originating station)

Deputy Case Manager



date

**This analysis resulted in a determination that no "take" of a federally listed species would occur. If any of the following occur, then there must be reinitiation on this action:**

- (1) any unforeseen circumstances arise or incidental take occurs

- (2) new information reveals effects of the Service's action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion;
- (3) the Service's action is later modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or
- (4) a new species is listed or critical habitat designated that may be affected by the action.

In instances where any incidental take occurs, the operations causing such take must cease until reinitiation.

If reinitiation is required, contact the Panama City Ecological Services Field Office about the action.

US Fish and Wildlife Service  
1601 Balboa Avenue  
Panama City, FL 32405  
Tel: 850-769-0552

**XIII. Reviewing Ecological Services Office Evaluation:**

A. Concurrence  Nonconcurrence \_\_\_\_\_


B. Formal consultation required \_\_\_\_\_

C. Conference required \_\_\_\_\_

D. Informal conference required \_\_\_\_\_

E. Remarks (attach additional pages as needed):

RECEIVED  
3/23/14

	<u>3/24/14</u>
Signature	date
<u>Don IMM</u>	<u>PCFO</u>
Field Supervisor	office

**References**

Florida Fish and Wildlife Conservation Commission (FWC), 2011. Standard Manatee Conditions for In-Water Work. [http://myfwc.com/media/415448/Manatee\\_StdCondIn\\_waterWork.pdf](http://myfwc.com/media/415448/Manatee_StdCondIn_waterWork.pdf) Accessed August 13, 2013.

NOAA. 2006. Sea Turtle and Smalltooth Sawfish Construction Conditions. <http://sero.nmfs.noaa.gov/pr/endangered%20species/Sea%20Turtle%20and%20Smalltooth%20Sawfish%20Construction%20Conditions%203-23-06.pdf> Accessed July 16, 2013.

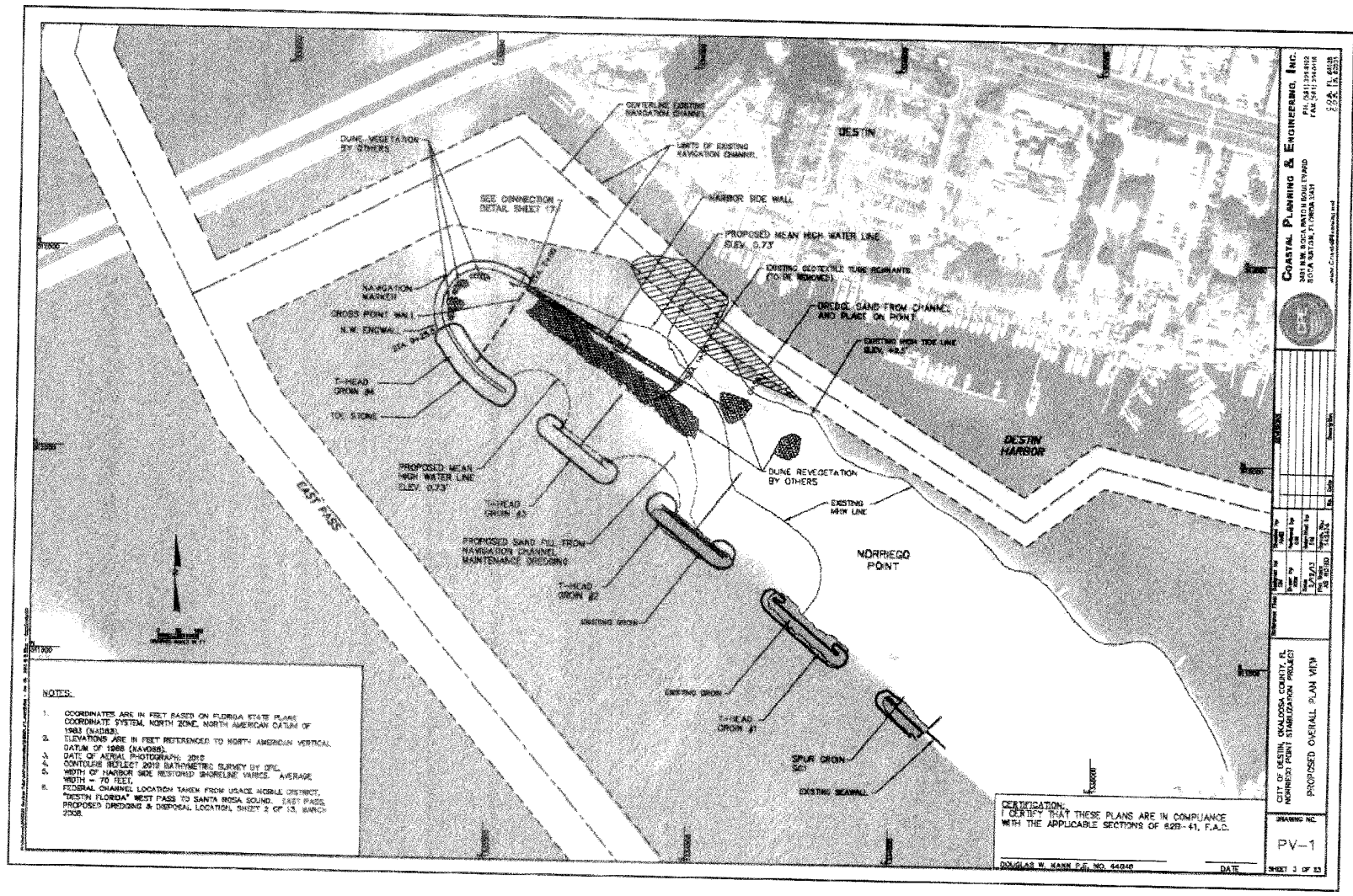
NOAA. 2013. Coastal Ecosystem Restoration. <http://www.csc.noaa.gov/archived/coastal/implementation/implementation.htm>. Accessed September 6, 2013.

U.S. Department of the Interior. 2011. Biological Opinion: Permitted actions for watercraft access facilities. FWS Log No. 41910-2-11-FC-0195. March, 21.

Figure 1. Location of envisioned Norriego Point Restoration and Recreation Project.



Figure 2. Layout of the existing and proposed erosion control structures at Norriego Point



Resource category	Common name	FWS status	State status	Natural communities	Species impacts (NE, NLAA, MAA)	Reason for impact
Amphibians	Florida bog frog	SSC	ce	Palustrine: seepage slope, baygall Riverine: seepage slope, seepage stream.	NE	Listed natural community is inconsistent with the project habitat
Amphibians	Reticulated flatwoods salamander	E (CH)		Palustrine: wet Flatwoods, dome swamp, basin swamp, Terrestrial: mesic flatwoods (reproduces in ephemeral wetlands within this community).	NE	Listed natural community is inconsistent with the project habitat
Birds	Arctic peregrine falcon	ce	E	Terrestrial: various, ruderal; winters along coasts	NE	Listed natural community is inconsistent with the project habitat
Birds	Bald eagle	BGEPA		Estuarine: marsh edges, tidal swamp, open water Lacustrine: swamp lakes, edges Palustrine: swamp, floodplain Riverine: shoreline, open water Terrestrial: pine and hardwood forests, clearings.	NE	Listed natural community is inconsistent with the project habitat
Birds	Least tern		T	Terrestrial: beach dune, ruderal. Nests common on rooftops.	NE	Listed natural community is inconsistent with the project habitat
Birds	Piping plover	T (CH)	T	Estuarine: exposed unconsolidated substrate Marine: exposed unconsolidated substrate Terrestrial: dunes, sandy beaches, and inlet areas. Mostly wintering and migrants.	NE	See Table 2, 3, and 4
Birds	Red knot	P		Estuarine: exposed unconsolidated substrate Marine: exposed unconsolidated substrate Terrestrial: dunes, sandy beaches, and inlet areas. Mostly wintering and migrants.	NE	See Table 2, 3, and 4
Birds	Red-cockaded woodpecker	E		Terrestrial: mature pine forests.	NE	Listed natural community is inconsistent with the project habitat
Birds	Southeastern kestrel	ce	T	Terrestrial: open pine forests, clearings, ruderal, various.	NE	Listed natural community is inconsistent with the project habitat

Birds	Southeastern snowy plover	ce	T	Estuarine: exposed unconsolidated substrate Marine: exposed unconsolidated substrate Terrestrial: dunes, sandy beaches, and inlet areas.	NE	Listed natural community is inconsistent with the project habitat
Birds	Stoddard's yellow-throated warbler	ce		Terrestrial: wooded habitats with Spanish moss, various.	NE	Listed natural community is inconsistent with the project habitat
Birds	Wood stork	E	E	Estuarine: marshes Lacustrine: floodplain lakes, marshes (feeding), various Palustrine: marshes, swamps, various.	NE	Listed natural community is inconsistent with the project habitat
Fish	Gulf sturgeon	T (CH)	SSC	Estuarine and Marine: sandy sediments for foraging and resting; Riverine: alluvial and blackwater streams.	—	See Table 2, 3, and 4
Fish	Okaloosa darter	T	E	Riverine: seepage stream.	NE	Listed natural community is inconsistent with the project habitat
Mammals	Florida black bear	ce	T	Palustrine: titi swamps, floodplains Terrestrial: pine and hardwood forests.	NE	Listed natural community is inconsistent with the project habitat
Mammals	Santa Rosa beach mouse	ce		Terrestrial: beach dune, coastal scrub.	NE	Listed natural community is inconsistent with the project habitat
Mammals	West Indian manatee	E	E	Estuarine: submerged vegetation, open water Marine: open water, submerged vegetation Riverine: alluvial stream, blackwater stream, spring-run stream.	NLAA	See Table 2, 3, and 4
Mussels	Choctaw bean	E (CH)		Riverine: Small to large creeks and rivers in sand to silty-sand substrates with moderate current. Panhandle drainages: Escambia, Yellow, and Choctawhatchee Rivers.	NE	Listed natural community is inconsistent with the project habitat
Mussels	Fuzzy pigtoe	T (CH)		Riverine: small to medium-sized creeks and rivers with slow to moderate currents in sand and sand with some silt. Panhandle drainages: Escambia, Yellow, and Choctawhatchee Rivers.	NE	Listed natural community is inconsistent with the project habitat

Mussels	Narrow pigtoe	T (CH)		Riverine: small to medium-sized creeks and rivers in stable substrates of sand, sand and gravel, or silty sand, with slow to moderate current. Panhandle drainages: Escambia and Yellow Rivers.	NE	Listed natural community is inconsistent with the project habitat
Mussels	Southern sandshell	T (CH)		Riverine: found in small to medium-sized creeks and rivers in sandy substrates sometimes with some silt in slow to moderate current. Panhandle drainages: Escambia, Yellow, and Choctawhatchee Rivers.	NE	Listed natural community is inconsistent with the project habitat
Plants	Ashe's magnolia		E	Terrestrial: slope and upland hardwood forest, ravines.	NE	Listed natural community is inconsistent with the project habitat
Plants	Baltzell's sedge	ce	T	Terrestrial: slope forest, moist sandy loam; moist sandy loam.	NE	Listed natural community is inconsistent with the project habitat
Plants	Cruise's golden-aster	ce	E	Terrestrial: coastal dunes, coastal strand, coastal grassland; openings and blowouts.	NE	Listed natural community is inconsistent with the project habitat
Plants	Curtiss' sandgrass	ce	T	Palustrine: mesic and wet flatwoods, wet prairie, depression marsh Terrestrial: mesic flatwoods.	NE	Listed natural community is inconsistent with the project habitat
Plants	Decumbant pitcher plant		T	Palustrine: Bogs.	NE	Listed natural community is inconsistent with the project habitat
Plants	Florida anise		T	Palustrine: floodplain forest, baygall Riverine: seepage stream bank Terrestrial: slope forest, seepage slope.	NE	Listed natural community is inconsistent with the project habitat
Plants	Gulf coast lupine	ce	T	Terrestrial: beach dune, scrub, disturbed areas, roadsides, blowouts in dunes.	NE	Listed natural community is inconsistent with the project habitat
Plants	Heartleaf		T	Riverine: seepage stream bank Terrestrial: slope forest.	NE	Listed natural community is inconsistent with the project habitat
Plants	Hummingbird flower		E	Palustrine: seepage slope, dome swamp edges, floodplain swamps Riverine: seepage stream banks Terrestrial: seepage slopes.	NE	Listed natural community is inconsistent with the project habitat



Plants	Karst pond xyris		E	Lacustrine: sandhill upland lake margins.	NE	Listed natural community is inconsistent with the project habitat
Plants	Large-leaved jointweed	ce	T	Terrestrial: scrub, sandpine/oak scrub ridges.	NE	Listed natural community is inconsistent with the project habitat
Plants	Meadow beauty	ce	E	Palustrine: dome swamp margin, seepage slope, depression marsh; on slopes; with hypericum.	NE	Listed natural community is inconsistent with the project habitat
Plants	Mountain laurel		T	Riverine: seepage stream bank Terrestrial: slope forest, seepage stream banks.	NE	Listed natural community is inconsistent with the project habitat
Plants	Orange azalea		E	Palustrine: bottomland forest Riverine: seepage stream bank Terrestrial: slope forest, upland mixed forest.	NE	Listed natural community is inconsistent with the project habitat
Plants	Panhandle lily	ce	E	Palustrine: baygall, dome swamp edges, mucky soil, seepage slope, edges of titi bogs, Riverine: banks.	NE	Listed natural community is inconsistent with the project habitat
Plants	Panhandle Meadow-beauty	ce		Palustrine: Wetland obligate with moist sandy or peaty soils in full sunlight .	NE	Listed natural community is inconsistent with the project habitat
Plants	Parrot pitcher plant		T	Palustrine: wet flatwoods, wet prairie, seepage slope.	NE	Listed natural community is inconsistent with the project habitat
Plants	Perforate reindeer lichen	E	E	Terrestrial: coastal strand, rosemary scrub; full sun. Sites: Eglin AFB Santa Rosa/Okaloosa Island.	NE	Listed natural community is inconsistent with the project habitat
Plants	Pondspice	ce	E	Palustrine: hydric hammock, baygall, dome swamp; on peaty soils.	NE	Listed natural community is inconsistent with the project habitat
Plants	Primrose-flower butterwort		E	Palustrine: bogs, pond margins, margins of spring runs.	NE	Listed natural community is inconsistent with the project habitat
Plants	Pyramid magnolia		E	Terrestrial: slope forest.	NE	Listed natural community is inconsistent with the project habitat
Plants	Red-flowered pitcher plant		T	Palustrine: bog, wet prairie, seepage slope, wet flatwoods Riverine: seepage stream banks.	NE	Listed natural community is inconsistent with the project habitat

Plants	Silky camellia		E	Palustrine: baygall Palustrine: slope forest, upland mixed forest, Terrestrial: slope forest, upland mixed forest; acid soils.	NE	Listed natural community is inconsistent with the project habitat
Plants	Spoon-leaved sundew		T	Lacustrine: sinkhole lake edges Palustrine: seepage slope, wet flatwoods, depression marsh Riverine: seepage stream banks, drainage ditches.	NE	Listed natural community is inconsistent with the project habitat
Plants	Sweet shrub		E	Terrestrial: upland hardwood forest, slope forest, bluffs Palustrine: bottomland forest, stream banks, floodplains.	NE	Listed natural community is inconsistent with the project habitat
Plants	Trailing arbutus		E	Terrestrial: bluff, slope forest, mixed hardwood forest.	NE	Listed natural community is inconsistent with the project habitat
Plants	West Florida cow-lily	ce		Riverine: shallow, clear, or tannic-acid tinted (blackwater) waters, often rooted in sandy substrate.	NE	Listed natural community is inconsistent with the project habitat
Plants	West's flax	ce	E	Palustrine: dome swamp, depression marsh, wet flatwoods, wet prairie, pond margins.	NE	Listed natural community is inconsistent with the project habitat
Plants	White-top pitcher plant	ce	E	Palustrine: wet prairie, seepage slope, baygall edges, ditches.	NE	Listed natural community is inconsistent with the project habitat
Plants	Yellow butterwort		T	Palustrine: flatwoods, bogs.	NE	Listed natural community is inconsistent with the project habitat
Plants	Yellow fringed orchid		T	Palustrine: bogs, wet flatwoods Terrestrial: Bluff.	NE	Listed natural community is inconsistent with the project habitat
Plants	Yellow fringeless orchid	ce	E	Palustrine: wet prairie, seepage slope Terrestrial: mesic flatwoods.	NE	Listed natural community is inconsistent with the project habitat
Reptiles	Alligator snapping turtle	ce	SSC	Estuarine: tidal marsh Lacustrine: river floodplain lake, swamp lake Riverine: alluvial stream, blackwater stream.	NE	Listed natural community is inconsistent with the project habitat
Reptiles	Eastern indigo snake	T	T	Estuarine: tidal swamp Palustrine: hydric hammock, wet Flatwoods Terrestrial: mesic flatwoods, upland pine forest, sand hills, scrub, scrubby flatwoods, rockland hammock, ruderal.	NE	Listed natural community is inconsistent with the project habitat

Reptiles	Florida pine snake	ce	SSC	Lacustrine: ruderal, sandhill upland lake Terrestrial: flatwoods, xeric hammock, ruderal.	NE	Listed natural community is inconsistent with the project habitat
Reptiles	Gopher tortoise	C	SSC	Terrestrial: sandhills, scrub, scrubby flatwoods, xeric hammocks, coastal strand, ruderal.	NE	Listed natural community is inconsistent with the project habitat
Reptiles	Green turtle	E	E	Marine: open water; Terrestrial: sandy beaches; nesting.	NE	See Table 2, 3, and 4
Reptiles	Hawksbill turtle	E	E	Marine: open water; Marine: open water; no nesting.	NE	See Table 2, 3, and 4
Reptiles	Kemp's ridley turtle	E	E	Marine: open water; Terrestrial: sandy beaches; nesting.	NE	See Table 2, 3, and 4
Reptiles	Leatherback turtle	E	E	Marine: open water; Terrestrial: sandy beaches; nesting.	NE	See Table 2, 3, and 4
Reptiles	Loggerhead turtle	T	T	Marine: open water;	NE	See Table 2, 3, and 4

Norriega Pt

# NRDA ROUTING SLIP

Comments: \_\_\_\_\_

Date: \_\_\_\_\_

Received Due

	Received	Due
Imm, Don		
Phillips, Catherine		
Ambrose, Lydia	3/12/14	
Kelly, Patty	3/21/14	
<del>Leinhoff, Lisa</del>		
<del>Mitchell, Harold</del>		
<del>Negron-Ortiz, Vivian</del>		
<del>Pursifull, Sandy</del>		
<del>Yanchis, Kristi</del>		

concern A.  
 concern for pip/retern.  
 Habitat conditions prior  
 to work preclude  
 the use of N. Point  
 bag piping planes.

Honey:  
 Please include revisions on  
 page 4. See comments  
 about creating Least Tern  
 habitat on dunes, which was  
 verbally committed to during site  
 visits. The / CSA

Discussion of DEP, Pierced(?), verbal  
 commitments to allow least tern  
 nesting and post/rope on  
 top of "dudge spoil" dune  
 area.

PK to follow up.