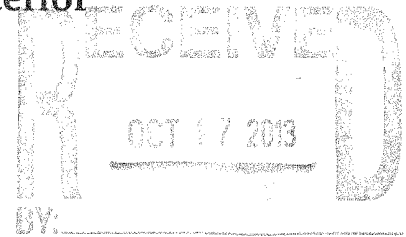


United States Department of the Interior

FISH AND WILDLIFE SERVICE
1875 Century Boulevard
Atlanta, Georgia 30345



In Reply Refer To:
FWS/R4/DH NRDAR

Memorandum

September 27, 2013

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. McCl...*

Subject: Informal Consultation Request for the Proposed St. Joseph Bay Seagrass Recovery 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, the 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 will be proposed in a draft early restoration plan that will be released for public comment and review. If the Trustees select the project after publication of the plan and consideration of public comment, and a stipulated agreement is reached with BP, the early restoration project will be implemented by the state of Florida (the State). 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 (and conference). Accordingly, we have reviewed the proposed St. Joseph Bay Seagrass Recovery Project, Florida, 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, piping plover, and red knot 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. 668-668c) 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/conference 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.

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 Commissions)

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

E-Mail: holly_herod@fws.gov; dmills@stratusconsulting.com

Date: 2013-09-19

PROJECT NAME (Grant Title/Number): St. Joseph Bay Seagrass Recovery 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 A at the end of this document for a map indicating the potential areas of activity for the project.

A. Ecoregion Number and Name: Southeast Region, estuarine/marine habitat

B. County and State: The project may involve activity in the waters of the following counties: Gulf County (St. Joseph Bay Aquatic Preserve), Franklin County (with Alligator Harbor Aquatic Preserve), and Bay County (St. Andrews Aquatic Preserve)

C. Section, township, and range (or latitude and longitude): n/a

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

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

The proposed St. Joseph Bay Seagrass Recovery project will address boat damage to shallow seagrass beds in the Florida panhandle by restoring scars located primarily in turtle grass (*Thalassia testudinum*) habitats located in St. Joseph Bay Aquatic Preserve in Gulf County. Additional sites may be restored depending on total project funds; therefore, we included these areas within our project description: Alligator Harbor Aquatic Preserve in Franklin County, and St. Andrews Aquatic Preserve, in Bay County. In addition to the turtle grass restoration, a boater outreach and education component of the project will install non-regulatory “Shallow Seagrass Area” signage, update existing signage and buoys where applicable, and install educational signage and provide educational brochures about best practices for protecting seagrass habitats at popular boat ramps in St. Joseph Bay, Alligator Harbor, and St. Andrews Bay.

The goal of this project is to address boat damage to shallow seagrass beds in the Florida panhandle by restoring scars located primarily in turtle grass (*Thalassia testudinum*) habitats. Scars are made when boat propellers cut up roots, stems, and leaves of seagrasses, producing long, narrow furrows devoid of vegetation. Turtle grass is a commonly-found species of submerged aquatic vegetation (SAV) in the panhandle that is particularly slow to rejuvenate naturally when damaged. Turtle grass with propeller damage can take many years to rejuvenate, or in severely scarred areas may never completely recover.

The project will primarily be located in St. Joseph Bay Aquatic Preserve in Gulf County, with additional potential sites in Alligator Harbor Aquatic Preserve in Franklin County, and St. Andrews Aquatic Preserve, in Bay County (see Figure A for project location). These three Aquatic Preserves contain turtle grass habitat that, if not restored, will continue to erode and destroy more of the healthy habitat surrounding the injured areas.

Through the project, scarring within the seagrass habitats in the three Aquatic Preserves will be surveyed and mapped using a combination of aerial photography and boat-based on-site surveys. Bio-degradable cotton sediment tubes will then be manufactured, filled with local fine grain sediment selected from an appropriate, state-approved source to match the characteristics of a sample taken from the affected area, and deployed by hand in approximately 2 acres of seagrass propeller scars. The placement of sediment tubes allows for and enhances seagrass recovery by raising the propeller scar elevation to ambient grade with clean sediment of appropriate grain size, thereby offering suitable habitat for seagrass recruitment. Seagrass planting units will be installed in the sediment tubes after a 90-day settling period. The seagrass restoration will be facilitated by placing bird stakes in the restoration project area. Figure B provides an example of bird stakes like those envisioned for this project being used at a seagrass restoration project site in the Florida Keys. The stakes will attract birds who then supply natural fertilizer to the restoration area in the form of feces, which are rich in phosphorus and nitrogen.

Finally, a boater outreach and education component of the project will install non-regulatory *Shallow Seagrass Area* signage, update existing signage and buoys where applicable, and install educational signage and provide educational brochures about best practices for protecting seagrass habitats at popular boat ramps in St. Joseph Bay, Alligator Harbor, and St. Andrews Bay. An illustration of the proposed buoy design is presented in Figure C. Figures D and E provide examples of a deployed sea grass buoy and a shallow sea grass area sign being installed respectively.

All sea grass sediment tubes and planting units for this project will be manually placed from boats. Similarly, the bird stakes placed to provide nutrients for the seagrass plantings will be installed from work boats using hand-held devices to drive the stakes into the sediment. Stakes will be removed upon seagrass establishment.

From the point of initiation the project is expected to take 6-12 months to complete with the exact start and stop dates being uncertain.

This project will incorporate a mix of monitoring efforts to ensure project designs are correctly implemented during construction and in a subsequent period, defined by contract, where corrective actions could be taken.

Post construction performance monitoring will initially focus on plant survival and revegetation of the existing scars. This monitoring may include collection of habitat information such as the depth of the scar at different points in time, and percent vegetative cover of the scar. Additional information collected may include utilization and integrity of the bird stakes over time and nature and extent of any subsequent seagrass habitat scaring in areas where the new non-regulatory buoys are placed.

Pre- and post-project monitoring will compare restoration progress in both control and study areas. Changes in the number, length, and cover of propeller scars will be determined in large replicate photograph plots within each study area. Aerial photography will be performed annually, in late summer. Data layers will be created using ArcMap to determine the increase or decrease in scar number, length, and area over time.

Field surveys will be performed biannually in the early spring and late summer to monitor the progress of the restoration activities. The criteria for choosing both treated and untreated prop scars for comparison will require that they do not have statistically significant differences in dimension (length and width), and that they are located within areas that contain similar seagrass densities. Methods designed to measure percent-cover and shoot counts will be used to compare recovery rates of prop scars located within treated and untreated locations of the project area. A minimum of four quarter-meter quadrats, subdivided into 10-cm by 10-cm cells, will be randomly positioned along each prop scar for the purpose of measuring percent-cover. Within each quadrat, five 10-cm by 10-cm cells will be randomly chosen for shoot counts. These two techniques have been adopted from Virnstein and Morris, 1996. Permanent (fixed) transects will be incorporated into the study in order to monitor changes in the number of untreated prop scars. Underwater photographs and video will also be taken to document site characteristics prior to and following restoration efforts.

VI. Description of the Project Area (attach additional pages as needed):

The potential project area is identified in Figure A. The potential project area includes the three main bodies of water that have been identified and will be evaluated for this project: St. Joseph Bay, St. Andrews Bay, and Alligator Harbor. More specific locations within these water bodies have not been identified at this time as an initial task in the project is to conduct surveying and mapping of existing seagrass scar areas.

The scar areas are located in generally shallow, estuarine/marine waters, approximately 2-6 feet of water, which is both a factor in the original scarring and contributes to the heavy reliance on shallow draft boats and manual placement of the sediment tubes, bird stakes and signage during the proposed project.

The adjacent shoreline habitats in potential project locations include a mix of salt marsh and sandy beach habitats.

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.

B. Include species/habitat occurrence map: *Attach a map that identifies species locations with the project area.*

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 seagrass restoration 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 ^a , Hawksbill turtle ^a , Kemp's ridley turtle; Leatherback turtle ^a , Loggerhead turtle	No work will occur in the terrestrial environment; therefore no impacts will occur to sea turtle species in the terrestrial environment. Consultation will be initiated with NMFS, as this agency has jurisdiction to review impacts to sea turtles in the estuarine and marine environments. The main risk to sea turtles during execution of this project would come from boat collisions which could result in harm or mortality.

SPECIES/CRITICAL	SPECIES/CRITICAL HABITAT IMPACTS
	<p>Critical habitat for the green sea turtle has been designated for the waters surrounding Culebra Island, Puerto Rico, and its outlying keys (63 FR 46693). Marine and terrestrial critical habitat for the leatherback sea turtle has been designated at Sandy Point on the western end of the island of St. Croix, U.S. Virgin Islands (44 FR 17710) and critical habitat will be reassessed during the future planned status review (76 FR 47133). Critical habitat for the hawksbill sea turtle has been designated for selected beaches and/or waters of Mona, Monito, Culebrita, and Culebra Islands, Puerto Rico (63 FR 46693). No designated critical habitat for the green, leatherback, or hawksbill sea turtles occurs within the action area. No critical habitat has been designated for the Kemp's ridley sea turtle; therefore, none will be adversely affected or modified.</p> <p>The project area does not overlap with the currently proposed critical habitat areas in Florida for Northwest Atlantic Distinct Population Segment of the loggerhead sea turtle as these habitats are terrestrial (i.e., beaches and shorelines) (78 FR 18000) Department of the Interior, 2013).</p>
West Indian manatee	<p>The counties in the project area are not part of the 36 Florida counties that are identified as being counties 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 and would potentially seek out shallow seagrass areas as they are preferred feeding habitat (U.S. Department of the Interior, 2011).</p> <p>The main risk to manatees during execution of this project would come from boat collisions which could result in harm or mortality. The overall goal of the project is to improve the quantity and quality of the seagrass habitat that manatees prefer.</p>
Piping plover	<p>The main risk to Piping plovers is from human disturbance while resting, foraging in habitats adjacent to marine work areas. The proposed project could result in short term increases in noise which could startle individuals, though we would expect normal activity to resume within minutes or cause the plovers to move to a nearby area. Because other foraging/resting habitats are nearby (less than two miles) we would expect this temporary displacement to be within normal movement patterns and consider this effect insignificant and discountable. The proposed project will not result in any changes to shoreline habitats where piping plover could be feeding or resting and is not expected to increase visitor use; therefore, no indirect effects are expected. Piping plover critical habitat is not designated in or near the action.</p>
Red knot	<p>The main risk to Red knots is from human disturbance while resting, foraging in habitats adjacent to marine work areas. The proposed project could result in short term increases in noise which could startle individuals, though we would expect normal activity to resume within minutes or cause the red knots to move to a nearby area. Because other foraging/resting habitats are nearby (less than two miles) we would expect this temporary displacement to be within normal movement patterns and consider this effect insignificant and discountable. The proposed project will not result in any changes to shoreline habitats where red knot could be feeding or resting and is not expected to increase visitor use; therefore, no indirect effects are expected.</p>
Gulf sturgeon	<p>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.</p>

^a 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
Green turtle, Hawksbill turtle, Kemp's ridley turtle, Leatherback turtle, Loggerhead turtle	No actions needed to minimize impacts in the terrestrial 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. We anticipate these conservation measures will avoid any risk of adverse effects to manatees from proposed project.
Piping plover	The presence of additional suitable habitat nearby and the infrequent nature of the project noise or workers and equipment will minimize project risks. Observation of adjacent habitats for potential impacts will also be used to help identify and modify disrupting actions/sounds.
Red knot	The presence of additional suitable habitat nearby and the infrequent nature of the project noise or workers and equipment will minimize project risks. Observation of adjacent habitats for potential impacts will also be used to help identify and modify disrupting actions/sounds.
Gulf sturgeon	See note in above table about the review of potential Gulf sturgeon impacts being coordinated through NMFS instead of through the USFWS.

IX. Effect Determination and Response Requested:

Species	Species Impacts					Response Requested*
	NE	NLAA	MAA	JP	JC	
Green turtle	X					Concurrence – Terrestrial Habitats Only; Consultation with NMFS for Estuarine/Marine habitats
Hawksbill turtle	X					Concurrence – Terrestrial Habitats Only; Consultation with NMFS for Estuarine/Marine habitats
Kemp's ridley turtle	X					Concurrence – Terrestrial Habitats Only; Consultation with NMFS for Estuarine/Marine habitats
Leatherback turtle	X					Concurrence – Terrestrial Habitats Only; Consultation with NMFS for Estuarine/Marine habitats

Species	Species Impacts					Response Requested*
	NE	NLAA	MAA	JP	JC	
Loggerhead turtle	X					Concurrence – Terrestrial Habitats Only; Consultation with NMFS for Estuarine/Marine habitats
Sea turtle proposed and designated critical habitat	X					Concurrence – Terrestrial Habitats Only; Consultation with NMFS for Estuarine/Marine habitats
West Indian manatee		X				Concurrence
Piping plover		X				Concurrence
Red knot		X				Conference
Gulf sturgeon ^a	---	---	---	---	---	Consultation with NMFS

*Concurrence, Formal Consultation, Formal Conference

^a 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.

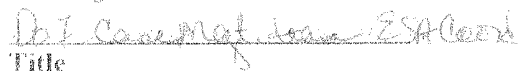
SPECIES	BEHAVIOR	SPECIES/HABITAT IMPACTS
Seabirds (terns, gulls, skimmers, double-crested cormorant, American white pelican, brown pelican)	Foraging, feeding, resting, roosting, nesting	Seabirds forage, feed, rest, and roost in the project area. As such, they may be impacted locally and temporarily by the project. It is expected that they would be able to move to another nearby location to continue foraging, feeding and resting. These birds primarily roost in the dunes. Therefore we do not anticipate impacts.

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.

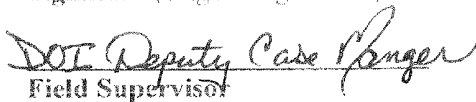
SPECIES/SPECIES GROUP	CONSERVATION MEASURES TO MINIMIZE IMPACTS
Seabirds (terns, gulls, skimmers, double-crested cormorant, American white pelican, brown pelican)	Care will be taken to minimize noise and vibration near areas where foraging or resting birds are encountered. All disturbances will be localized and temporary. The general behavior of these birds is to mediate their own exposure to human activity when given the opportunity. Roosting should not be impacted because the project will occur during daylight hours only. Nesting will not be impacted because the project will not occur during nesting season and activity is limited to open water areas.

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


Signature (originating station - preparer) 9/27/13
date


Title ESA Coord.


Signature (originating station) 10/6/13
date


Field Supervisor

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 X Nonconcurrency _____

B. Formal consultation required _____

C. Conference required _____

D. Informal conference required _____

E. Remarks (attach additional pages as needed):

Donald W. Lee 10/21/13
Signature date
Donald W. Lee PC Field Office
Field Supervisor office

RECEIVED
11/5/13

TAWS # 04/EF 3000-2014-1-0006

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 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.

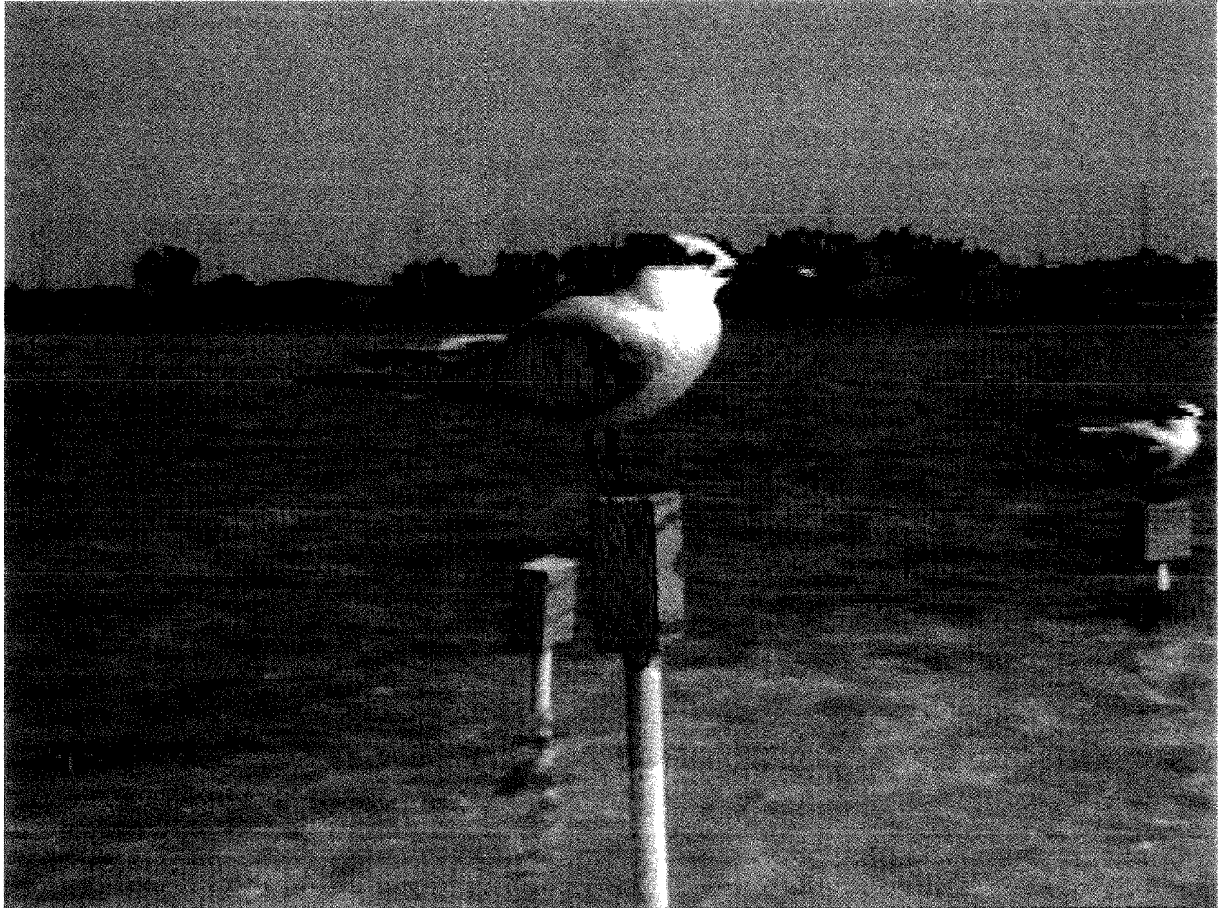
U.S. Department of the Interior. 2013. 50 CFR Part 17: Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Northwest Atlantic Ocean District Population Segment of the Loggerhead Sea Turtle (*Caretta caretta*). Proposed Rule. Federal Register p. 18000-18082. March 25.

Virnstein, R. W. and L.J. Morris. 1996. Seagrass Preservation and Restoration: A Diagnostic Plan for the Indian River Lagoon. St. Johns River Water Management District, Technical Memorandum No. 14. Palatka, Florida.

Figure A. Location of envisioned St. Joseph Bay Seagrass Recovery Project.



Figure B. Examples of bird stakes being used in a seagrass restoration project in the Florida Keys.



Source: NOAA (2013)

Figure C. Design of shallow sea grass area buoy.

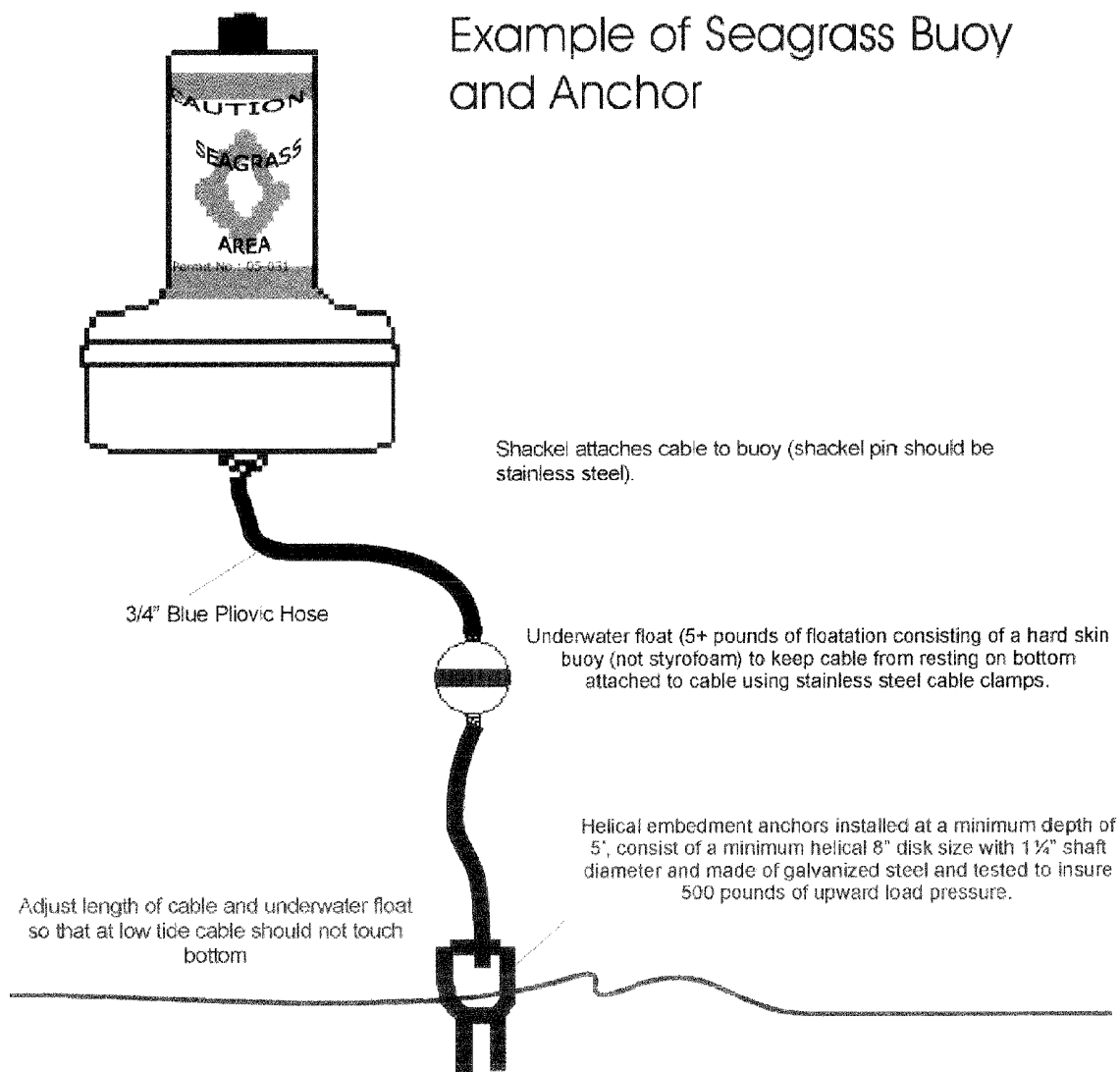


Figure D. Example of deployed shallow sea grass area buoy.

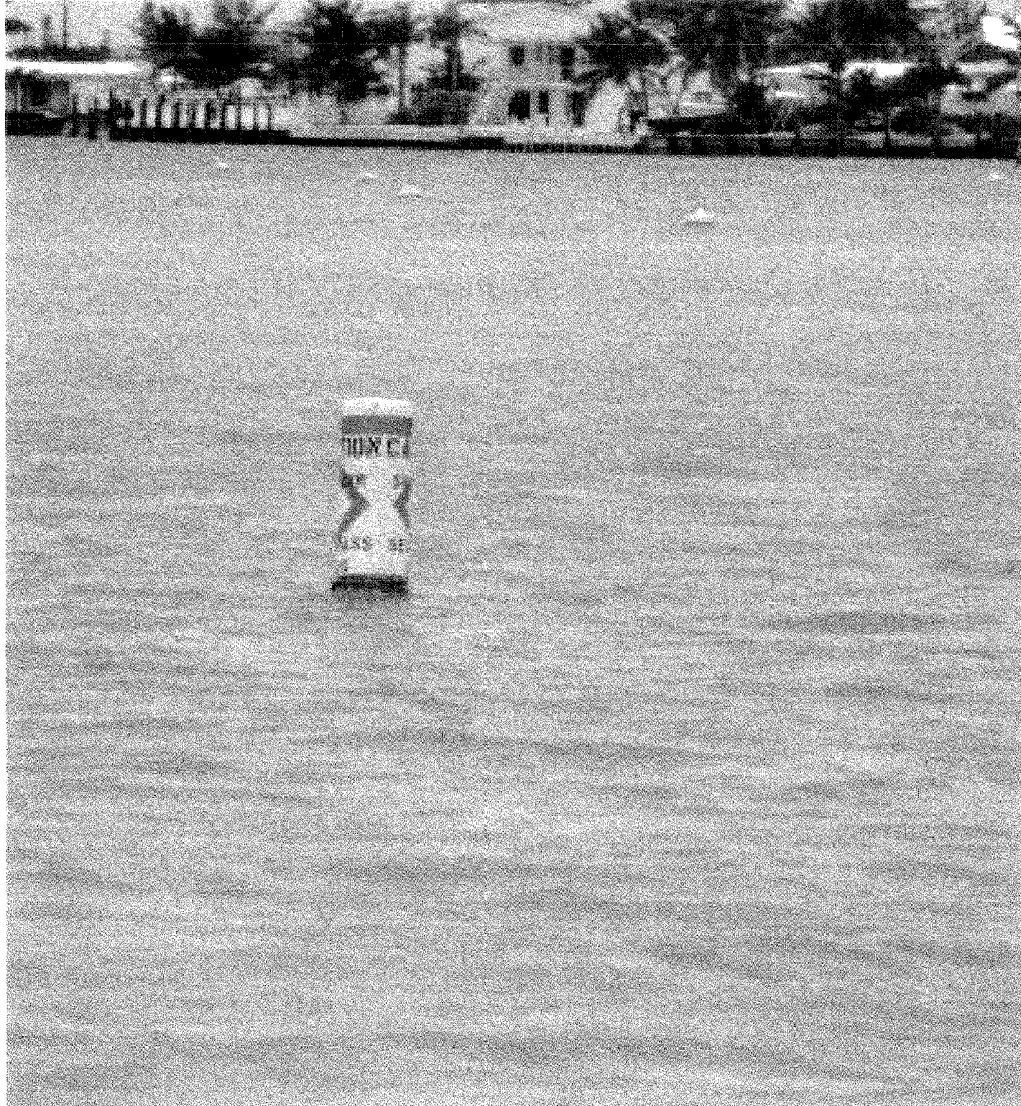


Figure E. Example of shallow sea grass area signage for boaters.



Table 1. Listed species of concern in the counties where activity for the seagrass project could occur

Source:

This table reflects the information available 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. Information downloaded March 13, 2013.

Resource category	Common name	FWS status	State status	Natural communities	Reason for impact	Species impacts (NE, NLAA, MAA)
Amphibians	Frosted flatwoods salamander	T (CH)		Palustrine: wet Flatwoods, dome swamp, basin swamp, Terrestrial: mesic flatwoods (reproduces in ephemeral wetlands within this community).	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Amphibians	Gopher frog	SSC	ce	Terrestrial: sandhill, scrub, scrubby flatwoods, xeric hammock(reproduces in ephemeral wetlands within these communities).	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Amphibians	Reticulated flatwoods salamander	E (CH)		Palustrine: wet Flatwoods, dome swamp, basin swamp, Terrestrial: mesic flatwoods(reproduces in ephemeral wetlands within this community).	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Birds	Arctic peregrine falcon	ce	E	Estuarine: winters along coasts Lacustrine: various Palustrine: various Terrestrial: various, ruderal.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Birds	Bachman's sparrow	ce		Terrestrial: various, ruderal.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE

Resource category	Common name	FWS status	State status	Natural communities	Reason for impact	Species impacts (NE, NLAA, MAA)
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.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Birds	Least tern		T	Estuarine: various Lacustrine: various Riverine: various Terrestrial: beach dune, ruderal. Nests common on rooftops.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
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.	See Table 2.	See Table 2
Birds	Red knot	C		Estuarine: exposed unconsolidated substrate Marine: exposed unconsolidated substrate Terrestrial: dunes, sandy beaches, and inlet areas. Mostly wintering and migrants.	See Table 2.	See Table 2
Birds	Red-cockaded woodpecker	E		Terrestrial: mature pine forests.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Birds	Reddish egret	ce	SSC	Estuarine: tidal swamp, depression marsh, bog, marl prairie, wet prairie Lacustrine: flatwoods/prairie lake, marsh lake Marine: tidal swamp.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Birds	Southeastern kestrel	ce	T	Estuarine: various habitats Palustrine: various habitats Terrestrial: open pine forests, clearings, ruderal, various.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is	NE

Resource category	Common name	FWS status	State status	Natural communities	Reason for impact	Species impacts (NE, NLAA, MAA)
					not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	
Birds	Southeastern snowy plover	ce	T	Estuarine: exposed unconsolidated substrate Marine: exposed unconsolidated substrate Terrestrial: dunes, sandy beaches, and inlet areas.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Birds	Stoddard's yellow-throated warbler	ce		Terrestrial: wooded habitats with Spanish moss, various.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Birds	Wakulla seaside sparrow	ce	SSC	Estuarine: tidal marsh Marine: tidal marsh.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Birds	Wood stork	E	E	Estuarine: marshes Lacustrine: floodplain lakes, marshes (feeding), various Palustrine: marshes, swamps, various.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Crustaceans	Panama City Crayfish (Econfinia crayfish)	ce	SSC	Palustrine: wet flatwoods; temporary or fluctuating ponds or semipermanently inundated ditches, also ruderal, roadside ditches and utility easements. Associated soil types: Pamlico-Dorovan Complex, Rutlege sand, Osier fine sand, Plummer sand, Pelham sand; some Leon sands.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Fish	Gulf sturgeon	T (CH)	SSC	Estuarine: various Marine: various	See Table 2.	See Table 2

Resource category	Common name	FWS status	State status	Natural communities	Reason for impact	Species impacts (NE, NLAA, MAA)
				habitats Riverine: alluvial and blackwater streams.		
Mammals	Choctawhatchee beach mouse	E (CH)	E	Terrestrial: beach dune, coastal scrub.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Mammals	Florida black bear	ce	T	Palustrine: titi swamps, floodplains Terrestrial: pine and hardwood forests.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Mammals	Florida mouse	ce	SSC	Terrestrial: scrub, sandhill, scrubby flatwoods.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Mammals	Round-tailed muskrat	ce		Estuarine: tidal marsh Lacustrine: marsh lake, flatwoods/prairie lake Palustrine: floodplain marsh, swale, depression marsh, basin marsh.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Mammals	Southeastern big-eared bat	ce		Palustrine: various, floodplains Terrestrial: pine and hardwood forests, ruderal, various.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Mammals	St. Andrew beach mouse	E (CH)	E	Terrestrial: beach dune, coastal scrub.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result,	NE

Resource category	Common name	FWS status	State status	Natural communities	Reason for impact	Species impacts (NE, NLAA, MAA)
					this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	
Mammals	West Indian manatee	E	E	Estuarine: submerged vegetation, open water Marine: open water, submerged vegetation Riverine: alluvial stream, blackwater stream, spring-run stream.	See Table 2.	See Table 2
Mussels	Chipola slabshell	T (CH)		Riverine: main channel of the Chipola River and its larger tributaries in substrate combinations of silt, clay, sand and occasionally gravel. Panhandle drainages: Chipola River.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Mussels	Fat threeridge	E (CH)		Riverine: main channels of small to large rivers in slow to moderate currents; fine to medium silty sand, also mixtures of sand, clay, and gravel. Panhandle drainages: Chipola and Apalachicola Rivers.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Mussels	Gulf moccasinshell	E (CH)		Riverine: medium-sized creeks to large rivers with sand and gravel substrates in slow to moderate currents. Panhandle drainages: Econfina Creek and Chipola River.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Mussels	Oval pigtoe	E (CH)		Riverine: medium-sized creeks to small rivers; various substrates; slow to moderate currents.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Mussels	Purple bank climber	T (CH)		Riverine: small to large rivers in sand, sand mixed with mud, or gravel substrates with slow to moderate currents. Panhandle drainages: Chipola, Apalachicola, and Ochlockonee Rivers.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no	NE

Resource category	Common name	FWS status	State status	Natural communities	Reason for impact	Species impacts (NE, NLAA, MAA)
					effects to this species are anticipated.	
Mussels	Shinyrayed pocketbook	E (CH)		Riverine: medium-sized creeks to mainstem rivers in a range of substrates including sand, clay, and gravel with slow to moderate current. Panhandle drainages: Econfinia (Creek), Chipola, and Ochlockonee (upstream of Lake Talquin) Rivers.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Mussels	Tapered pigtoe	T (CH)		Riverine: Small to medium-sized creeks to large rivers in stable substrates of sand, small gravel, or sandy mud, with slow to moderate current. Panhandle drainages: Choctawhatchee River	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Reptiles	Alligator snapping turtle	ce	SSC	Estuarine: tidal marsh Lacustrine: river floodplain lake, swamp lake Riverine: alluvial stream, blackwater stream	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Reptiles	Barbour's map turtle	ce	SSC	Palustrine: floodplain stream, floodplain swamp Riverine: alluvial stream.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
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.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Reptiles	Florida pine snake	ce	SSC	Lacustrine: ruderal, sandhill upland lake Terrestrial: flatwoods, xeric hammock, ruderal.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur	NE

Resource category	Common name	FWS status	State status	Natural communities	Reason for impact	Species impacts (NE, NLAA, MAA)
					within the project implementation area and no effects to this species are anticipated.	
Reptiles	Gopher tortoise	C	SSC	Terrestrial: sandhills, scrub, scrubby flatwoods, xeric hammocks, coastal strand, ruderal.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Reptiles	Green turtle	E	E	Terrestrial: sandy beaches; nesting.	See Table 2.	See Table 2
Reptiles	Hawksbill turtle	E	E	Marine: open water; no nesting.	See Table 2.	See Table 2
Reptiles	Kemp's ridley turtle	E	E	Terrestrial: sandy beaches; nesting.	See Table 2.	See Table 2
Reptiles	Leatherback turtle	E	E	Terrestrial: sandy beaches; nesting.	See Table 2.	See Table 2
Reptiles	Loggerhead turtle	T	T	Terrestrial: sandy beaches; nesting.	See Table 2.	See Table 2
Plants	Alternate-leaf or pagoda dogwood		E	Palustrine: creek swamps Terrestrial: slope forest, upland hardwood forest, bluffs.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Apalachicola dolls daisy	ce		Palustrine: Floodplain Forest.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Apalachicola wild indigo		E	Palustrine: floodplain forest Terrestrial: upland mixed forest, slope forest.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Ashe's magnolia		E	Terrestrial: slope and upland hardwood forest, ravines.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result,	NE

Resource category	Common name	FWS status	State status	Natural communities	Reason for impact	Species impacts (NE, NLAA, MAA)
					this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	
Plants	Baltzell's sedge	ce	T	Terrestrial: slope forest, moist sandy loam; moist sandy loam.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Bear tupelo or Dwarf blackgum	ce			The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Bent golden aster	ce	E	Terrestrial: pine forest, ruderal.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Buckthorn	ce	E	Palustrine: hydric hammock, floodplain swamp.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Carolina grass-of-parnassus	ce	E	Palustrine: seepage slope Terrestrial: mesic flatwoods.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Chapman's butterwort	ce	T	Palustrine: wet flatwoods, seepage slopes, bog, dome swamp, ditches; in water.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is	NE

Resource category	Common name	FWS status	State status	Natural communities	Reason for impact	Species impacts (NE, NLAA, MAA)
					not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	
Plants	Chapman's crownbeard	ce	T	Palustrine: seepage slope Terrestrial: mesic flatwoods with wiregrass(<i>Aristida stricta</i>).	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Chapman's rhododendron	E	E	Palustrine: seepage slope(titi bog) Terrestrial: mesic flatwoods; ecotone between flatwoods or more xeric longleaf communities and titi bogs.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Corkwood		T	Estuarine: tidal marsh Palustrine: freshwater tidal swamp, hydric hammock.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Cruise's golden-aster	ce	E	Terrestrial: coastal dunes, coastal strand, coastal grassland; openings and blowouts.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Curtiss' loosestrife	ce	E	Palustrine: wet Flatwoods edges, floodplain swamp, seepage slope, dome swamp edges Terrestrial: seepage slope.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE

Resource category	Common name	FWS status	State status	Natural communities	Reason for impact	Species impacts (NE, NLAA, MAA)
Plants	Curtiss' sandgrass	ce	T	Palustrine: mesic and wet flatwoods, wet prairie, depression marsh Terrestrial: mesic flatwoods.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Dark-headed hatpin	ce		Palustrine: Wet Boggy Seepage slopes, mucky soils.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Decumbant pitcher plant		T	Palustrine: Bogs.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Dew-thread		E	Lacustrine: exposed lake bottoms.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Florida anise		T	Palustrine: floodplain forest, baygall Riverine: seepage stream bank Terrestrial: slope forest, seepage slope.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE

Resource category	Common name	FWS status	State status	Natural communities	Reason for impact	Species impacts (NE, NLAA, MAA)
Plants	Florida bear-grass	ce	T	Terrestrial: mesic flatwoods grassy areas.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Florida skullcap	T	E	Palustrine: seepage slope, wet flatwoods, grassy openings Terrestrial: mesic flatwoods.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Giant water-dropwort		E	Palustrine: dome swamp, wet flatwoods, ditches; in water.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Godfrey's (violet) butterwort	T	E	Palustrine: wet flatwoods, wet prairie, bog; in shallow water Riverine: seepage slope; in shallow water. Also, roadside ditches and similar habitat.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Godfrey's blazing star	ce	E	Terrestrial: sandhill, scrub, coastal grassland; disturbed areas.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE

Resource category	Common name	FWS status	State status	Natural communities	Reason for impact	Species impacts (NE, NLAA, MAA)
Plants	Gulf coast lupine	ce	T	Terrestrial: beach dune, scrub, disturbed areas, roadsides, blowouts in dunes.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Hairy fever tree		T	Palustrine: creek swamps, titi swamps, bogs.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Harper's beauty	E	E	Palustrine: wet prairie, seepage slope, roadsides, edges of titi swamps.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Harper's yellow-eyed grass	ce	T	Palustrine: seepage slope, wet prairie, bogs.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Harper's grooved yellow flax	ce		Palustrine: wet Flatwoods Terrestrial: mesic flatwoods; in site-prepped areas.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE

Resource category	Common name	FWS status	State status	Natural communities	Reason for impact	Species impacts (NE, NLAA, MAA)
Plants	Hooded pitcher plant		T	Palustrine: wet flatwoods, wet prairie, seepage slope.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Hummingbird flower		E	Palustrine: seepage slope, dome swamp edges, floodplain swamps Riverine: seepage stream banks Terrestrial: seepage slopes.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Karst pond xyris		E	Lacustrine: sandhill upland lake margins.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Lace-lip		T	Palustrine: wet flatwoods.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Large-flowered-grass-of-parnassus		E	Palustrine: dome swamp margins, seepage slope Riverine: spring-run stream edge Terrestrial: mesic flatwoods.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE

Resource category	Common name	FWS status	State status	Natural communities	Reason for impact	Species impacts (NE, NLAA, MAA)
Plants	Large-leaved jointweed	ce	T	Terrestrial: scrub, sandpine/oak scrub ridges.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Meadow beauty	ce	E	Palustrine: dome swamp margin, seepage slope, depression marsh; on slopes; with hypericum.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Mountain laurel		T	Riverine: seepage stream bank Terrestrial: slope forest, seepage stream banks.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Panhandle Meadow-beauty	ce			The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Panhandle spiderlily	ce	E	Palustrine: dome swamp edges, wet prairie, wet flatwoods, baygall edges, swamp edges Terrestrial: wet prairies and flatwoods.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE

Resource category	Common name	FWS status	State status	Natural communities	Reason for impact	Species impacts (NE, NLAA, MAA)
Plants	Papery whitlow-wort	T	E	Terrestrial: Karst sandhill lake margins.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Parrot pitcher plant		T	Palustrine: wet flatwoods, wet prairie, seepage slope.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Pine-woods aster	ce	E	Palustrine: seepage slope Terrestrial: sandhill, scrubby and mesic flatwoods.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Primrose-flower butterwort		E	Palustrine: bogs, pond margins, margins of spring runs.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Pyramid magnolia		E	Terrestrial: slope forest.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE

Resource category	Common name	FWS status	State status	Natural communities	Reason for impact	Species impacts (NE, NLAA, MAA)
Plants	Quillwort yellow-eyed grass	ce		Lacustrine: lake margins Palustrine: wet flatwoods, wet prairie.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Rosebud orchid or spreading pagonia		T	Palustrine: wet flatwoods.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Scare-weed	ce	T	Terrestrial: mesic flatwoods, sand hill; on disturbed sites.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Silky camellia		E	Palustrine: baygall Palustrine: slope forest, upland mixed forest, Terrestrial: slope forest, upland mixed forest; acid soils.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Smooth-barked St. John's wort	ce	E	Lacustrine: lake margins Terrestrial: lake margins.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE

Resource category	Common name	FWS status	State status	Natural communities	Reason for impact	Species impacts (NE, NLAA, MAA)
Plants	Snowy orchid		T	Palustrine: bogs.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Southern red lily		T	Palustrine: wet prairie, wet flatwoods, seepage slope Terrestrial: mesic flatwoods, seepage slope; usually with grasses.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Southern milkweed	ce	T	Palustrine: wet prairie, seepage slope edges Riverine: seepage stream banks Terrestrial: mesic flatwoods, drainage ditches.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Spoon-leaved sundew		T	Lacustrine: sinkhole lake edges Palustrine: seepage slope, wet flatwoods, depression marsh Riverine: seepage stream banks, drainage ditches.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	St. John's-susan	ce	E	Palustrine: wet flatwoods and prairies, roadside ditches.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE

Resource category	Common name	FWS status	State status	Natural communities	Reason for impact	Species impacts (NE, NLAA, MAA)
Plants	Sweet shrub		E	Terrestrial: upland hardwood forest, slope forest, bluffs Palustrine: bottomland forest, stream banks, floodplains.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Telephus spurge	T	E	Terrestrial: mesic flatwoods; disturbed wiregrass (<i>Aristida stricta</i>) areas, coastal scrub. All known sites are within 4 miles of Gulf of Mexico.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Thick-leaved water willow	ce	E	Palustrine: dome swamp, seepage slope Terrestrial: mesic flatwoods.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Tropical waxweed	ce		Palustrine: wet prairie, seepage slope Terrestrial: mesic flatwoods.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	West's flax	ce	E	Palustrine: dome swamp, depression marsh, wet flatwoods, wet prairie, pond margins.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE

Resource category	Common name	FWS status	State status	Natural communities	Reason for impact	Species impacts (NE, NLAA, MAA)
Plants	White birds-in-a-nest	T	E	Palustrine: seepage slope Terrestrial: grassy mesic pine flatwoods, savannahs, roadsides, and similar habitat.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	White Indian Plantain	ce		Palustrine: wet flatwoods.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	White-top pitcher plant	ce	E	Palustrine: wet prairie, seepage slope, baygall edges, ditches.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Wiregrass gentian	ce	E	Palustrine: seepage slope, wet prairie, roadside ditches Terrestrial: mesic flatwoods, planted slash pine.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Yellow fringed orchid		T	Palustrine: bogs, wet flatwoods Terrestrial: Bluff.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE

Resource category	Common name	FWS status	State status	Natural communities	Reason for impact	Species impacts (NE, NLAA, MAA)
Plants	Yellow butterwort		T	Palustrine: flatwoods, bogs.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
Plants	Yellow fringeless orchid	ce	E	Palustrine: wet prairie, seepage slope Terrestrial: mesic flatwoods.	The listed natural community for this species is inconsistent with the habitat in the project implementation area (marine: open water) and is not available within the action area. As a result, this species would not be expected to occur within the project implementation area and no effects to this species are anticipated.	NE
<p>BGEPA= Bald and Gold Eagle Protection Act, C = candidate species, ce = consideration encouraged, CH = critical habitat, E = endangered, PCH = proposed critical habitat, PE = proposed endangered, PT = proposed threatened, SSC = species of special concern, T = threatened.</p> <p>Source: This table reflects the information available 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. Information downloaded March 13, 2013.</p>						