

United States Department of the Interior

FISH AND WILDLIFE SERVICE 1875 Century Boulevard Atlanta, Georgia 30345

FEB 2 6 2014

Memorandum

To:

In Reply Refer To: FWS/R4/DH NRDAR

From:	Deputy Deepwater Horizon, Department of the Interior Natural Resou	Irce Damage	
	Assessment and Restoration (NRDAR), Case Manager	LMCV.	

Subject: Informal Consultation and Conference Request for the Proposed Wakulla County Mashes Sands Park Improvements, Florida

Field Supervisor, Panama City Ecological Services Office

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 authoritics, 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 and conference 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 Wakulla County Mashes Sands Park Improvements, 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, five species of sea turtles (green, hawksbill, Kemp's ridley, leatherback, and loggerhead), piping plover and red knot (if listed) 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 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

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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: <u>holly_herod@fws.gov</u>; dmills@stratusconsulting.com Date: February 24, 2014

PROJECT NAME (Grant Title/Number): Wakulla County Mashes Sands Park Improvements

I. Service Program:

- _X__NRDAR
- - ___ 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 proposed project area.
 - A. Ecoregion Number and Name: Southcast Region
 - B. County and State: Wakulla County, Florida
 - C. Section, township, and range (or latitude and longitude): See Figure 1 for general location and Figure 2 with detail of potential project activity area
 - **D.** Distance (miles) and direction to nearest town: see map (Figure 1)
- V. Description of Proposed Action (attach additional pages as needed):

The proposed Wakulla County Mashes Sands Park Improvements project involves constructing observation platforms, boardwalks and walking paths, and a canoe/kayak launch site. These activities would occur in the part of the potential project area in Figure 2 located to the North of the East-West running road that generally divides the action area. In addition, the project would involve work to improve the parking area around the existing boat ramp area, and the associated picnic areas and the restroom facility. The parking area and restroom facilities are in the Western portion in the southern part of the action area while the picnic areas would be to the west of the water in this part of the activity area and to the south of the existing boat ramp (See Figure 2).

Pilings would need to be placed for observation platforms and boardwalks. The footprint of ground disturbance would depend on final project design. Much of the work would likely be limited to relatively shallow depths given the nature of improvements (e.g., repairs to existing structures, new observation platforms, boardwalks, and walking paths). Material to be removed would include surface soil, vegetation, debris, and damaged material that would be removed to allow for repairs to existing facilities.

Construction materials would be staged in existing disturbed areas near the work site (e.g., the boat ramp parking lot area in the Southern portion of Figure 2 or the existing dirt road that runs to the North in the Northern portion of the project area). Other material may be placed on the ground in areas where repairs are made to existing facilities. It is not anticipated that the footprint of existing facilities would be expanded as part of this project.

Construction Best Management Practices (BMPs) are as follows:

- All construction would be performed in accordance with all local, state, and federal requirements and all requirements of any permits obtained so as to protect the surrounding vegetation and natural condition.
- The contractor would submit plan for control of surface water runoff in accordance with all local, state, and federal requirements and all requirements of permits obtained so as to protect the surrounding vegetation and natural condition.
- All construction adjacent to open water would be separated and confined by appropriate siltation screens and turbidity barriers so as to protect the quality of such open water.
- Upon completion of construction, the site would be cleared of all construction materials and restored to its natural state as shown on the drawings.
- The contractor would be responsible for assuring compliance with all permit requirements.

In addition to construction BMPs, the contractor would implement BMPs for adequate erosion control. Erosion control is necessary to prevent damage to adjacent properties, natural features, the site property, and work in progress. Erosion control measures would be in place prior to any land alteration and be modified throughout the construction process and until soils are stabilized. Erosion control BMPs are as follows:

- 1. To protect against wind and stormwater runoff erosion, the contactor would place as appropriate hay bales and silt fencing with wire fence reinforcement with sediment to be removed when it reaches approximately one-half the height of the barrier.
- 2. Silt fences would be of optimal design and materials for adequate sediment control.
- 3. Side slopes created during construction would be stabilized at the carliest possible date to avoid erosion with adequate use of compacted soil and staked hay bales.
- 4. Any disturbed area that would not be paved, sodded, or built upon would have a minimum vegetative cover of 80% and be mature enough to control soil erosion and survive severe weather conditions prior to final inspection.
- 5. Sod would be sufficiently grown and maintained to secure a dense stand of live grass.
- 6. Proposed road surface at the entrance would maintain a condition of slope that would prevent tracking or flow of mud onto the existing public roadway (County Road 372).

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

The potential project area is identified in Figures 1 and 2. Mashes Sands is the collective name for a larger park complex of low dunes, sandy beach, and a shallow offshore flat of rippled, sandy shoals. The area of the project construction activity is limited to upland sand road and parking area, a marsh system with channels in the Northern portion, including the area identified in Northern portion of the project area identified in Figure 2 and a developed boat ramp and picnic area in the southern part of the project area in Figure 2. The park and project area is surrounded by three bodies of water: Apalachee Bay, Dickerson Bay, and Ochlockonee Bay, offering both salt and fresh water access. There is no habitat within the construction area that supports endangered and threatened species. However, sandy shorelines nearby that could be accessed by boats, canoes/kayaks may support listed species.

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 Wakulla County, Florida.

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 Mashes Sands Park Improvements 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	SPECIES/CRITICAL HABITAT IMPACTS
HABITAT	
turtle, Kemp's ridley turtle; Leatherback	Effects to any sea turtles using estuarine or marine habitats will be evaluated in consultation with NMFS and are not addressed in this consultation.
turtle, Loggerhead turtle	No nesting habitat is present within the construction area. Therefore, no effects from construction are anticipated. Sea turtles may nest in areas north and east of the proposed project and these areas could be accessed by users of the facilities proposed in this project. Visitors could accidently trample nests/hatchlings, or increase predation through inadequate trash disposal. Conservation measures described below are expected to minimize any visitor impacts to an insignificant and discountable level.
West Indian manatee	Wakulla County is part of the 36 Florida counties that arc identified as being counties where manatees regularly occur in coastal and inland waters (U.S. Department of the Interior, 2011).
	However, manatees are unlikely to be using the marsh channel habitats therefore no effects from construction are expected. Implementation of conservation measures below will ensure no effects to manatees occur. This work will not increase motorized boating in the area, so the risks to West Indian manatees are discountable.
Piping plover and Red knot.	No habitat for piping plover or red knot is present in the construction area. Therefore, no effects from construction are anticipated. Piping plover and red knot may rest and forage in areas north and east of the proposed project and these areas could be accessed by users of the facilities proposed in this project. Visitors could accidently startle birds or increase predation through inadequate trash disposal. Human disturbance could startle individuals, though we would expect normal activity to resume within minutes or cause individuals 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 these species could be feeding or resting. Conservation measures described below are expected to minimize any visitor impacts (including the potential for increased predation) to an insignificant and discountable level.
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.

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

SPECIES	CONSERVATION MEASURES TO MINIMIZE IMPACTS
All species	Educational signage/Kiosks will be posted at various locations at the project site including the existing boat ramp and the new canoe/kayak launch. The signage will be developed in coordination with NMFS, FWC, and the Panama City Ecological Services Field Office and will discuss various trust resources (listed species below and migratory birds) and means to protect species and habitats while enjoying the park. If necessary, signage may identify areas to avoid in order to prevent effects to species.
J h. My	Predator-proof waste receptacles will be placed and maintained in strategic locations at each of the new facilities proposed in this project to prevent an increase in predator abundance.
Green turtle, Hawksbill	To minimize risks in the aquatic environment, all construction conditions
turtle, Kemp's ridley turtle,	identified in the Sea Turtle and Smalltooth Construction Conditions (NOAA,
Loggerhead turtle	minimize the risk of collisions
West Indian manatee	All construction conditions identified in the <i>Standard Manatee Conditions for</i> <i>In-water Work</i> (USFWS, 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 the proposed project.
Piping plover and red knot	No additional measures are necessary
Gulf sturgeon	See note in Table 2 about the review of potential Gulf sturgeon impacts being coordinated through NMFS instead of through the USFWS.

VIIII. Effect Determination and Response Requested:

Snaries		Response				
	NE	NLAA	MAA	ЛР	JC	Requested*
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)

Suesios		Response				
species	NE	NLAA	MAA	JP	JC	Requested*
Leatherback turtle		X				Concurrence (terrestrial); Consultation with NMFS (in-water)
Loggerhead turtle		X				Concurrence (terrestrial); Consultation with NMFS (in-water)
West Indian manatee	x			_		Concurrence
Piping plover		х				Concurrence
Red knot		х				Conference
Gulf sturgeon ^a					Br 10 10	n/a – see table note a

*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? X 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
Oystercatchers and Wilson's plovers Shorebirds/marsh	Nesting, foraging, feeding, resting Foraging, feeding, resting, nesting	These species are known to nest, feed, and rest within Mashes Sands (though not within the construction area). Shorebirds nest, forage, feed, and rest, and in the types of habitats consistent with some of the shoreline areas near the proposed project. As such, they may be impacted locally and temporarily by the project.
Seabirds (terns, gulls, skimmers, double- crested cormorant, American white pelican, brown pelican)	Resting, roosting, nesting	Seabirds forage in water and rest/roost in terrestrial habitats including dunes. However, project activities could startle resting birds and because activities will occur during the day roosting should not be impacted.
Passerines		Passerines could be foraging, resting, or nesting in nearby grasses, shrubs, or trees.

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	CONSERVATION MEASURES TO MINIMIZE IMPACTS
GROUP	
Oystercatchers and	Educational signage/Kiosks will be posted at various locations at the project
Wilson's plovers	site including the existing boat ramp and the new canoe/kayak launch. The
	signage will be developed in coordination with NMFS, FWC, and the Panama
	City Ecological Services Field Office and will discuss various trust resources
	(listed species below and migratory birds) and means to protect species and
	habitats while enjoying the park. Signage may identify areas to avoid in order
	to prevent effects to species. If necessary, breeding areas will be posted
	(during breeding season) for avoidance to further identify sensitive areas that
Shorehirde/Marsh hirda	Visitors must avoid.
Shoreon as relation on as	Care will be taken to minimize noise and physical disruptions near areas
	where foraging or resting birds are encountered. We expect foraging and
	festing birds would be able to move to another nearby location to continue
l I	loraging and resting. If project activities occur during shorebird nesting
	season (rebruary 15 to August 31), the FWC will be contacted to obtain the
,	most recent guidance to protect nesting shorebirds/marsh birds or rookeries
Cashinda (tamp 11	and their recommendations will be implemented.
Seabiros (terns, guils,	Care will be taken to minimize noise and physical disruptions near areas
skimmers, double-crested	where foraging or resting birds are encountered. All disturbances will be
cormorant, American	localized and temporary. The general behavior of these birds is to mediate
white pelican, brown	their own exposure to human activity when given the opportunity, which

SPECIES/SPECIES GROUP	CONSERVATION MEASURES TO MINIMIZE IMPACTS
pelican)	they will have. Roosting should not be impacted because the project will occur during daylight hours only. Nesting should not be impacted because the project will not occur near nesting habitats.
Passerines	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. Roosting should not be impacted because the project will occur during daylight hours only. Limited vegetation removal may be necessary. If vegetation removal is necessary during the nesting season, FWC will be contacted for guidance to protect any pacing birds

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

<u>/s/ Holly N. Blalock-Herod</u> Signature (originating station - preparer)

February 24, 2014 date

ESA Coordinator, DWH Case Management Office Title

Signature (originating station) Deputy Case Manager

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):

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Signature date DON imm **Field Supervisor** office

References

NOAA. 2006. Sca Turtle and Smalltooth Sawfish Construction Conditions. http://sero.nmfs.noaa.gov/pr/endangered%20species/Sea%20Turtle%20and%20Smalltooth%20S awfish%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.

USFWS 2011. Standard Manatee Conditions for In-Water Work. http://www.fws.gov/northflorida/Manatce/Manate_Key_Programmatic/20130425_gd_Appendix %20B_2011_Standard%20Manatee%20Construction%20Conditions.pdf



Figure 1. General location of envisioned Mashes Sands Park Improvements Project and Mashes Sands Park.

Figure 2. Detail of envisioned project activity area for Mashes Sands Park Improvements Project.



		Ta	ble 1. F	ederally listed species in Wakulla County.	Florida	
Resource category	Common name	FWS status	State status	Natural communities	Species impacts (NE, NLAA MAA)	Reason for impact
Amphibians	Frosted flatwoods salamander	T (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
Amphibians	Gopher frog	SSC	ce	Terrestrial: sandhill, scrub, scrubby flatwoods, xeric hammock (reproduces in ephemeral wetlands within these communities).	NE	Listed natural community is inconsistent with the project habitat
Amphibians	Striped newt	С	SSC	Terrestrial: sandhills, scrub, scrubby flatwoods, xeric hammocks, coastal strand.	NE	Listed natural community is inconsistent with the project habitat
Dirds	Arctic peregrine falcon	ce	E	Terrestrial: various, ruderal; winters along coasts.	NE	Listed natural community is inconsistent with the project
Biras	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
Birds	Piping plover	T (CH)	Ţ	Estuarine: exposed unconsolidated substrate Marine: exposed unconsolidated substrate Terrestrial: dunes, sandy beaches, and inlet areas. Mostly wintering and migrants.	NE	Listed natural community is inconsistent with the project habitat
Birds	Red knot	P		Estuarine: exposed unconsolidated substrate Marine: exposed unconsolidated substrate Terrestrial: dunes, sandy beaches, and inlet areas. Mostly wintering and migrants.	NE	Listed natural community is inconsistent with the project habitat
Birds	Red-cockaded woodpecker	E		Terrestrial: mature pine forests.	NE	Listed natural community is inconsistent with the project nabitat

	Table 1. Federally listed species in Wakulla County, Florida								
Resource category	Common name	FWS status	State status	Natural communities	Species impacts (NE, NLAA, MAA)	Reason for impact			
Birds	Reddish egret	се	SSC	Estuarine: tidal swamp, depression marsh, bog, marl prairie, wet prairie Lacustrine: flatwoods/prairie lake, marsh lake Marine: tidal swamp.	NE	Listed natural community is inconsistent with the project habitat			
Birds	Southeastern kestrel	се	T	Terrestrial: open pine forests, clearings, ruderal, various.	NE	Listed natural community is inconsistent with the project habitat			
Birds	Wakulla seaside sparrow	се	SSC	Estuarine: tidal marsh Marine: tidal marsh.	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			
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			
Mammals	Choctawhatchee beach mouse	E (CH)	E	Terrestrial: beach dune, coastal scrub.	NE	Listed natural community is inconsistent with the project			
Mammals	Florida black bear	ce	T	Palustrine: titi swamps, floodplains Terrestrial: pine and hardwood forests.	NE	Listed natural community is inconsistent with the project			
Mammals	Round-tailed muskrat	ce		Estuarine: tidal marsh Lacustrine: marsh lake, flatwoods/prairie lake Palustrine: floodplain marsh, swale, depression marsh, basin marsh.	NE	Listed natural community is inconsistent with the project habitat			
Mammals	Southeastern big- eared bat	ce		Palustrine: various, floodplains Terrestrial: pine and hardwood forests, ruderal, various.	NE	Listed natural community is inconsistent with the project habitat			
wammals	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			

		Ta	able 1. F	ederally listed species in Wakulla County, I	Florida	
Resource category	Common name	FWS status	State status	Natural communities	Species impacts (NE, NLAA MAA)	Poppen for invest
	moccasin shell	E (CH)		Riverine: large creeks to medium-sized rivers in substrates of sand with some gravel in moderate current. Panhandle drainages: Ochlockonee River (upstream of Lake Talquin)	NE	Listed natural community is inconsistent with the project habitat
Mussels	Oval pigtoe	E (CH)		Riverine: medium-sized creeks to small rivers; various substrates; slow to moderate currents	NE	Listed natural community is inconsistent with the project
Mussels	Purple bank climber	Т (СН)		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.	NE	habitat Listed natural community is inconsistent with the project habitat
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: Econfina (Creek), Chipola, and Ochlockonee (upstream of Lake Talquin) Bivers	NE	Listed natural community is inconsistent with the project habitat
	Ashe's magnolia		E	Terrestrial: slope and upland hardwood forest, ravines.	NE	Listed natural community is inconsistent with the project
Plante	Dent golden aster	ce	E	Terrestrial: pine forest, ruderal.	NE	Listed natural community is inconsistent with the project
lanta	Ducktnorn		E	Palustrine: bottomland forest, dome swamp, floodplain forest Terrestrial: upland hardwood forest.	NE	Listed natural community is inconsistent with the project
lante	Contraction of the sedge	се		Palustrine: hydric hammock, floodplain forest Terrestrial: slope forest.	NE	Listed natural community is inconsistent with the project
141 113	CURWOOD			Estuarine: tidal marsh Palustrine: reshwater tidal swamp, hydric hammock.	NE I	Listed natural community is nconsistent with the project

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Masks Sands

NRDA ROUTING SLIP

Comments:

Date: Received Due Imm, Don Phillips, Catherine Ambrose, Lydia-OK lisa lehnhoft Kelly, Patty 312114 OK Lehnhoff, Lisa Mitchell, Harold Negron-Ortiz, Vivian Pursifull, Sandy Yanchis, Kristi Concurrent NUAR for pipil is pelca contryent on Conservation. Measure written within

Please include revisions on page 4. Hacey, It is importance that signage is included + post-project evaluation of conservation measures are in Place. THX, CSA