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

Subject: Informal Consultation Request for the Proposed Early Restoration Project - Beach Enhancement at Gulf Islands National Seashore, 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, 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 begin 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 Gulf Islands National Seashore, Florida. DOI, acting through the Service, will be the lead 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 early restoration project and we wish to engage in such consultation. Accordingly, we have reviewed the proposed early restoration project - Beach Enhancement at Gulf Islands National Seashore, Florida, for potential impacts to listed, proposed, and candidate species and critical habitats in accordance with section 7 of the ESA and 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 (NMFS) for species where ESA regulatory authority is shared (i.e., sea turtles and Gulf sturgeon) and in regards to Marine Mammal Protection Act (MMPA) of 1972, as amended (16 U.S.C. 1461 *et seq.*).

We determined the proposed project may affect, but is not likely to adversely affect the following species: Northwest Atlantic Distinct Population Segment loggerhead turtle, leatherback turtle, hawksbill sea turtle, green sea turtle, Kemp's Ridley sea turtle, piping plover, red knot, Perdido Key beach mouse, and West Indian Manatee. In addition, we determined the proposed project will not result in adverse modification of designated critical habitat for the Perdido Key beach mouse and piping plover, or proposed critical habitat for the Northwest Atlantic Distinct Population Segment of loggerhead turtles. We have provided our analysis in the attached Biological Evaluation. 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

SOUTHEAST REGION
INTRA-SERVICE SECTION 7
BIOLOGICAL EVALUATION FORM

Originating Person: Holly Herod, Mark VanMouwerik
Telephone Number: Holly Herod 404 679-7089, Mark VanMouwerik 970-225-3507
E-Mail: holly_herod@fws.gov; mark_vanmouwerik@nps.gov
Date: September 11, 2013

PROJECT NAME (Grant Title/Number): Beach Enhancement at Gulf Islands National Seashore

I. **Service Program:** Self explanatory
- **_X__ 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**
- **___ Refuges/Wildlife**

II. **State/Agency:** Florida / National Park Service, Gulf Islands National Seashore

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

IV. **Location (see attached Figures):**

A. **Ecoregion Number and Name:** Ecoregion Number 30- Northeast Gulf Watersheds

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

B. **Section, township, and range (or latitude and longitude):** See attached Figures.
Perdido Key portion of project: S33 T3S R31W (approximate)
Fort Pickens portion of project: S22 T3S R30W (approximate)
Santa Rosa portion of project: S5 T3S R27W (approximate)

C. **Distance (miles) and direction to nearest town:**
Perdido Key portion of project is located in Perdido Key, Florida
Fort Pickens portion of project is located in Pensacola Beach, Florida
Santa Rosa portion of project is located in Pensacola Beach, Florida

V. **Description of Proposed Action (attach additional pages as needed):**
This project involves removing fragments of asphalt and road-base material (limestone aggregate and some chunks of clay) that have been scattered widely over the Fort Pickens, Santa Rosa, and

Perdido Key areas of the Florida District of Gulf Islands National Seashore. These materials originated from roads damaged during several storms and hurricanes since 1995 and were spread over an area of barrier island habitat hundreds of acres in size and over 14 miles long. These materials are found in both vegetated and un-vegetated areas and in both flat open beaches and dune areas. Additionally, there is also a small, two-mile-long area on the Gulf side of the Fort Pickens area where sections of the old road and some miscellaneous chunks of concrete may exist in the intertidal zone where visitors sometimes swim. Fragments and materials range in shape and size from large slabs down to brick and pea size (i.e., from approximately 10 feet in size down to a quarter of an inch).

Over the years, areas covered with asphalt fragments and road base materials have been observed by park staff. Observational surveys indicate at least 400 acres have asphalt fragments. In reality, however, these materials could exist over a much greater area. This is due to the highly dynamic nature of the area such that, since these observations were made, wind and water have been continually uncovering and moving these materials over an area as great as approximately 2,046 acres. This includes 1,303 acres over 7.3 miles in the Santa Rosa area, 631 acres over 5.0 miles in the Fort Pickens area, 99 acres over 2.0 miles in the Perdido Key area (west of Fort Pickens, across the mouth of the bay), and approximately eight acres in the inter- and sub-tidal zones on the Gulf side of the Fort Pickens area (See attached Figures). The extent to which cleanup will occur over all of these areas is unknown, but will depend on the project funding available. Therefore, we are requesting consultation to cover cleanup of the total area.

Based on initial observations, the majority of the terrestrial area to be cleaned is assumed to have materials only at the surface. However, it is likely there are materials up to approximately 6 inches deep and in mounds up to 3 feet deep throughout this area of "surface deposit". In addition, we expect asphalt materials to be or extend several feet deep, including, possibly, the intertidal zone at the Fort Pickens area. Buried materials may be removed to the extent practical to ensure that these materials do not "daylight" in the future due to wind or water erosion.

The sand-asphalt-fragment-road-base mixture in terrestrial habitats will likely be sifted in place in order to remove the asphalt and leave the sand behind. However, it could also be gathered and temporarily stock piled at a staging/processing area nearby (on an existing, disturbed area such as a parking lot) and sifted, in which case the clean sand would then be re-deposited back at the original site. The separated asphalt and road base will be disposed of or recycled off-site.

The method for removing the material will likely involve primarily mechanized equipment, supplemented by small crews using hand tools. Mechanized equipment such as dump trucks, roll-off dumpsters, backhoes, tractors with sifters and front-end loaders, "beach techs" and "pushable" sifters could be used. This equipment will be staged in existing parking lots and will access the beach via existing roads and along already hard-packed sand corridors. Where asphalt is present and must be removed from sensitive habitats, hand tools (rakes, shovel, scoops, buckets, screens, etc.) may be used. An on-site biologist will determine if and when asphalt will be removed from sensitive habitats and if mechanized equipment may be used without impact or if hand tools are necessary.

Specifically, mechanized equipment will be used in un-vegetated areas which dominate the areas requiring asphalt removal. Areas that are vegetated (e.g., the dunes and beach mouse habitat) will either not be cleaned or will be cleaned using hand tools. Mechanized equipment will avoid

dunes by at least 10 feet from the toe of the dune, except at designated access points. Much of the area, however, is sparsely vegetated and does not represent beach mouse habitat. In these areas, resource managers will determine whether or not the vegetation is dense enough to warrant avoiding with mechanized equipment and treating with hand tools. If it is sparsely vegetated (i.e., there are only a few plants scattered here and there), then mechanized equipment will be used which will cause collateral damage to these plants. We assumed that 10% of the total area to be cleaned has sparse vegetation which will be destroyed during the asphalt removal process. We will re-plant these areas with like numbers of native plants. This re-vegetation work could include removing/preserving/replanting plants, seed and/or cutting collection, plant propagation, delivery and installation of plant material, protection, monitoring, and re-planting if needed.

We expect to use a large backhoe with a long arm and bucket to remove any asphalt and concrete present in the small, eight-acre area inter- and sub-tidal zone. A portable (wheeled or tracked) dredger may also be used. No work will be done from boats or barges. The backhoe would operate near the mean low tide line and reach out perhaps five to fifteen feet – but no more than 20 feet– to retrieve materials. Maximum depth of material removal from these zones is not known but will be determined based on technical feasibility, cost effectiveness, and the likelihood of the materials becoming uncovered in the reasonably near future (e.g., in the 0-3 feet deep range). Sand will be scooped up with the pieces of asphalt or concrete and deposited on the beach just above the surf line where the pieces – and incidental amounts of sand only – would be taken off-site and disposed at a permitted location. Remaining sand would be returned to the intertidal zone at the approximate removal location. As such, negligible amounts of sand would be permanently removed from the intertidal zone and no other changes to the beach or shoreline are expected. Likewise, no changes are expected to erosion or accretion rates.

Asphalt removal activities will occur mostly during the late summer, fall, and winter months when disturbance of migratory birds and visitors will be minimal. Specifically, asphalt removal activities will *not* occur between March 15 and August 15 since this is the height of the bird nesting season. Cleanup in the intertidal zone will *not* take place until all known turtle nests in the vicinity have hatched. These seasonal work restrictions leave approximately seven months per year for fieldwork. Asphalt removal activities are expected to take up to four seasons, and re-planting up to three seasons, making the total project duration approximately five years. Depending on how widely the materials are found to be distributed, how long it takes to clean them up, and actual cleanup costs, the area cleaned could be as small as approximately 75 acres per seven-month year, or as large as approximately 400 acres per year.

VI. Species and Habitat:

This project will be staged from existing parking lots within the project area. Equipment will be moved from staging areas to active work areas via existing roads when possible. Care will be taken to avoid sensitive dune areas (including moderate to heavily vegetated areas) both when moving from the staging to work areas and when actively working. The habitats within which the project will take place include dunes, beaches, and the near shore and intertidal zones. Brief descriptions of each habitat type are listed below. Designated critical habitat for piping plover, Perdido Key beach mouse, and gulf sturgeon is present in the action area. Additionally, proposed critical habitat for the northwest Atlantic distinct population segment of loggerhead sea turtle is also present in the action area (see discussion below Table VI-B).

Nearshore and intertidal beach: The nearshore (the area just below the low tide line which is always inundated), and intertidal beach (the area between high and low tides) zones are highly dynamic with constant wave action which creates a turbulent environment that prohibits rooted vegetation from taking hold. This environment is thus confined to a detritus ecosystem where primary productivity is limited to unicellular algae. Birds, including piping plover and red knot, use these zones for foraging and feeding. Sea turtles traverse this area to nest on the beach. Gulf sturgeon may forage in the nearshore environment. A large backhoe with a long arm and bucket (or grapple) on the end will be used in this area. No work will be done from boats or barges. The backhoe would operate near the mean low tide line and reach out perhaps five-to-fifteen feet – but no more than 20 feet– to retrieve materials. The backhoe will operate on compacted sand and will not actually rest within the intertidal zone.

Beach: The area between the high tide line and the primary dune, beaches are controlled in large part by the frequency of storms and are only slightly more stable than the nearshore and intertidal areas. Beaches are primarily devoid of vegetation, with colonization being dependent on the amount of time between severe storms. Birds use this zone for foraging, feeding, and resting. Sea turtles use this area to nest. Beach mice may traverse wrack lines and vegetation while foraging and moving between dune systems. Mechanized equipment will be used on beaches where there is sparse or no vegetation. In areas where vegetation is sparse to moderate, small, "push-behind" sifters will be used.

Dunes: The areas behind the beach, dunes are formed when wind and waves move sand leeward and vegetation begins to colonize. Typically, dunes which are farther away from the shore (backdunes) are more densely vegetated than those closer to shore (primary dunes). Dunes vary in elevation and dunes with higher elevations typically contain scrub vegetation which serves as refugia during storm events. A more stable environment than the beach or tidal zones, dune vegetation provides shelter, forage, and camouflage for various animals including birds and beach mice. Hand tools will be used within the dunes; push-behind sifters may also be used in dune toes and other areas of sparse vegetation if resource managers determine it to be appropriate. Large, mechanized equipment will not be used within 10 feet of the toe of the dunes except at designated access points.

A. Include species/habitat occurrence map: Attach a map that identifies species locations within the project area. (see attached Figures)

B. Complete the following table: This species list was derived 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.

Species/Critical Habitat	STATUS[1]	Habitat Description	Habitat Present or PCE'S Present
Fish			
Acipenser oxyrhinchus desotoi (Gulf sturgeon*)	T; CH	RIVERINE: spawning over bedrock, cobble, clean gravel, marl, soapstone, or hard clay substrates ESTUARINE/MARINE: unvegetated sandy shorelines, shallow shoals, and other areas containing mostly sand	Yes;1, 5, 6, 7**
Amphibians and Reptiles			
Caretta caretta (loggerhead turtle)	T, PCH	TERRESTRIAL: sandy beaches; Nesting ESTUARINE/MARINE: unvegetated sandy shorelines, shallow shoals, and other areas containing mostly sand	Yes; 1, 2, 3***
Chelonia mydas (green sea turtle)	E	TERRESTRIAL: sandy beaches; Nesting ESTUARINE/MARINE: unvegetated sandy shorelines, shallow shoals, and other areas containing mostly sand	Yes
Dermochelys coriacea (leatherback turtle)	E	TERRESTRIAL: sandy beaches; Nesting ESTUARINE/MARINE: unvegetated sandy shorelines, shallow shoals, and other areas containing mostly sand	Yes
Eretmochelys imbricate (hawksbill sea turtle)	E	TERRESTRIAL: sandy beaches; Nesting ESTUARINE/MARINE: unvegetated sandy shorelines, shallow shoals, and other areas containing mostly sand	Yes
Lepidochelys kempii (Kemp's Ridley Sea Turtle)	E	TERRESTRIAL: sandy beaches; Nesting ESTUARINE/MARINE: unvegetated sandy shorelines, shallow shoals, and other areas containing mostly sand	Yes
Drymarchon corais couperi (Eastern indigo snake)	T	ESTUARINE: tidal swamp PALUSTRINE: hydric hammock, wet flatwoods TERRESTRIAL: mesic flatwoods, upland pine forest, sandhills, scrub, scrubby flatwoods, rockland hammock, rudera	No
Ambystoma bishopi (reticulated flatwoods salamander)	E	PALUSTRINE: wet flatwoods, dome swamp, basin swamp, TERRESTRIAL: mesic flatwoods (reproduces in ephemeral wetlands within this community)	No
Birds			
Picoides borealis (red-cockaded	E	TERRESTRIAL: mature pine	No

Species/Critical Habitat	STATUS[1]	Habitat Description	Habitat Present or PCE'S Present
woodpecker)		forests	
Charadrius melodus (piping plover)	T; CH	ESTUARINE: exposed unconsolidated substrate MARINE: exposed unconsolidated substrate TERRESTRIAL: dunes, sandy beaches, and inlet areas. Mostly wintering and migrants.	Yes; 1, 2, 3, 4****
Mycteria Americana (wood stork)	E	ESTUARINE: marshes LACUSTRINE: floodplain lakes, marshes (feeding), various PALUSTRINE: marshes, swamps, various	No
Calidris canutus rufa (red knot)	C	ESTUARINE: exposed unconsolidated substrate MARINE: exposed unconsolidated substrate TERRESTRIAL: dunes, sandy beaches, and inlet areas. Mostly wintering and migrants.	Yes
Mammals			
Peromyscus polionotus trissyllepsis (Perdido Key beach mouse)	E; CH	TERRESTRIAL: beach dune, coastal scrub. Sites: Perdido Key State Rec. Area (CH), Gulf Islands National Seashore (CH).	Yes; 1, 2, 3, 4, 5*****
Trichechus manatus (West Indian Manatee)	E	ESTUARINE: submerged vegetation, open water MARINE: open water, submerged vegetation RIVERINE: alluvial stream, blackwater stream, spring-run stream	Yes, adjacent
Clams			
Villosa choctawensis (Choctaw bean)	E	RIVERINE: Small to large creeks and rivers with moderate current over sand to silty-sand substrates. Endemic to the Escambia, Yellow, and Choctawhatchee River drainages of Alabama and Florida.	No
Pleurobema strodeanem (fuzzy pigtoe)	T	RIVERINE: small to medium-sized creeks and rivers with slow to moderate currents in sand and sand with some silt. Endemic to the Escambia, Yellow, and Choctawhatchee River drainages of Alabama and Florida.	No
Fusconaia rotulata (round ebonyshell)	E	RIVERINE: Endemic and restricted to the main channel of the Conecuh River AL, and Escambia River, FL	No

Species/Critical Habitat	STATUS[1]	Habitat Description	Habitat Present or PCE'S Present
Fusconaia escambia (narrow pigtoe)	T	RIVERINE: small to medium-sized creeks and rivers with slow to moderate current over gravel, and gravel mixed with sand or some silt. Endemic to the Escambia and Yellow River drainages of Alabama and Florida	No

[1]STATUS: E=endangered, T=threatened, PE=proposed endangered, PT=proposed threatened, CH=critical habitat, PCH=proposed critical habitat, C=candidate species

** PCE's for Gulf sturgeon: 1) Abundant food items, such as detritus, aquatic insects, worms, and/or mollusks, within riverine habitats for larval and juvenile life stages; and abundant prey items, such as amphipods, lancelets, polychaetes, gastropods, ghost shrimp, isopods, mollusks and/or crustaceans, within estuarine and marine habitats and substrates for subadult and adult life stages; 2) Riverine spawning sites with substrates suitable for egg deposition and development, such as limestone outcrops and cut limestone banks, bedrock, large gravel or cobble beds, marl, soapstone, or hard clay; 3) Riverine aggregation areas, also referred to as resting, holding, and staging areas, used by adult, subadult, and/or juveniles, generally, but not always, located in holes below normal riverbed depths, believed necessary for minimizing energy expenditures during freshwater residency and possibly for osmoregulatory functions; 4) A flow regime (*i.e.,* the magnitude, frequency, duration, seasonality, and rate-of-change of freshwater discharge over time) necessary for normal behavior, growth, and survival of all life stages in the riverine environment, including migration, breeding site selection, courtship, egg fertilization, resting, and staging, and for maintaining spawning sites in suitable condition for egg attachment, egg sheltering, resting, and larval staging; 5) Water quality, including temperature, salinity, pH, hardness, turbidity, oxygen content, and other chemical characteristics, necessary for normal behavior, growth, and viability of all life stages; 6) Sediment quality, including texture and other chemical characteristics, necessary for normal behavior, growth, and viability of all life stages; and 7) Safe and unobstructed migratory pathways necessary for passage within and between riverine, estuarine, and marine habitats (*e.g.*, an unobstructed river or a dammed river that still allows for passage).

*** Proposed PCE's for loggerhead turtles: 1) Suitable nesting beach habitat that: (a) has relatively unimpeded nearshore access from the ocean to the beach for nesting females and from the beach to the ocean for both post-nesting females and hatchlings and (b) is located above mean high water to avoid being inundated frequently by high tides. 2) Sand that: (a) allows for suitable nest construction, (b) is suitable for facilitating gas diffusion conducive to embryo development, and (c) is able to develop and maintain temperatures and moisture content conducive to embryo development. 3) Suitable nesting beach habitat with sufficient darkness to ensure that nesting turtles are not deterred from emerging onto the beach and hatchlings and post-nesting females orient to the sea.

**** PCE's for piping plover: 1) Intertidal flats with sand or mud flats (or both) with no or sparse emergent vegetation. 2) Adjacent unvegetated or sparsely vegetated sand, mud, or algal flats above high tide are also important, especially for roosting piping plovers. Such sites may have debris, detritus, or microtopographic relief (less than 50 cm above substrate surface) offering refuge from high winds and cold weather. 3) Important components of the beach/dune ecosystem include surf-cast algae, sparsely vegetated back beach and salterns, spits, and washover areas. 4) Washover areas are broad, unvegetated zones, with little or no topographic relief, that are formed and maintained by the action of hurricanes, storm surge, or other extreme wave action.

***** PCE's for Perdido Key beach mouse: 1) A contiguous mosaic of primary, secondary scrub vegetation, and dune structure, with a balanced level of competition and predation and few or no competitive or predaceous nonnative species present, that collectively provide foraging opportunities, cover, and burrow sites; 2) Primary and secondary dunes, generally dominated by sea oats that, despite occasional temporary impacts and reconfiguration from tropical storms and hurricanes, provide abundant food resources, burrow sites, and protection from predators; 3) Scrub dunes, generally dominated by scrub oaks, that provide food resources and burrow sites, and provide elevated refugia during and after intense flooding due to rainfall and/or hurricane induced storm surge; 4) Functional, unobstructed habitat connections that facilitate genetic exchange, dispersal, natural exploratory movements, and recolonization of locally extirpated areas; and 5) A natural light regime within the coastal dune

ecosystem, compatible with the nocturnal activity of beach mice, necessary for normal behavior, growth and viability of all life stages.

VII. Determination of Effects:

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

Species/Critical Habitat	Impacts to Species/Critical Habitat
Loggerhead, hawksbill, green, Kemp's Ridley, and leatherback sea turtles	Most of the project work will occur during the late summer, fall and winter months when sea turtles are less likely to be present in the terrestrial environment. However, project work may coincide with sea turtle presence (i.e. Aug. 15 – Nov. 1). During this time construction crews will be operating mechanized equipment on the beach and small crews may be walking along the beach removing some fragments of material by hand. The noise produced by the machinery and movement of the machinery along the beaches may disturb any late nesting Sea Turtles or crush nests. Ruts made by vehicles on shore can potentially trap sea turtles/hatchlings. Removal of large pieces of material may create holes that could potentially trap sea turtles or hatchlings, and hatchlings are vulnerable to being run over. In the table below we describe conservation measures to protect sea turtles. We believe the implementation of these measures will minimize any potential risks to sea turtles to an insignificant and discountable effect.
Proposed Loggerhead Critical Habitat	The PCE's for Loggerhead Critical Habitat include 1) suitable nesting beach habitat with relatively unimpeded nearshore access for mothers and hatchlings, 2) sand that allows for suitable nest construction, facilitates gas diffusion and allows temperature and moisture levels conducive to embryo development, and 3) sufficient darkness to ensure turtles are not deterred from heading seaward. This project may temporarily impede nearshore access (PCE 1) and short- term, temporary driving on the beach could compact sand. Conservation measures below will be implemented to ensure PCEs will continue to support the survival and recovery of Northwest Atlantic DPS of loggerhead sea turtles. Impacts to turtles and critical habitat in-water will be reviewed and consulted on by National Marine Fisheries Service not considered in this consultation.
Eastern Indigo Snake	Eastern Indigo Snakes are located within pine flatwoods, hardwood forests, moist hammocks, and areas surrounding cypress swamps. Neither this species nor habitat type occurs within or adjacent to the action area. Therefore, the proposed project will not affect this species.
Florida Pine Snake	Florida pine snakes inhabit areas of dry sandy soils with relatively open canopies. They are found in pine forests, sand pine scrub and scrubby flatwoods. Neither this species nor habitat type occurs within or adjacent to the action area. Therefore, the proposed project will not affect this species.
Reticulated Flatwoods Salamander	Reticulated Flatwoods Salamanders inhabit longleaf pine flatwoods and slash pine flatwoods that contain wetland areas. Breeding occurs within the wetland areas of the forest and eggs are then laid within the leaf litter and pine needles. Neither this species nor habitat type occurs within or adjacent to the action area. Therefore, the proposed project will not affect this species.
Red-Cockaded Woodpecker	Red-Cockaded Woodpeckers inhabit pine forests and nest in self-made cavities in the trunks of live pine trees. Neither this species nor habitat type occurs within or adjacent to the action area. Therefore, the proposed project will not affect this species.
Piping Plover	Project work will occur during the late summer, fall and winter months over a period of approximately 4 years. Piping Plovers do not nest in the project area, but do use it for wintering habitat. Piping plovers could be startled by work crews, vehicles, and machinery and stop foraging or roosting. However, piping plovers would be expected

to move away from the disturbance to other suitable habitats outside of the disturbance area. There is an abundance of suitable foraging and roosting habitat within GUIS and within 2 miles of the action area in which plovers would be expected to move to or within (i.e., within their normal range of movements). The noise produced by the machinery and movement of the machinery and personnel along the beaches may disturb the Piping Plover present on site, but Piping Plover could avoid disturbance by moving into adjacent areas of unimpacted habitat. Therefore we would not expect startling and temporary displacement to interrupt or have long-term consequences to normal behaviors. Foraging habitats are abundant within GUIS and sand and prey items will be sieved on site and not removed from the area therefore we do not expect indirect effects to piping plover from a loss of prey base. In addition, we do not expect increased visitor use due to the project; rather we expect the project to result in an improved visitor experience. Therefore, we do not expect indirect effects from human use to increase or impact piping plovers. Based upon the normal movement patterns of piping plover and the conservation measures outlined below (allowing movement of their own volition, and watching for the birds), we determined the project may affect but is not likely to adversely affect piping plover.

Piping Plover critical habitat

Areas containing habitat components that are essential for primary biological needs of foraging, sheltering, and roosting are considered critical habitat. In the long term, construction activity impacts should be largely beneficial to critical habitat, with cleanup improving long-term foraging, sheltering, and roosting resources. Cleanup will improve the PCEs of sparsely vegetated intertidal flats, flats above high tide, back beach and washover areas by removing roadbed debris, thus returning the site to a more natural condition. During project work, construction crews will be operating mechanized equipment on the beach and small crews may be walking along the beach removing fragments of material by hand. Sand will be sifted in place and all sand and non-roadbed-related debris will be returned as near as possible to its original location. The vast majority of the material to be removed is expected to cause surficial disturbance only. No significant change to the structure of existing landscape features (including PCEs) is expected, and should changes occur, they will occur because of the removal of foreign materials and should not affect the way landscape features are formed and maintained in the future. Further, the project is not anticipated to alter the way any coastal processes (such as washovers and spits) occur. During project implementation machinery on the beach may compact sand and/or create divots where asphalt is removed, however this is not expected to change plant densities in any way, and where plants are removed, appropriate native plants will be planted in their place. Thus no short or long term effects to piping plover critical habitat are expected to occur.

Wood Stork

Wood Storks are wading birds that build their nests in trees located in water. They inhabit hardwood swamps, cypress domes/strands, mangroves, and sloughs. Nesting occurs during the fall, winter, and spring months. Neither this species nor habitat type occurs within or adjacent to the action area. Therefore, the proposed project will not affect this species.

Red Knot

Project work will occur during the late summer, fall and winter months over a period of approximately 4 years. During project work, construction crews will be operating mechanized equipment on the beach and small crews may be walking along the beach removing fragments of material by hand. Red Knots could be startled by work crews, vehicles, and machinery and stop foraging or roosting, but Red Knots could avoid disturbance by moving into adjacent areas of unimpacted habitat. Therefore we would not expect startling and temporary displacement to interrupt or have long-term consequences to normal behaviors. Foraging habitats are abundant within GUIS and sand and prey items will be sieved on site and not removed from the area therefore we do not expect indirect effects to piping plover from a loss of prey base. In addition, we do not expect increased visitor use due to the project; rather we expect the project to result in an improved visitor experience. Therefore, we do not expect indirect effects

	from human use to increase or impact Red Knots. Based upon anticipated movement patterns of red knot and the conservation measures outlined below (allowing movement of their own volition, and watching for the birds), we determined the project may affect but is not likely to adversely affect red knot.
Perdido Key Beach Mouse	Perdido Key Beach Mice inhabit the sand dunes along Perdido Key, but not other locations considered within this project. During project work, construction crews will be operating mechanized equipment on the beach and small crews may be walking along the beach removing fragments of material by hand. Machinery will not be used within dune habitats used by the mice; however crews with hand tools could be used. The noise produced by the machinery and movement of the machinery and people along the beaches may disturb the Perdido Key Beach Mice, vibrate the dunes, collapse burrows, or cause adults to temporarily abandon burrows leaving juveniles in the nest. It is possible that equipment could be left in place overnight and mice could shelter under or around it.
Perdido Key Beach Mouse Critical Habitat	PCE's for PKBM critical habitat largely refer to landscape level (including vegetation and dune structure and habitat connections). This project will not affect the area on a landscape level. Work will occur in small areas and move from one area to the other as asphalt and aggregate material are removed. It is unlikely that this work will alter the landscape mosaic of vegetation, dunes, and other habitat connections with which the PCEs are concerned. Where vegetation is damaged it will be replaced, though vegetation in mouse habitat is expected to be avoided. The PCE of natural light regimes will not be affected because all work will occur within daylight hours.
West Indian Manatee	The majority of this project is to be accomplished on shore; however, a portion of this project will occur in the intertidal zone on the Gulf side of the Fort Pickens area. Due to the depth of water within the intertidal zone, lack of submerged aquatic vegetation, and rarity of encountering West Indian Manatees at Gulf Island National Seashore, it is unlikely that West Indian Manatees will be present in the action area. In-water asphalt removal will not involve the use of boats or barges. Construction equipment such as a backhoe with a long arm and bucket, located on shore near the mean low tide line, may be used to retrieve materials. Turbidity of the water within the intertidal zone may increase during the project work within this area and the noise from the machinery may affect species within the intertidal zone and adjacent areas. If transiting the area manatees could be startled by in-water removal or have difficulty navigating due to turbidity. We expect West Indian Manatee to naturally avoid any areas of increased turbidity as they are not known to use turbid habitats. We do not expect this avoidance of the project area to result in changes to normal behaviors. Also, because of the wave action in this area, natural background levels of turbidity are already high.
Choctaw Bean	Choctaw Beans inhabit freshwater rivers and are endemic to the Choctawhatchee River drainage. Neither this species nor habitat type occurs within or adjacent to the action area. Therefore, the proposed project will not affect this species.
Fuzzy Pigtoe	Fuzzy Pigtoes inhabit freshwater rivers and are endemic to the Escambia, Yellow, and Choctawhatchee River drainages. Neither this species nor habitat type occurs within or adjacent to the action area. Therefore, the proposed project will not affect this species.
Round Ebonyshell	Round Ebonyshells inhabit freshwater rivers and are endemic to the Escambia River drainage. Neither this species nor habitat type occurs within or adjacent to the action area. Therefore, the proposed project will not affect this species.
Narrow Pigtoe	Narrow Pigtoes inhabit freshwater rivers and are endemic to the Escambia and Yellow river drainages. Neither this species nor habitat type occurs within or adjacent to the action area. Therefore, the proposed project will not affect this species.

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

SPECIES/ CRITICAL HABITAT	ACTIONS TO MINIMIZE IMPACTS
Sea Turtles (Loggerhead Turtle, Green Sea Turtle, Leatherback Turtle, Hawksbill Sea Turtle, Kemp's Ridley Sea Turtle)	• Construction activities will be limited to the late summer, fall and winter months when sea turtles are less likely to be nesting and hatchlings are less likely to be leaving the nest. • GUIS will increase turtle crawl and nest monitoring in areas between May 1 and Aug 31 in an effort to locate and identify all crawls, false crawls and nests. These nests will be marked for avoidance (following standard procedures) by foot traffic and vehicles. The park fails to identify less than one nest in every two breeding seasons (personal communication with Mark Nicholas, Biologist, GUIS, 8/27/2013); therefore, we anticipate being able to avoid all nests if asphalt removal must occur in sea turtle nesting habitats prior to November. • In areas where sea turtle nests are present, cleaning will not begin until after the nest hatches. • Vehicles and equipment will be driven to avoid nests by a minimum of 10 feet. • All construction personnel will be notified of the potential presence of sea turtles both on the beach and in the water and will be reminded of the need to avoid sea turtles. • All construction personnel will be notified of the criminal and civil penalties associated with harassing, injuring, or killing sea turtles. • In areas where adults or hatchlings could be present and vehicles or mechanical equipment maybe used, a pre-operational survey will be conducted to ensure no adults or hatchlings are present or in the path of the equipment. • Train/instruct all construction personnel of what they are to do in the presence of a sea turtle. • Construction activities will occur during daylight hours and noise will be kept to the minimum feasible. • All ruts created during construction activities involving operation of mechanized equipment will be leveled in order to prevent trapping of sea turtles. • All holes created from removal of material will promptly be filled in order to prevent entrapment of sea turtles.
Proposed Critical Habitat Loggerhead	• To avoid impacts to PCE 1 regarding relatively unimpeded nearshore access for nesting females and hatchlings, no work will be completed in the nearshore area until all known nests in the vicinity have hatched. In addition, park staff will monitor for nests, crawls, and nesting females from May 1 and Aug 31 in an effort to locate and identify all crawls, false crawls and nests. • Short- term, temporary driving on the beach could compact sand, the driving will between nesting seasons allowing for the full natural cycle of wind/rain erosion and accretion of sand to occur. Therefore, this project should not in any way change the nature of the sand in the project area (PCE 2). Instead, the project will improve the physical conditions of sand in the project area by removing foreign materials. The project will be sifted in place, thus not removing sand.

SPECIES/ CRITICAL HABITAT	ACTIONS TO MINIMIZE IMPACTS
	• Work on this project will only occur during daylight hours and will therefore not affect the light regime needed for post-nesting females and hatchlings to orient to the sea.
Nesting Shorebirds and Seabirds (including resting/foraging Piping Plover and red knot)	• All construction personnel will be notified of the potential presence of nesting shorebirds and seabirds within the project area. • All construction personnel will be instructed and trained in the protection of shorebirds and seabirds. • Construction activities will be conducted in accordance with the Florida Fish and Wildlife Conservation Commission's guidelines developed to protect nesting shorebirds. • Construction personnel will be notified of the criminal and civil penalties associated with harassing, injuring, or killing shorebirds and seabirds. • Construction activities will be conducted during the late summer, fall and winter months in order to avoid much of the nesting shorebird season. However, this time period is when piping plovers and red knots would be present to forage and rest. • If piping plovers or red knots are present, work will not occur until the birds have moved from the area by 150 feet. • Construction noise will be kept to the minimum feasible. • All construction personnel will be notified that if equipment is left onsite overnight, they should walk around the equipment and look for signs of birds before moving the equipment, contacting a qualified biologist if signs of birds presence are detected.
Piping Plover Critical Habitat	• The project will not remove sand from intertidal, sand, or mud flats. • The project will occur in very localized locations for very short periods of time, allowing for intact sand, mud, and algal flats, as well as surf-cast algae, back beach, salterns, spits and washover areas to remain nearby as others are disturbed.
Perdido Key Beach Mouse	• All construction personnel will be notified of the potential presence of Perdido Key Beach Mice and reminded of the criminal and civil penalties associated with harassing, injuring, or killing Perdido Key Beach Mice. • To minimize impacts to PKBM in burrows, a qualified biologist will survey the project site before work commences and flag potential burrows and tracks so that they can be avoided. • Only hand tools will be used within a five-foot radius of a burrow opening or any observed mice tracks. • Mechanized equipment will not be used to remove the materials within areas known to support beach mice. Small crews, guided by a biologist, may remove product with hand tools to some extent. • Equipment and vehicles will avoid the dune by 10 foot of the toe of the dune. • Construction noise will be kept to the minimum feasible. • Construction will occur during the day to minimize disturbance to nocturnal patterns. • Equipment, vehicles, and project debris will not be stored in a manner or location where it could be colonized by mice. • All construction personnel will be notified that if equipment is left onsite overnight, they should walk around the equipment and look for signs of mice before moving the equipment, contacting a qualified

SPECIES/ CRITICAL HABITAT	ACTIONS TO MINIMIZE IMPACTS
	biologist if signs of mouse presence are detected.
Perdido Key Beach Mouse Critical Habitat	• The project will occur in very localized locations for very short periods of time, allowing the mosaic of primary, secondary scrub vegetation and dune structure to remain unchanged. • When plants are destroyed during the project, appropriate native plants will be planted in the same location to minimize effects to the vegetative composition of the area. • Only hand tools will be used within the dunes, reducing possible impacts to burrows and reactions to noise and vibration. • No mechanized equipment will be used or left in the dunes. • Project work will only occur during daylight hours, as such it will not alter the natural light regime of the area.
West Indian manatee	• All construction personnel will be notified of the potential presence of West Indian Manatee in the water and reminded of the criminal and civil penalties associated with harassing, injuring, or killing West Indian Manatees. • All workers will be educated that there could be West Indian manatees in the water and will be advised to look for manatees and, if observed, wait until manatees leave the area to put the equipment in the water. • In-water construction activities will be limited to the late summer, fall and winter months when West Indian Manatees are less likely to be present within the construction area. Care will be taken when lowering equipment into the water and the sediment in order to ensure that no harm is caused to West Indian Manatee that may potentially be in the water within the construction area. • Should a West Indian Manatee come within 50 foot of the project area during construction activities, work would immediately cease until the West Indian Manatee has moved away from the project area on its own. • Construction noise will be kept to the minimum feasible.

VIII. Effect Determination and Response Requested:

SPECIES/ CRITICAL HABITAT	DETERMINATION[1]			RESPONSE REQUESTED
	NE	NLAA	AA	
Gulf Sturgeon	___	___	___	Consultation with NMFS
Critical Habitat Gulf sturgeon	___	___	___	Consultation with NMFS
Loggerhead Turtle		X		Concurrence – Terrestrial habitats; Consultation with NMFS in estuarine/marine habitats
Proposed Critical Habitat Loggerhead		X		Conference
Green Sea Turtle		X		Concurrence – Terrestrial

SPECIES/ CRITICAL HABITAT	DETERMINATION[1]			RESPONSE REQUESTED
	NE	NLAA	AA	
				habitats; Consultation with NMFS in estuarine/marine habitats
Leatherback Turtle		X		Concurrence – Terrestrial habitats; Consultation with NMFS in estuarine/marine habitats
Hawksbill Sea Turtle		X		Concurrence – Terrestrial habitats; Consultation with NMFS in estuarine/marine habitats
Kemp's Ridley Sea Turtle		X		Concurrence – Terrestrial habitats; Consultation with NMFS in estuarine/marine habitats
Eastern Indigo Snake	X			Concurrence
Gopher Tortoise	X			Concurrence
Florida Pine Snake	X			Concurrence
Alligator Snapping Turtle	X			Concurrence
Reticulated Flatwoods Salamander	X			Concurrence
Red-cockaded Woodpecker	X			Concurrence
Piping Plover		X		Concurrence
Critical Habitat Piping plover		X		Concurrence
Wood Stork	X			Concurrence
Red Knot		X		Conference
Perdido Key Beach Mouse		X		Concurrence
PKBM critical habitat		X		Concurrence
West Indian Manatee		X		Concurrence
Choctaw Bean	X			Concurrence
Fuzzy Pigtoe	X			Concurrence
Round Ebonyshell	X			Concurrence
Narrow Pigtoe	X			Concurrence

IX. 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.

X. 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
Wading birds (herons, egrets, ibises, wood stork, American flamingo)	Foraging, feeding, resting, roosting, nesting	Wading birds primarily forage and feed at the water's edge. 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 nest and roost in trees or shrubs (e.g. pines, *Bacchurus* and mangroves), which occur outside the project area. In addition, this project will not take place during nesting season; therefore this project is not anticipated to impact nesting.
Shorebirds (plovers, oystercatchers, stilts, sandpipers)	Foraging, feeding, resting, roosting, nesting	Shorebirds 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 nest and roost in the dunes. However, this project will not take place during nesting season; therefore it is not anticipated to impact nesting.
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. However, this project will not take place during nesting season; therefore it is not anticipated to impact nesting.
Raptors (osprey, hawks, eagles, owls)	Foraging, feeding, resting, roosting, nesting	Raptors forage, feed, and rest 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. Most raptors are aerial foragers and soar long distances in search of food. The areas in the park where these birds roost and nest are not within the project area.
Goatsuckers (nighthawks,	Foraging, feeding,	Goatsuckers forage, feed, rest, and roost in the project area.

Species*	Behavior	Species/habitat Impacts
whip-poor-will, Chuck-will's widow)	resting, roosting, nesting	However, they are nocturnal/crepuscular and therefore not active during the project work period. They nest in thickets and woodlands, which are not included in the project area. In addition, this project will not take place during nesting season; therefore it is not anticipated to impact nesting.
Waterfowl (geese, swans, ducks, loons, and grebes)	Foraging, feeding, resting, roosting, nesting	Waterfowl 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 and nest in low vegetation. However, this project will not take place during nesting season; therefore it is not anticipated to impact nesting.
Doves and pigeons	Foraging, feeding, resting, roosting	Doves and pigeons could forage, feed, rest, and roost in the project area. However, they are unlikely to utilize sandy habitat. In addition, this project will not take place during nesting season; therefore it is not anticipated to impact nesting.
Rails and coots	Foraging, feeding, resting, roosting, nesting	Rails and coots forage, feed, rest, and roost in the project area. As such, they may be impacted locally and temporarily by the project. However they are most likely to favor marshy areas. It is expected that they would be able to move to another nearby location to continue foraging, feeding and resting if disturbed by the project. These birds primarily roost and nest in marshes, which are not within the project area. In addition, this project will not take place during nesting season; therefore it is not anticipated to impact nesting.

*Gulf Islands National Park lists 345 species of birds known to occur in within the park. The above table lists species guilds and the genus type for those most likely to occur in the project area. The full list of species occurrences can be found at:
http://www.nps.gov/guis/naturescience/loader.cfm?csModule=security/getfile&pageID=525505

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
Wading birds (herons, egrets, ibises, wood stork, American flamingo)	Care will be taken to minimize noise and vibration near areas where foraging or resting birds are encountered. All disturbance 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.
Shorebirds (plovers, oystercatchers, stilts, sandpipers)	Care will be taken to minimize noise and vibration near areas where foraging or resting birds are encountered. All disturbance 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.

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 disturbance 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.
Raptors (osprey, hawks, eagles, owls)	No work will occur within 500 feet of any bald eagle nests. Care will be taken to avoid working near other raptor nests, and to minimize noise and vibration in their vicinities. Roosting should not be impacted because the project will occur during daylight hours only, and because the areas where these birds nest are not within the project area. A staff biologist will advise the contractor of the nesting status of all identified raptor nests near the project area and approve of work in the vicinity.
Goatsuckers (nighthawks, whip-poor-will, Chuck-will's widow)	All work will be done during daylight hours. These birds are nocturnal/crepuscular and as such, should not be foraging or feeding while work occurs. Care will be taken to minimize noise and vibration near habitat where these birds are resting or roosting. Nesting will not be impacted because the project will not occur during nesting season.
Waterfowl (geese, swans, ducks, loons, and grebes)	Care will be taken to minimize noise and vibration near areas where foraging or resting birds are encountered. All disturbance 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.
Doves and pigeons	It is unlikely that doves and pigeons will be impacted by this project.
Rails and coots	Care will be taken to minimize noise and vibration near areas where foraging or resting birds are encountered. All disturbance 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.

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

Holly Blaboch Herod 9/27/13
Signature (originating station - preparer) **date**

DOI Case Mgt + Intra Esa Coord.
Title

Debora L McCl 10/2/13
Signature (originating station) **date**

DOI Deputy Case Manager
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 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

XII. 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):

_____	_____
Signature	**date**
_____	_____
Title	**office**