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

To: Field Supervisor Mississippi Field Office

From: Deputy Deepwater Horizon, Department of the Interior Natural Resource Damage Assessment and Restoration (NRDAR), Case Manager Deborah L. [illegible]

Subject: Informal Consultation Request for the proposed Pascagoula Beachfront Promenade, Mississippi

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 the Trustee for the state of Mississippi, the Mississippi Department of Environmental Quality, 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 (NOAA) 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 above-referenced project is being evaluated by the Trustees as a potential early restoration project. If the project is proposed in a draft restoration plan, and then selected by the Trustees, after publication of the plan and consideration of public comment, and final agreement is reached with BP, it will be implemented by the state of Mississippi Department of Environmental Quality (Trustee). 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 this project and we wish to engage in such consultation (and conference). Accordingly, we have reviewed the proposed Pascagoula Beachfront Promenade, Mississippi for potential impacts to listed, proposed, and candidate species, and proposed and designated critical habitats in accordance with section 7 of the ESA. We have determined that the proposed project may affect, but is not likely to adversely affect piping plover (*Charadrius melodus*) or red knot (*Calidris canutus rufa*) 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. The attached Biological Evaluation form contains our analysis under the ESA, BGEPA, and MBTA. There is no in-water work, so no marine resources would be impacted by the project. NOAA has reviewed the project and agreed that there are no marine species regulated under ESA or the Marine Mammal Protection Act (MMPA) of 1972, as amended (16 U.S.C. 1461 *et seq.*), that would be impacted by the project.

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

Attachment

SOUTHEAST REGION
INTRA-SERVICE SECTION 7
BIOLOGICAL EVALUATION FORM

[Federally endangered, threatened, and candidate species]

Originating Person: Holly Herod; prepared by Stephen Parker (representing MS DEQ)
Telephone Number: Holly Herod: 404-679-7089; Stephen Parker: 228-224-9057
E-Mail: Holly_Herod@fws.gov; sparker@adaptivemngmt.com
Date: August 28, 2013; Revised October 4, 2013

PROJECT NAME (Grant Title/Number): Pascagoula Beachfront Promenade (Early Restoration Project)

I. Service Program:

_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: Mississippi Department of Environmental Quality

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

IV. Location (attach map): *See Figure 1*

A. Ecoregion Number and Name: Region 4, Southeast

B. County and State: Jackson County, Mississippi

C. Section, township, and range (or latitude and longitude): Approximate project centerpoint is 30.34331667,-88.54729444. See map for more detailed project location.

D. Distance (miles) and direction to nearest town: Project is located in the City of Pascagoula, Mississippi.

V. Description of Proposed Action and Habitats in the Action Area (attach additional pages as needed):

Introduction and Background

The proposed Pascagoula Beachfront Promenade project is intended to restore lost recreational opportunities resulting from the Deepwater Horizon oil spill and related response action which severely restricted human activity including access to Pascagoula's beachfront recreation by local residents and regional visitors for an extended period of time. Specifically, the proposed project would enhance recreational shoreline access via the construction of a lighted concrete beachfront pedestrian pathway adjacent to a sand beach in Pascagoula, Mississippi. Early restoration funds would be used to help complete a portion of a two-mile, 10 foot wide lighted concrete pathway complete with amenities.

Previous NEPA/Early Restoration Funding: In 2011, the City of Pascagoula prepared an Environmental Assessment (EA) for the Department of Housing and Urban Development for the Beachfront Promenade Project (HUD, 2011) for a portion of the Pascagoula Beachfront Promenade project. For the purposes of this discussion, the project is divided into 3 segments (See Table 1; Figure 1):

Eastern Segment: A 2,800 linear ft. segment from the eastern project terminus to Oliver Street; the segment is completed and was authorized by the HUD EA.

Middle Segment: A 7,700 linear ft. segment Oliver Street to the eastern terminus of Point Park that would be constructed using early restoration funds and was authorized by the 2011 HUD EA.

Western Segment: A 500 linear ft. segment in the vicinity of Point Park that would be funded by early restoration and was not reviewed under the HUD EA.

Proposed Project Area: An 8,200 linear ft. segment from Oliver Street to Point that is the early restoration project; funds would also be used to construct amenities and water tie ins.

The early restoration NEPA review adopts the 2011 HUD EA and focuses on a NEPA analysis of the western segment of the project that has not been reviewed. Funding would be used for the entire 8,200 linear ft. project area which includes the middle and western segment (Table 1).

Table 1 - Early Restoration and Compliance for the Pascagoula Beach Promenade

Project Area	Length	NEPA Review/Permitting	Early Restoration Funding
Eastern Portion	2,800 feet	HUD EA/MCWPA permit	No
Middle Portion	7,700 feet	HUD EA/MCWPA permit	Yes
Western Portion	500 feet	No NEPA review/not authorized under MCWPA	Yes

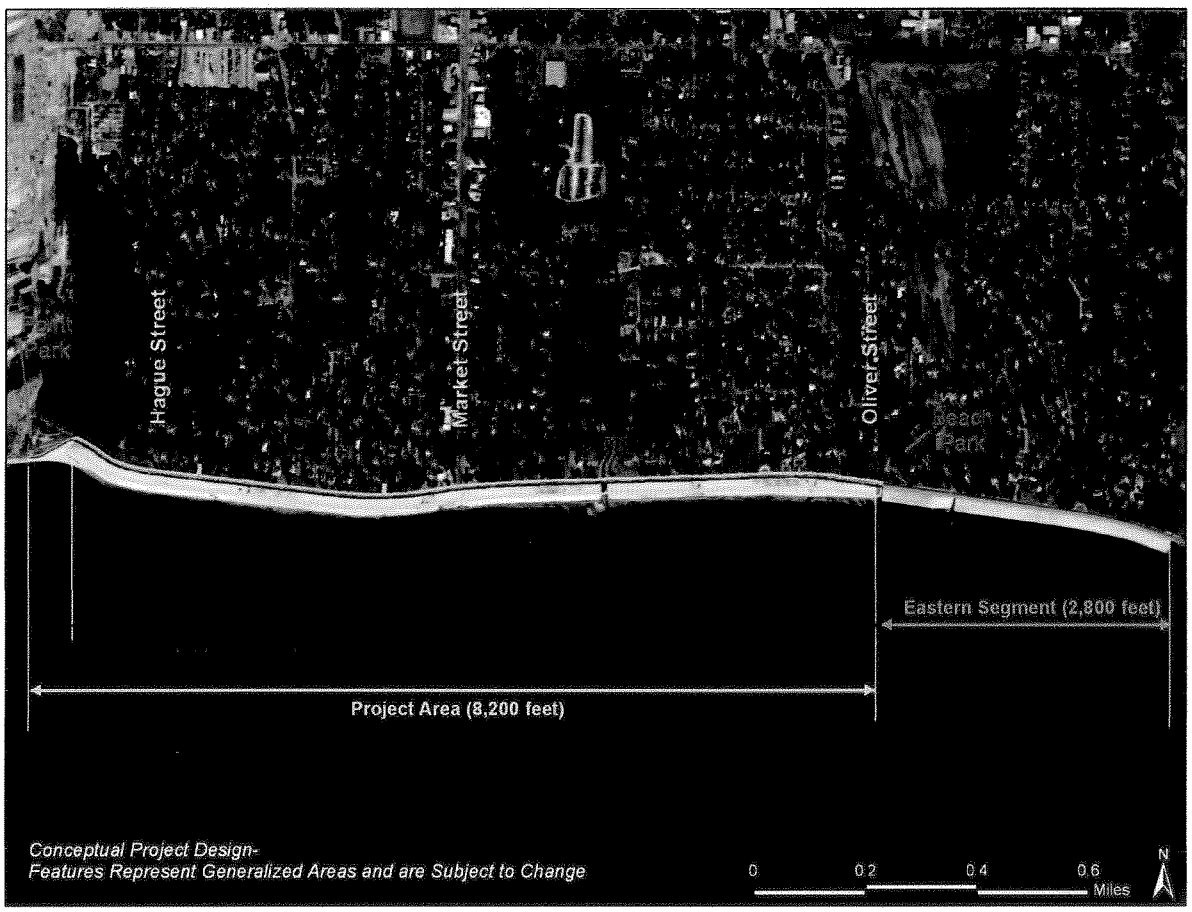


Figure 1: The Pascagoula Beachfront Promenade Project Segments-Conceptual Project Design

In 2011, the City of Pascagoula prepared an Environmental Assessment (EA) for the Department of Housing and Urban Development for the Beachfront Promenade Project (HUD, 2011). The HUD EA covers the 10,500 linear feet of the promenade (eastern and middle segments). The HUD EA does not cover the western 500 feet of the promenade, utility tie-ins beneath Beach Boulevard at Buena Vista Street and Bernard Street, or amenities to be placed on the beach south of the Promenade pathway. The HUD EA's "Finding of No Significant Impact" (FONSI) indicates that the project would not result in significant negative impacts to the natural and human environment.

1.2 Project Location

The proposed project is located in the City of Pascagoula within the State of Mississippi, in Sections 6, 8 and 10, Township 8 south, Range 6 West (USGS Pascagoula South MS Quadrangle) in Jackson County. The promenade would be located adjacent to the south of Beach Boulevard along the shore of the Mississippi Sound, bounded by Point Park to the west (30.343989 167 N; 88.561320° W) and Beach Park to the east (30.343589° N; 88.535842° W) (Figure 1 and 2).

The Pascagoula Promenade provides enhanced access via a promenade, which is positioned over

the historic seawall along the shore (Figure 3). Project amenities may include but are not limited to lighting, shower stations, fire pits, pavilions and/or other items to be determined at final design. All amenities (known and any left to be determined) will be placed alongside the beachfront promenade as well as on the beach which was recently restored by the U.S. Army Corps of Engineers (USACE) as part of the $12 million Mississippi Coastal Improvements Program (MsCIP) Pascagoula Beach Boulevard Restoration Project (USACE 2010).

The USACE's Pascagoula Beach Boulevard Restoration Project consisted of repair of the old seawall; replacement and extension of existing drainage structures; fill and placement of 7,700 feet of geotubes; excavation of approximately 290,000 cubic yards of sand from the upper river portions of the Pascagoula Federal navigation channel; placement of sand along 7,700 feet of the Pascagoula waterfront in the Mississippi Sound; and beach toe protection consisting of the placement of Class 2 riprap at elevation -1 Mean Lower Low Water (MLLW) along the length of the USACE's project. The project also includes establishment of vegetation behind the riprap *(Spartina patens).* While the engineered purpose of the USACE's project was for storm protection of the seawall and Beach Boulevard, most residents refer to the area as the Pascagoula Beach ("beach"); Figure 1 and 2.

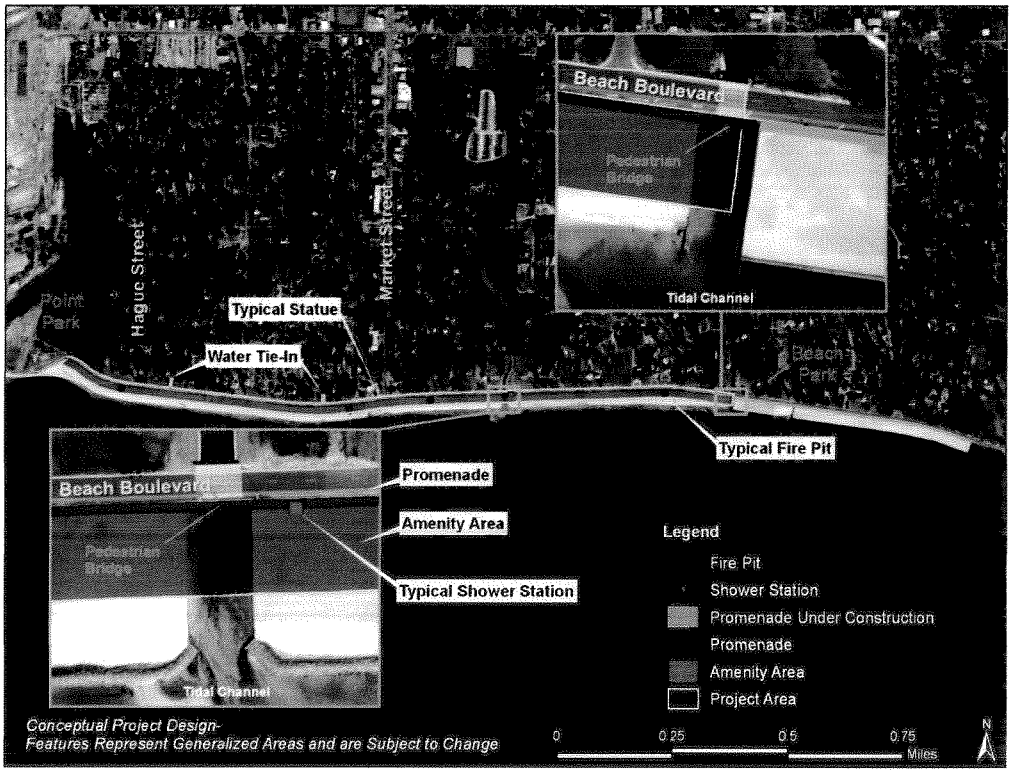
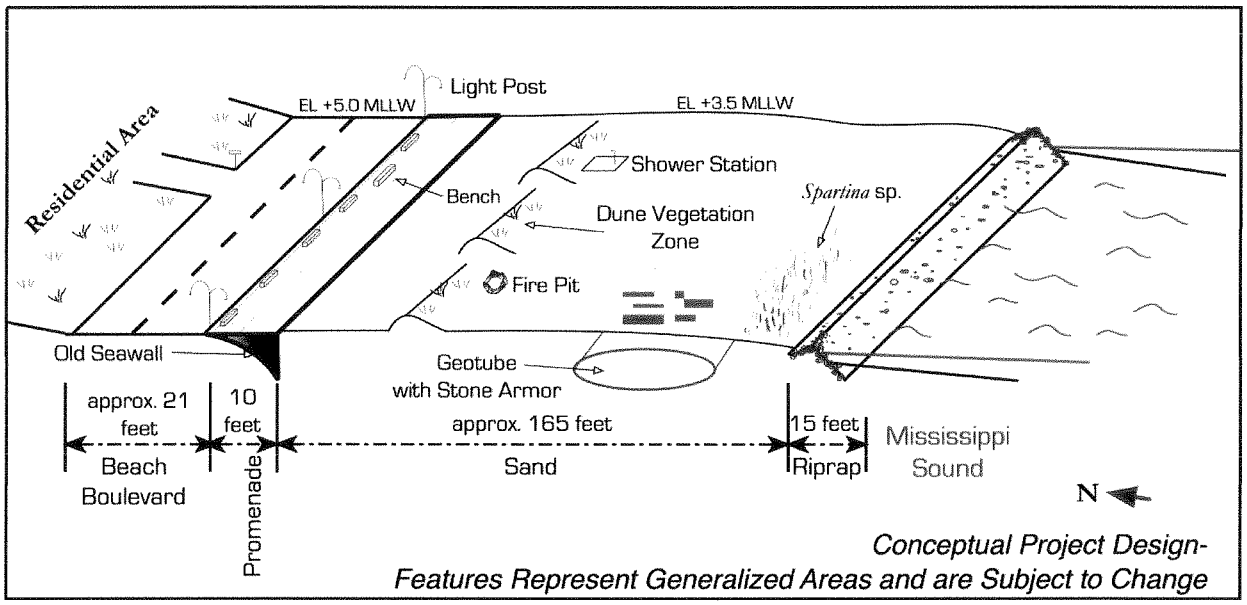


Figure 2: Location of Pascagoula's beachfront and proposed project features-Conceptual Project Design

Figure 3: Pascagoula Beachfront Promenade-Conceptual Cross Section



1.3 Construction and Installation

Beachfront Promenade Structure and Amenities

The promenade would consist of concrete placed on top of an existing seawall which is a feature currently covered in most places by sand (Figures 4). Two, 60-foot long pre-fabricated pedestrian bridges would be installed to cross two existing drainage culverts. Tie-ins to existing water lines would be constructed along the north edge of Beach Boulevard at Bernard Street and Buena Vista Street. The promenade would contain concrete pedestrian barriers to provide a boundary between the concrete promenade and Beach Boulevard and would also serve as benches. The promenade would also include decorative light poles and fixtures.

Shower stations would be constructed at locations along the promenade in addition to other potential amenities positioned along the northern boundary of the beach (see 'Amenity Area' in Figure 1). Construction activities would consist of removal of all existing low mast lighting, the existing concrete pedestrian 18 inches x 18 inches barrier located on the southern edge of Beach Boulevard, excavation of sand to expose the existing seawall, and the installation of required reinforcing steel and placement of concrete for the promenade structure walkway. New decorative light poles with associated fixtures and associated conduit would be installed, as well as pedestrian barriers/benches, bollards and concrete pavers. Construction staging areas would include Point Park to the west, Beach Park to the east, the beach south of the construction site, and/or nearby leased private properties. Point Park is a disturbed area adjacent to an existing industrial shipyard while Beach Park is a municipal park and recreation area with a public parking lot. Typical construction equipment consisting of small track-mounted mini-excavators, larger track-mounted full sized excavators; rubber-tired backhoes and track-mounted dozers would access the project area via Beach Boulevard and the sand beach.

After construction, parking for beach visitors would be available in Beach Park, Point Park, or along city streets in the neighborhoods adjacent to the north of Beach Boulevard.

Water Tie-ins

A directional bore perpendicular to Beach Boulevard would be made at both Bernard and Buena Vista Streets to install six inch HDPE (SDR-11) water piping under the street to the south side of the new Promenade walkway structure. Taps would be made to the existing city water main on the north side of Beach Boulevard and the lines on the south side would be extended down the walkway for supply to the new shower locations. Equipment to be used would include a small JD 410 backhoe for miscellaneous grubbing and light excavation (locating and excavating for water taps), a directional boring machine similar to a Ditch Witch JT-30 that is track-mounted and medium-sized over the road trucks for material handling and equipment delivery.

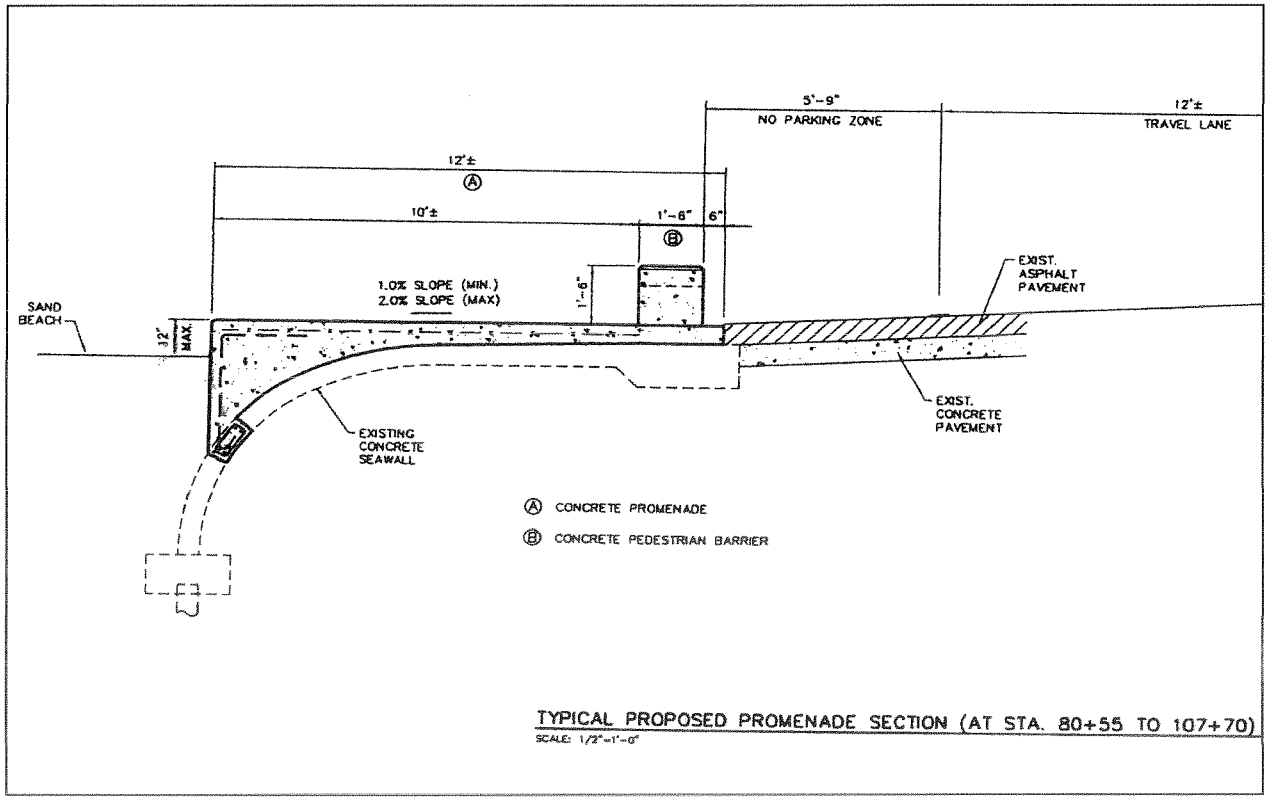


Figure 4: Crosssection of beachfront promenade.

1.4 Operations and Maintenance

The facility would be operated and maintained by the City of Pascagoula. Activities would include security, trash pickup and disposal, maintenance and repair of amenities, and repairs of structural elements. The performance of the facility would be monitored over a period of five years to determine the number of visitors to the beachfront. Visitor counts could be completed using permanently installed automatic counters, visual counts during site visits, or some other appropriate means.

VI. Species and Habitats:

Federally Listed Species in Project County (Jackson County, MS species list and habitat descriptions dated Feb 2013 obtained from Mississippi Ecological Services Field Office website). Hawksbill sea turtles were not included on the Service's species list; however, we included them for analysis with other sea turtles as they have the *potential* to occur within the State.

SPECIES/CRITICAL HABITAT	STATUS[1]	HABITAT PREFERECE	HABITAT OR PCE'S PRESENT
Alabama red-bellied turtle (*Pseudemys alabamensis)*	E	Fresh and brackish habitats, river banks, submerged and emergent aquatic vegetation; upland habitat for nesting	No
Black pine snake (*Pituophis melanoleucus lodingi)*	C	Mature longleaf pine forest with sandy soil, an open canopy and thick, grassy understory	No
Gopher tortoise (*Gopherus polyphemus)*	T	Open canopy longleaf pine/scrub oak habitats with well-drained sandy soils	No
Gulf sturgeon (*Acipenser oxyrhynchus desotoi*)	T	Migrates from large coastal rivers to coastal bays, estuaries, and barrier islands	Adjacent to action area – No Effect; NOAA concurred
Critical Habitat Gulf sturgeon	CH	PCEs as summarized: include abundant food items within riverine habitats for larval and juvenile life stages; and estuarine and marine habitats and substrates for subadult and adult life stages; riverine spawning sites with substrates suitable for egg deposition and development; riverine aggregation areas; a flow regime necessary for normal behavior, growth, and survival of all life stages in the riverine environment; water quality chemical characteristics necessary for normal behavior, growth, and viability of all life stages; sediment quality necessary for normal behavior, growth, and viability of all life stages; and safe and unobstructed migratory pathways necessary for passage within and between riverine, estuarine, and marine habitats.	Adjacent to action area – No Effect; NOAA concurred
Green sea turtle (*Chelonia mydas*)	T	Shallow coastal waters with SAV and algae, nests on open beaches	Terrestrial – No Aquatic – Adjacent to action area – No Effect; NOAA concurred
Kemp's Ridley sea turtle (*Lepidochelys kempii*)	E	Nearshore and inshore coastal waters; neritic zones with muddy or sandy substrate, nests on open beaches	Terrestrial – No Aquatic – Adjacent to action area – No Effect; NOAA concurred
Leatherback sea turtle (*Dermochelys coriacea*)	E	Open ocean, coastal waters, nests on open beaches	Terrestrial – No Aquatic – Adjacent to action area – No Effect; NOAA concurred
Loggerhead Sea Turtle (*Caretta*	T	Open ocean; also inshore areas,	Terrestrial – No

SPECIES/CRITICAL HABITAT	STATUS[1]	HABITAT PREFERECE	HABITAT OR PCE'S PRESENT
caretta)		bays, salt marshes, ship channels, and mouths of large rivers, nests on open beaches	Aquatic – Adjacent to action area – No Effect; NOAA concurred
Hawksbill sea turtle (*Eretmochelys imbricata*)	E	Coral reefs, open ocean, bays, estuaries, nests on open beaches	Terrestrial – No Aquatic – Adjacent to action area – No Effect; NOAA concurred
Louisiana black bear (*Ursus americanus luteolus*)	T	Bottomland Hardwood and flooplain Forest; habitats must contain hard mast, soft mast, escape cover, denning sites, forested dispersal corridors, and limited human access	No
Louisiana quillwort (*Isoetes louisianensis*)	E	Mineral soil, usually light gray in color, in bottomlands that are periodically washed free of leaves and debris	No
Dusky gopher frog (*Rana sevosa*)	E	Temporary pools for breeding and sandy upland foraging sites with subterranean refuge	No
Critical Habitat dusky gopher frog	CH	No dusky gopher frog critical habitat is designated in the action area	No
Mississippi sandhill crane (*Grus canadensis pulla*)	E	Coastal pine savannas and associated wetlands in a small area west of the Pascagoula River in Jackson Co.	No
Critical Habitat Mississippi sandhill crane	CH	No Mississippi sandhill crane critical habitat is designated in the action area	No
Pearl darter (*Percina aurora*)	C	Freshwater riverine habitats in the Pearl and Pascagoula river systems with stable gravel riffles or sandstone exposures with large sized gravel or rock.	No
Piping Plover (*Charadrius melodus*)	T	Beaches and mudflats in southeastern coastal areas	Potential
Critical Habitat piping plover	CH	No piping plover critical habitat is designated in the action area	No
Red knot (*Calidris canutus rufa*)	C	Sandy beaches, tidal mudflats, salt marshes, and peat banks. May forage along beaches, oyster reefs, and exposed bay bottoms while roosting on high sand, flats, reefs, and other sites protected from high tides.	Potential
Red-cockaded woodpecker (*Picoides borealis*)	E	Open, mature pine woodlands (60+ years old) with few or no hardwood trees present.	No
West Indian manatee (*Trichechus manatus*)	E	Fresh, brackish, and salt water in large coastal rivers, bays and estuaries	Adjacent to action area
Yellow-blotched map turtle (*Graptemys flavimaculata*)	T	Freshwater rivers and larger streams with strong current and	No

SPECIES/CRITICAL HABITAT	STATUS[1]	HABITAT PREFERECE	HABITAT OR PCE'S PRESENT
		large sandbars in the Chickasawhay, Leaf, and Pascagoula rivers.	

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

VII. Determination of Effects:

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

SPECIES/ CRITICAL HABITAT	IMPACTS TO SPECIES/CRITICAL HABITAT
Gulf sturgeon and Critical Habitat Gulf sturgeon	Impacts to Gulf sturgeon and Gulf sturgeon critical habitat in the estuarine and marine environments are analyzed by National Marine Fisheries Service (NMFS) in coordination with the USFWS. Information presented in this consultation is meant to facilitate NMFS review. No in-water work will occur; therefore no effects to this species or its critical habitat are anticipated.
Critical habitat for dusky gopher frog, Mississippi sandhill crane, and piping plover	No critical habitat for these species is designated in the action area; therefore, none will be adversely modified or destroyed.
Green, Kemp's Ridley, Leatherback, Loggerhead, and Hawksbill sea turtles	The five sea turtles species on the list are rarely observed in Mississippi waters (MDWFP 2001). Sea turtle nesting in Mississippi is rare although there are several known nesting events for barrier island beaches and even less frequently for mainland beaches (Hoggard 1991; MDWFP 2001; (NOAA Fisheries 2012; NOAA Fisheries 2013a; NOAA Fisheries 2013b; NOAA Fisheries 2013c). Both the Kemp's ridley and loggerhead have been caught close to the shoreline by land-based fishermen indicating use of the Mississippi nearshore areas for foraging and/or movement (MDWFP 2001). Nesting typically does not occur on mainland beaches in Mississippi. Even though there is sandy "beach" above the high tide line that in theory could be appropriate nesting habitat, the placement of riprap along the entire "beach" toe makes the area unsuitable for sea turtle nesting. The riprap is at least 2 feet in elevation and 3 feet in width. This large barrier between "beach" and ocean makes the "beach" inaccessible for sea turtles and unsuitable for nesting. In addition, there is existing vegetation along parts of the shoreline as well as earth/articulated rock ramps perpendicular to the shoreline. These would also be deterrents to sea turtle nesting. The project should not affect the migration and foraging of this species in adjacent waters because there are no in-water activities. No impacts of night lighting are expected since nesting turtles (if present) would avoid the "beach" due to its inaccessibility. It is

SPECIES/ CRITICAL HABITAT	IMPACTS TO SPECIES/CRITICAL HABITAT
	unlikely that there will be any impacts to water quality because all construction will take place on the created "beach" and all available construction best management practices will be used. The project action area is entirely on the "beach" area with no in-water work. Therefore, no effects to sea turtles are anticipated from the proposed project either in terrestrial or aquatic habitats.
Piping Plover	The piping plover is a migratory species that only winters on the Gulf and Atlantic coasts, including the Mississippi Gulf coast. Wintering activities consist of feeding, loafing, and other non-breeding behaviors. Some non-breeding individuals can stay at the Gulf Coast wintering locations all year round; however, most individuals stay for seven to eight months and return to their breeding areas in the spring (Haig and Oring 1985). In Mississippi they are commonly observed on barrier islands and mainland beaches, both manmade and natural (MDWFP 2001). During wintering, plovers feed on invertebrates on top of or just beneath the substrate surface. Forging habitats include areas with moist soils, wrack lines, sparse vegetation, small ephemeral pools, and areas influenced by tides and waves such as shoals, washover areas, mud and sand flats, and areas close to salt marshes (USFWS 2012; USFWS 2013). Roosting habitat includes ocean beaches and other areas above the high tide line and close to foraging locations especially those with shelter such as wrack (USFWS 2012). Mainland beaches in Mississippi are used as wintering habitat but nesting does not occur on beaches in the state. The project area is not a key wintering site, there are no high concentrations of piping plovers, and only one observation of three individuals is known for this location (Elliot-Smith 2009; eBird 2013). This area does not include any critical habitat and contains existing elements (i.e., riprap at toe of the "beach", vegetation, and human presence and development) that would make the area less desirable as wintering habitat (Rice 2012). Piping plovers tend to select beaches that do not have hardened protective structures such as riprap as these structures do not allow for overwash and other dynamic processes to work on the beach and create suitable foraging areas such as sand flats (USFWS 2012). In addition, the 10 feet of "beach" to be used for the promenade along the 8,200 feet proposed length is very close to the well-traveled Beach Boulevard. It is likely that piping plovers would tend to avoid areas close to human disturbance and development. Lastly, the "beach" is not considered a beach in the sense that it provides habitat for species but rather it is a structural protection feature for the existing seawall covered by sand. Project implementation may overlap with the presence of wintering birds, including piping plover. If piping plovers are present, we would expect them to be startled and fly to other areas. Because the action area provides little to no foraging habitat, we would not expect piping plovers to remain in the action area for any duration in the absence of the project and therefore, consider any departure from the action area

SPECIES/ CRITICAL HABITAT	IMPACTS TO SPECIES/CRITICAL HABITAT
	due to startling well within their normal movement and behavioral patterns. During windy or storm conditions, piping plovers may use ruts from equipment or any equipment staged on the beach for shelter. Effects (startle, injury, mortality) from staged equipment becoming operational or ruts can be avoided by general awareness and looking for birds prior to starting equipment. Due to the conservation measures below, potential effects from equipment becoming operational will be avoided and we consider startling insignificant and discountable.
Red knot	In coastal Mississippi, the red knot is mainly a migratory species that uses coastal beaches and marine intertidal areas as stopover feeding locations or staging areas on the way to and from their wintering grounds in South America and breeding areas in the Arctic. Foraging on ocean beaches, mud and sand flats, and salt marshes occurs from March to April during the northward spring migration and September and October during the southward autumn migration (Niles et al. 2007; USFWS 2013). A very small number of individuals have been observed wintering on the Gulf coast and are observed from October to March (USFWS 2013). The nonbreeding diet of this species includes marine invertebrates such as snails, crustaceans, and small mollusks including the coquina clam (*Donax variabilis*) which is common on Gulf coast beaches and the dwarf surf clam (*Mulinia lateralis*) (Niles et al. 2007; USFWS 2013). Roosting and resting habitat includes areas above the high tide line such as reefs and high sand flats (USFWS 2013). The project area is not a key migratory stopover or wintering site, there are no high concentrations of red knots, and few, if any, occurrences of individuals are known for this location (Niles et al. 2007; eBird 2013), though many can be present on the Mississippi barrier islands. This area contains existing elements (i.e., riprap at toe of the "beach", human presence, and development) that likely make the area less desirable as foraging or wintering habitat. Red knots forage in intertidal areas close to the surf zone that alternately are underwater and exposed (Niles et al. 2007). The project area does not include intertidal areas and most of the "beach" has a riprap barrier preventing water from reaching the sand. In addition, the 10 feet of "beach" to be used for the promenade along the 8,200 feet proposed length is very close to the well-traveled Beach Boulevard. It is likely that red knots would tend to avoid areas close to human disturbance and development. Lastly, the "beach" is not considered a beach in the sense that it provides habitat for species but rather it is a structural protection feature for the existing seawall covered by sand. Due to lack of foraging and roosting habitats in the action area, and the absence of known records of red knot from the action area, we consider this species extremely unlikely to be present. In the event that a red knot is present, we would expect them to be startled and fly to other areas during construction. Because the action area provides little to no foraging habitat, we would not expect red knots to remain in the action

SPECIES/ CRITICAL HABITAT	IMPACTS TO SPECIES/CRITICAL HABITAT
	area for any duration in the absence of the project and therefore, consider any departure from the action area due to startling well within their normal movement and behavioral patterns. During windy or storm conditions, red knots may use ruts from equipment or any equipment staged on the beach for shelter. Effects (startle, injury, mortality) from staged equipment becoming operational or ruts can be avoided by general awareness and looking for birds prior to starting equipment. Due to the conservation measures below, potential effects from equipment becoming operational will be avoided and we consider startling insignificant and discountable.
West Indian manatee	Manatees are known to migrate to Mississippi estuarine and river mouth habitats, though there have been sightings near barrier islands and offshore as well (Fertl et al. 2005). The proposed project will be conducted within the terrestrial environment with best management practices to prevent erosion and turbidity. Therefore, no effects to this species are anticipated.
Alabama red-bellied turtle	No suitable habitat is present in or near the action area and this species is not known to occur within the action area. Therefore, no effects to this species are anticipated.
Black pine snake	No suitable habitat is present in or near the action area and this species is not known to occur within the action area. Therefore, no effects to this species are anticipated.
Gopher tortoise	No suitable habitat is present in or near the action area and this species is not known to occur within the action area. Therefore, no effects to this species are anticipated.
Louisiana black bear	No suitable habitat is present in or near the action area and this species is not known to occur within the action area. Therefore, no effects to this species are anticipated.
Louisiana quillwort	No suitable habitat is present in or near the action area and this species is not known to occur within the action area. Therefore, no effects to this species are anticipated.
Dusky gopher frog	No suitable habitat is present in or near the action area and this species is not known to occur within the action area. Therefore, no effects to this species are anticipated.
Mississippi sandhill crane	No suitable habitat is present in or near the action area and this species is not known to occur within the action area. Therefore, no effects to this species are anticipated.
Pearl darter	No suitable habitat is present in or near the action area and this species is not known to occur within the action area. Therefore, no effects to this species are anticipated.
Red-cockaded woodpecker	No suitable habitat is present in or near the action area and this species is not known to occur within the action area. Therefore, no effects to this species are anticipated.
Yellow-blotched map turtle	No suitable habitat is present in or near the action area and this species is not known to occur within the action area. Therefore, no effects to

SPECIES/ CRITICAL HABITAT	IMPACTS TO SPECIES/CRITICAL HABITAT
	this species are anticipated.

B. Explanation of actions to be implemented to reduce adverse effects:

SPECIES/ CRITICAL HABITAT	ACTIONS TO MINIMIZE IMPACTS
Green, Kemp's Ridley, Leatherback, Loggerhead, and Hawksbill sea turtles	Awareness of turtle presence. If any turtles are found to be present in the immediate project area during project activities, construction will be halted until the species move away from the project area. In addition, impacts to lands or waters surrounding the project area will be prevented, controlled or mitigated by use of all available best management practices during construction all available construction best management practices will be used to prevent, control, or mitigate any.
Piping Plover and red knot	Awareness of piping plover/red knot presence. Pre-operational surveys will be completed if equipment has left ruts on the "beach" or if equipment is staged on the "beach." If any piping plovers or red knots are found to be present in the immediate project area during project activities, construction will be halted until the species move away from the project area or construction activities will resume at a safe distance from the species. During construction, attempts will be made to limit the use of heavy equipment on the "beach" area. To the degree possible, construction activities will be concentrated in months when piping plovers and red knots are in breeding areas. Pets are currently not allowed on the "beach" except on the far western end; these pets must be leashed. In addition, all available construction best management practices will be used to prevent, control, or mitigate any impacts during construction especially from accidental leaks of fluids from equipment.

VIII. Effect Determination and Response Requested:

SPECIES/ CRITICAL HABITAT	DETERMINATION[1]			RESPONSE[1] REQUESTED
	NE	NLAA	LAA	
Alabama red-bellied turtle	X			Concurrence
Black pine snake	X			Concurrence
Gopher tortoise	X			Concurrence
Gulf sturgeon	X			Consultation with NOAA Complete ; no

SPECIES/ CRITICAL HABITAT	DETERMINATION[1]			RESPONSE[1] REQUESTED
	NE	NLAA	LAA	
				concurrence requested from FWS
Critical Habitat Gulf sturgeon	X			Consultation with NOAA Complete; no concurrence requested from FWS
Green sea turtle	X			Concurrence for terrestrial; ; Consultation with NOAA Complete for aquatic
Kemp's Ridley sea turtle	X			Concurrence for terrestrial; Consultation with NOAA Complete for aquatic
Leatherback sea	X			Concurrence for terrestrial; Consultation with NOAA Complete for aquatic
Loggerhead Sea Turtle	X			Concurrence for terrestrial; Consultation with NOAA Complete for aquatic
Hawksbill sea turtle	X			Concurrence for terrestrial; Consultation with NOAA Complete for aquatic
Louisiana black bear	X			Concurrence
Louisiana quillwort	X			Concurrence
Dusky gopher frog	X			Concurrence
Critical Habitat dusky gopher frog	X			Concurrence
Mississippi sandhill crane	X			Concurrence
Critical Habitat Mississippi sandhill crane	X			Concurrence
Pearl darter	X			Concurrence
Piping Plover		X		Concurrence
Critical Habitat piping plover	X			Concurrence
Red knot		X		Conference
Red-cockaded woodpecker	X			Concurrence
West Indian manatee	X			Concurrence
Yellow-blotched map turtle	X			Concurrence

[1]DETERMINATION/ RESPONSE REQUESTED:

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. The project area does not include water's edge habitat, therefore foraging and feeding would not be impacted. These birds primarily nest and roost in trees or shrubs (e.g. pines, *Bacchurus* and mangroves), which occur outside the project area.
Shorebirds (plovers, oystercatchers, stilts, sandpipers)	Foraging, feeding, resting, roosting, nesting	Shorebirds forage, feed, rest, and roost in beach environments. Foraging and feeding habitats include sand or mud flats exposed by tides. There are no tidally exposed sand flats in the project area and it is expected that birds would be able to move to another nearby location to continue resting. Although the project area includes ocean "beach" these birds primarily nest and roost in dunes which occur outside the project area. There is no dune habitat in the project area.

SPECIES*	BEHAVIOR	SPECIES/HABITAT IMPACTS
Seabirds (terns, gulls, skimmers, double-crested cormorant, American white pelican, brown pelican)	Foraging, feeding, resting, roosting, nesting	Seabirds forage, feed, rest, and roost in marine coasts including islands, marshes, river/lake banks, and sand or gravel beaches including ocean beaches. As such, they may be present and impacted locally and temporarily by the project due to disturbance from construction. It is expected that they would be able to move to another nearby location to continue foraging, feeding and resting. Although the project area includes ocean "beach" these birds primarily roost in dunes which occur outside the project area. There is no dune habitat in the project area.
Raptors (osprey, hawks, eagles, owls)	Foraging, feeding, resting, roosting, nesting	Raptors could 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 and any searches for prey would be within their normal behavior patterns. There are no roosting or nesting habitats within the project area.
Goatsuckers (nighthawks, whip-poor-will, Chuck-will's widow)	Foraging, feeding, resting, roosting, nesting	Goatsuckers do not forage, feed, rest, or roost in the project area. In addition, 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.
Waterfowl (geese, swans, ducks, loons, and grebes)	Foraging, feeding, resting, roosting, nesting	Waterfowl do not forage, feed, rest, and roost in the project area.
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 present on site.
Rails and coots	Foraging, feeding, resting, roosting, nesting	Rails and coots likely do not forage, feed, rest, roost, or nest in the project area. They favor marshy habitats for these activities and no marsh habitat is present within the project area.

B. If species or habitat impacts could occur, identify avoidance and minimization measures to prevent incidental take. Incidental take of Migratory Birds cannot be authorized.

SPECIES/SPECIES GROUP	CONSERVATION MEASURES TO MINIMIZE IMPACTS
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.

SPECIES/SPECIES GROUP	CONSERVATION MEASURES TO MINIMIZE IMPACTS
	These birds primarily roost in trees or shrubs, but project components will not impact these habitats. No nesting habitat is present in the action area.
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. No nesting habitat is present in the action area.
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. No nesting habitat is present in the action area.
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.
Goatsuckers (nighthawks, whip-poor-will, Chuck-will's widow)	It is unlikely that goatsuckers will be impacted by this project.
Waterfowl (geese, swans, ducks, loons, and grebes)	It is unlikely that waterfowl will be impacted by this project.
Doves and pigeons	It is unlikely that doves and pigeons will be impacted by this project.
Rails and coots	It is unlikely that rails and coots will be impacted by this project.

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

/s/ Holly N. Blalock-Herod — December 3, 2013
Signature (originating station - preparer) **date**

DOI Case Management Team, ESA Coordinator
Title

Deborah L McQ — 12/5/13
Field Supervisor (originating station) **date**

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

(1) any 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 Mississippi Ecological Services Field Office **about the action.**

Mississippi Ecological Services Field Office
6578 Dogwood View Parkway, Suite A
Jackson, Mississippi 39213
(p) 601-965-4900
(f) 601-965-4340

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**

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