# **Appendix J**

# Threatened and Endangered Species Lists and Agency Coordination

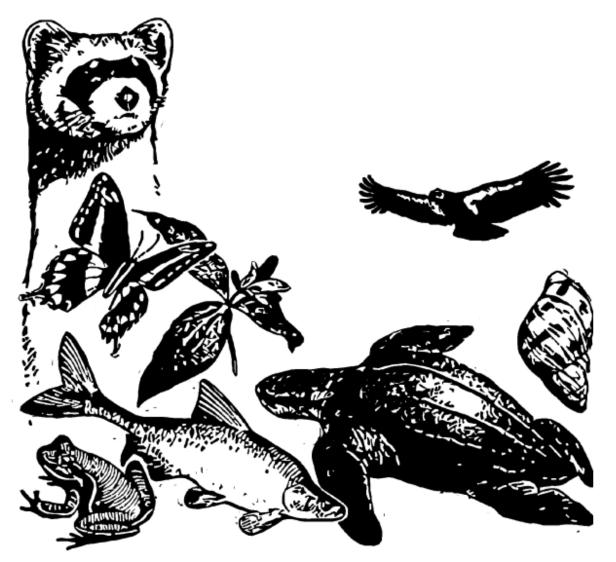
U.S. Fish & Wildlife Service

# I-73 South

## IPaC Trust Resources Report

Generated October 06, 2016 01:10 PM MDT, IPaC v3.0.9

This report is for informational purposes only and should not be used for planning or analyzing project level impacts. For project reviews that require U.S. Fish & Wildlife Service review or concurrence, please return to the IPaC website and request an official species list from the Regulatory Documents page.



IPaC - Information for Planning and Conservation (<u>https://ecos.fws.gov/ipac/</u>): A project planning tool to help streamline the U.S. Fish & Wildlife Service environmental review process.

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## U.S. Fish & Wildlife Service IPaC Trust Resources Report



#### NAME

I-73 South

#### LOCATION

Dillon, Horry and Marion counties, South Carolina

#### DESCRIPTION

Interstate 73 from Interstate 95 to SC 22 in Dillon, Marion and Horry Counties, South Carolina

#### IPAC LINK

https://ecos.fws.gov/ipac/project/ 5G54N-Y77NR-APJFX-L5MD6-TVRRW4



## U.S. Fish & Wildlife Service Contact Information

Trust resources in this location are managed by:

#### South Carolina Ecological Services

176 Croghan Spur Road, Suite 200 Charleston, SC 29407-7558 (843) 727-4707

## **Endangered Species**

Proposed, candidate, threatened, and endangered species are managed by the <u>Endangered Species Program</u> of the U.S. Fish & Wildlife Service.

This USFWS trust resource report is for informational purposes only and should not be used for planning or analyzing project level impacts.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list from the Regulatory Documents section.

<u>Section 7</u> of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency.

#### A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list either from the Regulatory Documents section in IPaC or from the local field office directly.

The list of species below are those that may occur or could potentially be affected by activities in this location:

## Birds

Kirtland's Warbler Setophaga kirtlandii (= Dendroica kirtlandii)	Endangered
CRITICAL HABITAT No critical habitat has been designated for this species.	
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B031	
Piping Plover Charadrius melodus	Threatened
CRITICAL HABITAT	
There is <b>final</b> critical habitat designated for this species.	
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B079	
Red Knot Calidris canutus rufa	Threatened
CRITICAL HABITAT	
No critical habitat has been designated for this species.	
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0DM	
Red-cockaded Woodpecker Picoides borealis	Fredericared
·	Endangered
CRITICAL HABITAT No critical habitat has been designated for this species.	
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B04F	
Wood Stork Mycteria americana	Threatened
CRITICAL HABITAT	
No critical habitat has been designated for this species.	
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B060	
Fishes	
Shortnose Sturgeon Acipenser brevirostrum	Endangered
CRITICAL HABITAT	
No critical habitat has been designated for this species.	
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=E00B	

http://ecos.fws.gov/tess\_public/profile/speciesProfile.action?spcode=E00B

## **Flowering Plants**

American Chaffseed Schwalbea americana CRITICAL HABITAT No critical habitat has been designated for this species.	Endangered
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q2I4	
CRITICAL HABITAT No critical habitat has been designated for this species. http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q2EL	Endangered
Pondberry Lindera melissifolia CRITICAL HABITAT No critical habitat has been designated for this species. http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q2CO	Endangered
Seabeach Amaranth Amaranthus pumilus CRITICAL HABITAT No critical habitat has been designated for this species. http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q2MZ	Threatened
Mammals West Indian Manatee Trichechus manatus CRITICAL HABITAT There is final critical habitat designated for this species. http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=A007	Endangered
Reptiles Kemp's Ridley Sea Turtle Lepidochelys kempii CRITICAL HABITAT No critical habitat has been designated for this species.	Endangered
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=C000 Leatherback Sea Turtle Dermochelys coriacea	Endangered
CRITICAL HABITAT There is <b>final</b> critical habitat designated for this species. http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=C00F	

## Critical Habitats

There are no critical habitats in this location

## **Migratory Birds**

Birds are protected by the <u>Migratory Bird Treaty Act</u> and the <u>Bald and Golden Eagle</u> <u>Protection Act</u>.

Any activity that results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish & Wildlife Service.<sup>[1]</sup> There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

1. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern <u>http://www.fws.gov/birds/management/managed-species/</u> <u>birds-of-conservation-concern.php</u>
- Conservation measures for birds <u>http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/</u> <u>conservation-measures.php</u>
- Year-round bird occurrence data <u>http://www.birdscanada.org/birdmon/default/datasummaries.jsp</u>

The following species of migratory birds could potentially be affected by activities in this location:

American Kestrel Falco sparverius paulus Season: Year-round	Bird of conservation concern
American Oystercatcher Haematopus palliatus Season: Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0G8	Bird of conservation concern
American Bittern Botaurus lentiginosus Season: Wintering http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0F3	Bird of conservation concern
Bachman's Sparrow Aimophila aestivalis Season: Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B07F	Bird of conservation concern

Bald Eagle Haliaeetus leucocephalus Season: Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B008	Bird of conservation concern
Black Rail Laterallus jamaicensis Season: Breeding http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B09A	Bird of conservation concern
Black-throated Green Warbler Dendroica virens Season: Breeding	Bird of conservation concern
Brown-headed Nuthatch Sitta pusilla Season: Year-round	Bird of conservation concern
Chuck-will's-widow Caprimulgus carolinensis Season: Breeding	Bird of conservation concern
Fox Sparrow Passerella iliaca Season: Wintering	Bird of conservation concern
Gull-billed Tern Gelochelidon nilotica Season: Breeding http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JV	Bird of conservation concern
Henslow's Sparrow Ammodramus henslowii Season: Wintering http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B09D	Bird of conservation concern
Kentucky Warbler Oporornis formosus Season: Breeding	Bird of conservation concern
Le Conte's Sparrow Ammodramus leconteii Season: Wintering Least Bittern Ixobrychus exilis Season: Breeding	Bird of conservation concern
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B092 Lesser Yellowlegs Tringa flavipes	Bird of conservation concern
Season: Wintering http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MD	Bid of conservation concern
Loggerhead Shrike Lanius Iudovicianus Season: Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FY	Bird of conservation concern
Marbled Godwit Limosa fedoa Season: Wintering http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JL	Bird of conservation concern
Mississippi Kite Ictinia mississippiensis Season: Breeding	Bird of conservation concern

Peregrine Falcon Falco peregrinus Season: Wintering http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FU	Bird of conservation concern
Prairie Warbler Dendroica discolor Season: Breeding	Bird of conservation concern
Prothonotary Warbler Protonotaria citrea Season: Breeding	Bird of conservation concern
Purple Sandpiper Calidris maritima Season: Wintering	Bird of conservation concern
Red Knot Calidris canutus rufa Season: Wintering	Bird of conservation concern
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0DM	
Red-headed Woodpecker Melanerpes erythrocephalus Season: Year-round	Bird of conservation concern
Rusty Blackbird Euphagus carolinus Season: Wintering	Bird of conservation concern
Saltmarsh Sparrow Ammodramus caudacutus Season: Wintering	Bird of conservation concern
Seaside Sparrow Ammodramus maritimus Season: Year-round	Bird of conservation concern
Sedge Wren Cistothorus platensis Season: Wintering	Bird of conservation concern
Short-eared Owl Asio flammeus Season: Wintering	Bird of conservation concern
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HD	
Swainson's Warbler Limnothlypis swainsonii Season: Breeding	Bird of conservation concern
Wood Thrush Hylocichla mustelina Season: Breeding	Bird of conservation concern
Worm Eating Warbler Helmitheros vermivorum Season: Breeding	Bird of conservation concern
Yellow Rail Coturnicops noveboracensis Season: Wintering http://ecos.fws.gov/tess.public/profile/speciesProfile.action?spcode=B0.IG	Bird of conservation concern

## Wildlife refuges and fish hatcheries

There are no refuges or fish hatcheries in this location

## Wetlands in the National Wetlands Inventory

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

#### For more information please contact the Regulatory Program of the local <u>U.S. Army</u> <u>Corps of Engineers District</u>.

#### DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

#### DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

#### DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

#### Wetland data is unavailable at this time.



## **United States Department of the Interior**

FISH AND WILDLIFE SERVICE South Carolina Ecological Services 176 CROGHAN SPUR ROAD, SUITE 200 CHARLESTON, SC 29407 PHONE: (843)727-4707 FAX: (843)727-4218 URL: www.fws.gov/charleston/



Consultation Code: 04ES1000-2017-SLI-0008 Event Code: 04ES1000-2017-E-00008 Project Name: I-73 South October 06, 2016

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

#### http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan

(http://www.fws.gov/windenergy/eagle\_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and

http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



Project name: I-73 South

## **Official Species List**

#### **Provided by:**

South Carolina Ecological Services 176 CROGHAN SPUR ROAD, SUITE 200 CHARLESTON, SC 29407 (843) 727-4707 http://www.fws.gov/charleston/

**Consultation Code:** 04ES1000-2017-SLI-0008 **Event Code:** 04ES1000-2017-E-00008

Project Type: TRANSPORTATION

**Project Name:** I-73 South **Project Description:** Interstate 73 from Interstate 95 to SC 22 in Dillon, Marion and Horry Counties, South Carolina

**Please Note:** The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



Project name: I-73 South

### **Project Location Map:**



Project Coordinates: The coordinates are too numerous to display here.

Project Counties: Dillon, SC | Horry, SC | Marion, SC



Project name: I-73 South

## **Endangered Species Act Species List**

There are a total of 13 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	Status	Has Critical Habitat	Condition(s)	
Kirtland's Warbler ( <i>Setophaga</i> <i>kirtlandii</i> ) Population: Wherever found	Endangered			
Piping Plover ( <i>Charadrius melodus</i> ) Population: except Great Lakes watershed	Threatened	Final designated		
Red Knot ( <i>Calidris canutus rufa</i> ) Population: Wherever found	Threatened			
Red-Cockaded woodpecker ( <i>Picoides</i> <i>borealis</i> ) Population: Wherever found	Endangered			
Wood stork ( <i>Mycteria americana</i> ) Population: AL, FL, GA, MS, NC, SC	Threatened			
Fishes				
Shortnose sturgeon (Acipenser brevirostrum) Population: Wherever found	Endangered			
Flowering Plants				
American chaffseed (Schwalbea	Endangered			



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<i>americana)</i> Population: Wherever found					
Canby's dropwort ( <i>Oxypolis canbyi</i> ) Population: Wherever found	Endangered				
pondberry ( <i>Lindera melissifolia</i> ) Population: Wherever found	Endangered				
Seabeach amaranth ( <i>Amaranthus pumilus</i> ) Population: Wherever found	Threatened				
Mammals					
West Indian Manatee ( <i>Trichechus</i> <i>manatus</i> ) Population: Wherever found	Endangered	Final designated			
Reptiles					
Kemp's Ridley sea turtle ( <i>Lepidochelys kempii</i> ) Population: Wherever found	Endangered				
Leatherback sea turtle ( <i>Dermochelys</i> <i>coriacea</i> ) Population: Wherever found	Endangered	Final designated			

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Project name: I-73 South

### Critical habitats that lie within your project area

There are no critical habitats within your project area.

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Project name: I-73 South

## **Appendix A: FWS National Wildlife Refuges and Fish Hatcheries**

There are no refuges or fish hatcheries within your project area.



Project name: I-73 South

## **Appendix B: FWS Migratory Birds**

The protection of birds is regulated by the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA). Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). The MBTA has no otherwise lawful activities. For more information regarding these Acts see: http://www.fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php http://www.fws.gov/birds/policies-and-regulations/laws-legislations/bald-and-golden-eagle-protection-act.php

All project proponents are responsible for complying with the appropriate regulations protecting birds when planning and developing a project. To meet these conservation obligations, proponents should identify potential or existing project-related impacts to migratory birds and their habitat and develop and implement conservation measures that avoid, minimize, or compensate for these impacts. The Service's Birds of Conservation Concern (2008) report identifies species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become listed under the Endangered Species Act as amended (16 U.S.C 1531 et seq.).

For information about Birds of Conservation Concern, go to: http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php

For information about conservation measures that help avoid or minimize impacts to birds, please visit: http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php

To search and view summaries of year-round bird occurrence data within your project area, go to the Avian Knowledge Network Histogram Tools at:

http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/akn-histogram-tools.php



Project name: I-73 South

#### Migratory birds that may be affected by your project:

There are 34 birds on your migratory bird list. The list may include birds occurring outside this FWS office jurisdiction.

Species Name	Bird of Conservation Concern (BCC)	Seasonal Occurrence in Project Area
American bittern (Botaurus lentiginosus)	Yes	Wintering
American Kestrel (Falco sparverius ssp. paulus)	Yes	Year-round
American Oystercatcher (Haematopus palliatus)	Yes	Year-round
Bachman's sparrow (Aimophila aestivalis)	Yes	Year-round
Bald eagle (Haliaeetus leucocephalus)	Yes	Year-round
Black Rail (Laterallus jamaicensis ssp.)	Yes	Breeding
Black-throated Green Warbler (Dendroica virens)	Yes	Breeding
Brown-headed Nuthatch (Sitta pusilla)	Yes	Year-round
Chuck-will's-widow ( <i>Caprimulgus</i> carolinensis)	Yes	Breeding
Fox Sparrow (Passerella liaca)	Yes	Wintering
Gull-billed Tern (Gelochelidon nilotica)	Yes	Breeding
Henslow's sparrow (Ammodramus henslowii)	Yes	Wintering
Kentucky Warbler (Oporornis formosus)	Yes	Breeding
Le Conte's Sparrow (Ammodramus	Yes	Wintering

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United States Department of Interior Fish and Wildlife Service

Project name: I-73 South

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leconteii)		
Least bittern (Ixobrychus exilis hesperis)	No	Breeding
Lesser Yellowlegs (Tringa flavipes)	Yes	Wintering
Loggerhead Shrike (Lanius ludovicianus)	Yes	Year-round
Marbled Godwit (Limosa fedoa)	Yes	Wintering
Mississippi Kite (Ictinia mississippiensis)	Yes	Breeding
Peregrine Falcon (Falco peregrinus)	Yes	Wintering
Prairie Warbler (Dendroica discolor)	Yes	Breeding
Prothonotary Warbler (Protonotaria citrea)	Yes	Breeding
Purple Sandpiper (Calidris maritima)	Yes	Wintering
Red Knot (Calidris canutus rufa)	Yes	Wintering
Red-headed Woodpecker (Melanerpes erythrocephalus)	Yes	Year-round
Rusty Blackbird (Euphagus carolinus)	Yes	Wintering
Saltmarsh Sparrow (Ammodramus caudacutus)	Yes	Wintering
Seaside Sparrow (Ammodramus maritimus)	Yes	Year-round
Sedge Wren (Cistothorus platensis)	Yes	Wintering
Short-eared Owl (Asio flammeus)	Yes	Wintering
Swainson's Warbler (Limnothlypis swainsonii)	Yes	Breeding
Wood Thrush (Hylocichla mustelina)	Yes	Breeding
	1	1



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Worm eating Warbler ( <i>Helmitheros</i> vermivorum)	Yes	Breeding
Yellow Rail (Coturnicops noveboracensis)	Yes	Wintering



## United States Department of the Interior

FISH AND WILDLIFE SERVICE 176 Croghan Spur Road, Suite 200 Charleston, South Carolina 29407



October 16, 2007

Mr. Wayne Hall Special Projects Manager South Carolina Department of Transportation Post Office Box 191 Columbia, SC 29202-0191

Re: I-73 Southern Phase, Biological Assessment

Dear Mr. Hall:

The U.S. Fish and Wildlife Service (Service) has received the results of the Biological Assessment (BA) for the proposed construction of the southern phase of I-73 between I-95 in Dillon County and SC-22 in Horry County, SC. The BA, completed by the South Carolina Department of Transportation (SCDOT), provides a brief description of the project and its proposed corridor, a review of habitats within the corridor and a list of the 15 protected species known to occur within Horry, Marion and Dillon Counties. An Environmental Impact Statement for this phase of the project was previously reviewed by the Service.

The Service recommends SCDOT contact the National Marine Fisheries Service (NMFS) for consultation requirements regarding the Shortnose sturgeon, *Acipenser brevirostrum*. The Service and NMFS share jurisdiction over the listed sea turtles, however, these species are not found within the project corridor. Similarly the West Indian Manatee, *Trichechus manatus*, the Seabeach amaranth, *Amaranthus pumilus*, and the Piping plover, *Charadrius melodus* require specific habitat types and do not occur within the project corridor. Finally, consultation for the Bald eagle, *Haliaeetus leucocephalus*, under the Endangered Species Act, 1973, is no longer required.

The BA has concluded that the proposed activity may affect, but is not likely to adversely affect the Kirkland's warbler. Further, the BA concludes the project will have no effect upon the Pondberry, Canby's dropwort, American chaffseed, Red-cockaded woodpecker or the Wood stork. Upon view of the information provided, the Service concurs with conclusions in the BA regarding listed species. However, obligations under section 7 of the Endangered Species Act must be considered if (1)-new information reveals impacts of this identified action that may affect any listed species or critical habitat in a manner not previously considered, (2) this action is subsequently modified in a manner which was not considered in this assessment, or (3) a new species is listed or critical habitat is determined that may be affected by the identified action.



If you have any questions regarding the Service's comments, please do not hesitate to contact Mark Caldwell at

Sincerely, A We Timothy N. Hall

Field Supervisor

Mr. Patrick Tyndall, FHWA, Columbia, SC cc:

TNH/MAC/km



## United States Department of the Interior



FISH AND WILDLIFE SERVICE 176 Croghan Spur Road, Suite 200 Charleston, South Carolina 29407

October 1, 2009

Mr. Edward Frierson Environmental Project Manager South Carolina Department of Transportation P.O. Box 191 Columbia, SC 29202-0191

Re: Re-evaluation of Biological Assessment, I-73, Conway to I-95, Various Counties, FWS Log No. 42410-2009-I-0645

Dear Mr. Frierson:

The U.S. Fish and Wildlife Service (USFWS) has reviewed the plans for this proposed project. Based on our review and the information received:

- □ We concur with your determination that the proposed action will have no effect on resources under the jurisdiction of the USFWS that are currently protected by the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.)(Act). Therefore, no further action is required under Section 7(a)(2) of the Act.
- $\square$  We concur with your determination that the proposed action is not likely to adversely affect resources under the jurisdiction of the USFWS that are currently protected by the Act. Therefore, no further action is required under Section 7(a)(2) of the Act.
- It is our opinion that the proposed action is not likely to have reasonably foreseeable adverse effects on resources under the jurisdiction of the USFWS that are currently protected by the Act. Therefore, no further action is required under Section 7(a)(2) of the Act.
- □ The proposed project may impact wetlands. Please contact the U.S. Army Corps of Engineers, Charleston District for more information.



Please note that obligations under section 7 of the Act must be reconsidered if (1) new information reveals impacts of this identified action may affect any listed species or critical habitat in a manner not previously considered, (2) this action is subsequently modified in a manner which was not considered in this assessment, or (3) a new species is listed or critical habitat is designated that may be affected by the identified action.

If you have any questions regarding the Service's determination, please do not hesitate to contact Mark Caldwell at (843) 727-4707 ext. 215.

Sincerely,

Joseph F. Cochuell

Timothy N. Hall Field Supervisor

TNH/MAC/km



UNITED STATES DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE Southeast Regional Office 263 13th Avenue South St. Petersburg, Florida 33701-5505 http://sero.nmfs.noaa.gov

APR 29 2013

F/SER31:EGH SER-2013-10712

Mr. Travis G. Hughes Chief, Special Projects Branch Department of the Army Charleston District, Corps of Engineers 69-A Hagood Avenue Charleston, South Carolina 29403-5107

Ref.: SAC-2008-1333, South Carolina Department of Transportation's (SCDOT) New Interstate Highway 73 (I-73) Construction Over the Little Pee Dee River, Horry/Marion County Line, South Carolina

Dear Mr. Hughes:

By letter dated February 8, 2013, you requested National Marine Fisheries Service (NMFS) comments on the U.S. Army Corps of Engineers (USACE), Charleston District's proposed issuance of a regulatory permit to SCDOT authorizing the placement of fill materials in waters of the United States during construction of the referenced interstate highway and bridge construction project proposed by SCDOT. We have treated your request for comments as a request for informal consultation under Section 7 of the Endangered Species Act (ESA). In its Public Notice dated January 26, 2011, the USACE previously determined that the project may affect, but is not likely to adversely affect threatened or endangered species or critical habitat. At the time, the USACE did not request ESA Section 7 consultation with NMFS nor seek our concurrence with USACE's project-effect determinations. Since issuance of the USACE public notice, the Atlantic sturgeon was listed under the ESA. As a result, USACE requested SCDOT to submit a revised biological assessment on potential effects of the action on the newly listed species. The assessment was included in your request for comments. Our findings on the effects of the proposed action on shortnose and Atlantic sturgeon are based on the following project description based on information in your letter, and on conversations my staff had with USACE staffers and South Carolina Department of Natural Resources sturgeon biologists. Changes to the proposed action may negate our findings and may require reinitiating consultation.

SCDOT proposes to a build a new interstate highway bridge over the Little Pee Dee River at approximate location 34.144969°N, 79.207861°W, North American Datum 1983, as part of a new interstate highway (I-73) from SC-22 in Horry County to the North Carolina state line northeast of Bennettsville in Marlboro County. The new four-lane interstate highway will parallel state road SC-917 near the town of Mullens and cross the Little Pee Dee River at the Horry County-Marion County Line. The new river crossing consisting of two adjacent, two-lane bridges parallel to each other will be built near Church Landing Road, just downriver of the existing SC-917 two-lane bridge over the river, about five miles southeast of the town of Mullens (see Figures 1-3).

The construction and expansion of the aforementioned bridges will be conducted as follows: Construction work over the river will be done inside specially built cofferdams, enabling the bridge support structures ("bents") to be built on dry land within the river. The cofferdams will be installed at the locations where the bridge support structures will later be built, then pumped dry to enable workers inside. Workers then install steel structural rebar and pour concrete for the bent construction. The completed bents will later support the bridge spans across the river. To protect potentially spawning



Atlantic and shortnose sturgeon that may be moving upriver or downriver past the site during construction, SCDOT will implement an in-water work moratorium from February 1 to April 30. Construction of cofferdams may take place before or after the moratorium, but not during the moratorium. However, once a cofferdam is built, work inside it may continue year-round. Bridge construction may take up to two years. Bridge construction will never obstruct more than half of the river at any one time, to prevent potential hindrance of anadromous fish passage. Use of turbidity controls (such as Type C silt fences) during construction is part of the best management practices routinely implemented by SCDOT during construction in wetlands to prevent adverse water quality effects to anadromous fishes and other species.

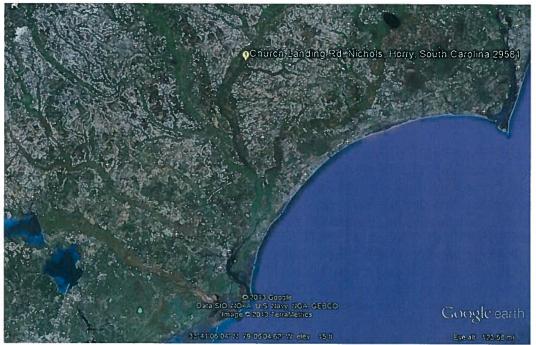


Figure 1. High-altitude view of the project location showing distance from Atlantic Ocean.



Figure 2. Mid-altitude view of project location along Horry County-Marion County Line.



Figure 3. Project location alongside the existing SR-917 bridge over the Little Pee Dee River.

Two species of sturgeon (shortnose and Atlantic) could be present in or near the project area and may be affected by the project. However, we believe these species are unlikely to be adversely affected. Shortnose and Atlantic sturgeon of all life stages are unlikely to be present or use the Little Pee Dee

River for spawning because of the project distance from the mainstem of the Pee Dee River (where their presence has been documented). Previous scientific surveys have never documented sturgeon of either species in the Little Pee Dee River, despite significant survey effort (B. Post, South Carolina Department of Natural Resources (SCDNR), pers. comm. to E. Hawk, NMFS, April 5, 2013), though both species have been regularly encountered in the Pee Dee River. Telemetry studies conducted by SCDNR from 2001-2002 and 2010 to present have never encountered a tagged sturgeon at a sampling station approximately 30 miles downriver from the proposed bridge construction site. Based on past and present experience/knowledge, most sturgeon bypass the Little Pee Dee River and continue spawning migrations in the Great Pee Dee River (B. Post, SCDNR, pers. comm. e-mail to E. Hawk, NMFS, April 5, 2013). If either of these species are present in the action area, adverse impacts are extremely unlikely to occur because of the February 1-April 30 in-water moratorium that will be implemented by SCDOT to protect anadromous fishes, as well as the requirement to leave at least 50 percent of the river unobstructed to anadromous fish passage from January 1 through the end of April. Therefore, the risk of either of these species being affected by construction activity is discountable.

This concludes your ESA consultation responsibilities with NMFS for the proposed project. Consultation must be reinitiated if a take occurs or new information reveals effects of the action not previously considered, or the identified action is subsequently modified in a manner that causes an effect to listed species or critical habitat in a manner or to an extent not previously considered, or if a new species is listed or critical habitat designated that may be affected by the identified action.

We have enclosed additional information for your review on other statutory requirements that may apply to this action. Thank you for your assistance in the conservation of ESA-listed species and critical habitat. If you have any questions on this consultation, please contact Eric Hawk, consultation biologist, at (727) 551-5773, or by e-mail at Eric.Hawk@noaa.gov.

Sincerely,

Wiles M. Croom

Roy E. Crabtree, Ph.D. Regional Administrator

- Enc.: 1. Sea Turtle and Smalltooth Sawfish Construction Conditions (Revised March 23, 2006)
  2. PCTS Access and Additional Considerations for ESA Section 7 Consultations (Revised July 15, 2009)
- cc: FriersonEW@dot.state.sc.us
- File: 1514-22.F.2



### United States Department of the Interior

FISH AND WILDLIFE SERVICE 176 Croghan Spur Road, Suite 200 Charleston, South Carolina 29407

July 19, 2016



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Lt. Colonel Matthew A. Luzzatto District Engineer U.S. Army Corps of Engineers 69A Hagood Street Charleston, SC 29403-5107

Re: P/N SAC-2008-1333-REVISED, I-73, Various Counties, SC FWS Log No. 2011-CPA-0056

Attn: Steve Brumagin

Dear Colonel Luzzatto:

The U.S. Fish and Wildlife Service (Service) has received the revised public notice dated July 8, 2016, for the proposed construction of a new designated I-73, through various counties in South Carolina. The South Carolina Department of Transportation (SCDOT) has requested this Department of the Army permit pursuant to Section 10 of the Rivers and Harbor Act of 1899, and Sections 401 and 404 of the Clean Water Act. This report is submitted in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*) and Section 7 of the Endangered Species Act (ESA), as amended (16 U.S.C. 1531-1543).

As proposed, the revised I-73 project has reduced the overall impacts proposed in the original application. The current project includes the placement of fill materials, bridges and culverts in a total of 4,643 linear feet of streams and 254.28 acres of wetlands; temporary clearing of 48.67 acres of wetlands; permanently clearing 16.75 acres of wetlands; and excavation of 4.4 acres of wetlands. This application indicates that the project will impact a total of 17 separate streams, 139 separate waters of the U.S. including wetlands, and 5 open water features at various locations in Marlboro, Dillon, Marion, and Horry Counties beginning at the NC/SC State line near Bennettsville, in Marlboro County, and extending southeast to the intersection SC 22 near Conway, South Carolina.

The public notice does not identify borrow areas that will provide material that will be used for wetland impacts. A project of this magnitude will no doubt require a significant amount of fill which increases the likelihood of additional impacts to wetland resources. If wetland resources

are impacted by the borrow areas, the Service recommends that the SCDOT develop a project plan detailing use of the borrow sites allowing resource agencies an opportunity to evaluate potential long-term impacts to the areas.

2.47

From the previous project development, SCDOT had committed to reduce the likelihood of invasive species gaining a foothold in disturbed areas. However, no plans or descriptive process were provided in the public notice indicating how this will be accomplished. The Service recommends SCDOT develop an invasive species control and monitoring plan for all areas disturbed during the life of this construction project.

In addition, SCDOT committed temporary roads that may be placed in wetlands during bridge construction will be removed upon completion of each bridge and the impacted area will be reseeded with native seed mixes. Bridge construction is a long-term process and may encompass several years. This translates into a significant temporal loss of functions and values the wetland resource provides for the benefit of the surrounding area. Further, this temporal loss accrues until the reseeded area reaches ecological maturity. The added functional loss over time may be significant especially if the wetland affected is a mature bottomland hardwood resource. To offset the temporal loss, the Service believes appropriate compensation should be required prior to the action taking place. We also recommend SCDOT compliment the reseeding activities by planting native seedlings, where appropriate, to hasten the full recovery of the affected wetland resource.

Previously proposed mitigation plans for this project included restoration efforts at Joiner Bay and Long Branch Creek in Horry County. In addition, the remaining credits within the Sandy Island Mitigation Bank were debited. However, the two aquatic sites and use of the mitigation credits have been dismissed in favor of a new plan. A new site, Gunter's Island, has now been proposed to address the project's needs for mitigation.

Service personnel have a basic knowledge of the proposed area and its opportunities for restoration and enhancement. We find that Gunter's Island has the potential to meet the SCDOT need to compensate for impacts that will result from the I-73 project. Further, Gunter's Island will be acquired by the South Carolina Department of Natural Resources for inclusion into the Heritage Trust Program which offers, among other benefits, permanent protection to the property. While we anticipate no objections to this site, we believe it would be prudent to conduct a multi-agency site visit to Gunter's Island and review the potential restoration and enhancement opportunities. Without a site visit, we cannot provide comments on specific aspects of the mitigation site. Regardless, a final mitigation plan for Gunter's Island should be reviewed by all resource and regulatory agencies to ensure the site will adequately offset the proposed impacts of I-73. We also recommend all restoration activities begin and preferably be completed prior to commencement of the I-73 construction activities.

Upon review of the public notice, the Service concurs with the Corps' determination that this proposed action may affect, but will not adversely affect, threatened or endangered species known to occur in the Counties encompassed by the proposed project. Further, no critical habitat has been designated within the project area. In view of this, we believe that the requirements of

section 7 of the ESA have been satisfied. However, obligations under section 7 of the ESA must be reconsidered if: (1) new information reveals impacts from this identified action may affect listed species or critical habitat in a manner not previously considered; (2) this action is subsequently modified in a manner which was not considered in this assessment; or (3) a new species is listed or critical habitat is designated that may be affected by the identified action.

The Service appreciates the opportunity to provide comments on this proposed project. If you have any questions on the Service's comments, please contact Mr. Mark Caldwell of this office at (843) 727-4707 ext. 215, and reference FWS Log No. 2011-CPA-0056.

Sincerely,

Thomas D. McCon

Thomas D. McCoy\_ Field Supervisor

TDM/MAC



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE Southeast Regional Office 263 13th Avenue South St. Petersburg, Florida 33701-5505 http://sero.nmfs.noaa.gov

July 29, 2016

F/SER47: KH/pw

(Sent via Electronic Mail)

Lt. Col. Matthew Luzzatto Charleston District, Corps of Engineers 69A Hagood Avenue Charleston, South Carolina 29403-5107

Attention: Stephen A. Brumagin

Dear Colonel Luzzatto:

NOAA's National Marine Fisheries Service (NMFS) reviewed joint public notice SAC-2008-01333 REVISED dated July 8, 2016. The South Carolina Department of Transportation (SCDOT) requests authorization from the Department of the Army to impact approximately 324.1 acres of jurisdictional wetlands and 4,643 linear feet of jurisdictional streams from cut/fill and clearing activities in various locations in Marlboro, Dillon, Marion, and Horry Counties associated with construction of a new 75.3-mile four-lane interstate roadway (I-73) on new alignment. The Charleston District has determined the proposed work is not within areas designated essential fish habitat (EFH). The NMFS agrees with this determination and offers no comments under the authorities of the Magnuson-Stevens Fishery Conservation and Management Act. As the nation's federal trustee for the conservation and management of marine, estuarine, and anadromous fishery resources, the NMFS provides the following comments and recommendation pursuant to authorities of the Fish and Wildlife Coordination Act.

#### Description of the Proposed Project

The proposed new four-lane interstate roadway would begin at the NC/SC stateline northeast of Bennettsville in Marlboro County and extend to its intersection with SC Highway 22 northwest of Conway in Horry County for a total approximate distance of 75.3 miles. The project would also include construction of interchanges, over/underpasses, and improvements to existing roadways at the interchanges and over/underpasses. The project would utilize a standard limited-access interstate design with frontage roads and entrance/exit ramps at interchanges, stormwater facilities, grassed medians, shoulders, guide rails, and barrier fences. The project is designed to provide interstate linkage between the I-73/I-74 corridor in North Carolina to the Myrtle Beach region in South Carolina.

#### Consultation History

The NMFS has participated in project review and planning, as well as numerous interagency meetings, since the project's initial coordination with the NMFS during 2006. The NMFS has reviewed and provided comments on the project Purpose and Need (January 31, 2006), the Draft Environmental Impact Statements (DEIS) for the southern route (phase 1; August 17, 2006) and northern route (phase 2; September 11, 2007), the Final Environmental Impact Statements (EIS) for the Northern Corridor (September 22, 2008), and public notice SAC-2008-1333-DIS (March 25, 2011). Additionally, as part of the Agency Coordination Team, the NMFS commented on numerous versions of the proposed mitigation plan, which are best summarized by letter dated August 13, 2014, reviewing the SCDOT's Permittee-Responsible Final Mitigation Plan for Joiner Bay and Long Branch Creek.



#### **Project Impacts**

The public notice describes impacts to 324.1 acres of jurisdictional wetlands within 139 separate wetlands and five ponds/impoundments. Proposed permanent wetland impacts include 254.28 acres from fill activities, 16.75 from permanent clearing, and 4.4 acres from excavation. Approximately 48.67 acres of jurisdictional wetlands would be impacted from temporary clearing activities. The loss of freshwater wetlands can adversely affect water quality as this habitat filters pollutants, stabilizes shorelines, and facilitates transport of organic material. Consideration of the losses to these habitats and the ecosystem services they provide is essential during the Charleston District's analysis of the proposed project.

The public notice also describes direct impacts to 4,643 linear feet of jurisdictional streams within 17 separate streams. These stream impacts would permanently eliminate or temporarily disturb aquatic habitats as well as temporarily disrupt the behavior of aquatic organisms. The Little Pee Dee River includes spawning, foraging, and migration habitat for anadromous fish species, including American shad (*Laos sapidissima*) and blueback herring (*Alosa aestivalis*). Anadromous fishes occur within, upstream, and downstream of the proposed I-73 crossing of the Little Pee Dee River, however, the public notice does not describe potential adverse impacts to these species or their habitats. Sediment input into streams and rivers is a major threat to anadromous fishes and their habitat. This input can directly impact individuals and spawning aggregations as well as permanently eliminate migration and spawning habitat. Additionally, impacts from noise, vibrations, and other elements associated with construction activities can adversely affect anadromous fish spawning and migratory patterns and behavior. The NMFS recommends the Charleston District examine impacts to anadromous fishes, including downstream impacts, during final analysis of the permit application.

#### Proposed Compensatory Mitigation

The mitigation plan for the proposed roadway has been revised and will no longer include the Joiner Bay wetland mitigation site and the Long Branch stream mitigation site, which were originally considered to compensate for unavoidable impacts from the project. The currently proposed compensatory mitigation plan consists of the permittee-responsible mitigation site referred to as "Gunter's Island," located in Horry County. The SCDOT is proposing to purchase and preserve the tract, including an intact Carolina Bay, and conduct enhancement activities by replacing/removing existing culverts/roads/bridges, stabilizing streambanks, and supplemental planting along floodplains within wetlands and buffers. The proposed mitigation plan states the site is a large-scale mitigation opportunity with regional importance based on a watershed approach to protect water quality and aquatic resources. The 6,134 acre tract is on the east bank of the Little Pee Dee River approximately four miles north of the US 378 crossing of the river. The SCDOT states the tract contains 89,836 linear feet of tributaries, 4,583 acres of wetlands, and includes an 11-mile corridor along the east side of the Little Pee Dee River. The SCDOT indicates preservation of this tract would further prevent habitat fragmentation caused by land conversion from typical agricultural practices to non-traditional uses and development. The South Carolina Department of Natural Resources would be the long-term steward of the site for management and inclusion in the Department's Heritage Trust Program.

The NMFS does not object to the use of the Gunter's Island site for permittee-responsible compensatory mitigation for unavoidable impacts from the proposed project. The NMFS believes Gunter's Island represents a unique mitigation opportunity providing significant value due to its size, aquatic resources, and connectivity to anadromous fish habitat in the Little Pee Dee River, including the 11-mile segment of the site along the east bank of the river. However, the public notice does not describe any ecological performance standards for mitigation activities. Performance standards are used to assess whether a project is achieving its goals and should be objective and verifiable. The public notice also fails to include any on-site restoration as a component of the mitigation plan, and only describes enhancement and preservation activities. The NMFS recommends the Charleston District examine potential restoration

opportunities at Gunter's Island and require comprehensive performance standards be included in the final mitigation plan.

#### Recommendations

The proposed project may prevent upstream passage of anadromous fishes to spawning habitat in the Little Pee Dee River and may degrade spawning, migration, and foraging habitats within, upstream, and downstream of the proposed I-73 crossing of the Little Pee Dee River for numerous breeding seasons. The NMFS anticipates impacts to anadromous fishes from the proposed project would be significant unless avoidance and minimization measures are included in the project design. To the extent practicable, the SCDOT should restrict in-water work in the Little Pee Dee River to May 1 to February 14 of each year (no in-water work conducted between February 15 and April 30), and avoid blocking or constricting the river throughout the year to avoid impacts to migrating, foraging, and spawning anadromous fishes. Additionally, the SCDOT should pursue construction methods that avoid and minimize impacts to the river, including the use of top-down construction, temporary work trestles, work barges, or other methods that reduce or eliminate impacts to the river. Should the SCDOT require use of in-water structures during construction, such as rip-rap pads or rock jetties, hydraulic analysis should be conducted to assess whether current changes will alter rates of fish passage and sedimentation in spawning areas, and the permit should require monitoring of these habitats to assess project impacts and trigger remedial action if necessary. Furthermore, if blasting is required in the Little Pee Dee River, a blasting plan should be developed and submitted to the NMFS for review. Lastly, the SCDOT should install, inspect, and maintain appropriate erosion and sedimentation control Best Management Practices in accordance with local and state stormwater guidelines to avoid sediment input into adjacent waters.

Thank you for the opportunity to provide these comments. Please direct related questions or comments to the attention of Keith M. Hanson at our Charleston Area Office, 219 Fort Johnson Road, Charleston, South Carolina 29412-9110, Keith.Hanson@noaa.gov or by phone at (843)762-8622.

Sincerely,

Pace Willer

/ for

Virginia M. Fay Assistant Regional Administrator Habitat Conservation Division

cc: COE, Stephen.A.Brumagin@usace.army.mil SCDNR, RigginL@dnr.sc.gov SCDNR, HolbrookS@dnr.sc.gov, PostB@dnr.sc.gov EPA, Laycock.Kelly@epa.gov FWS, Mark\_Caldwell@fws.gov F/SER46, David.Dale@noaa.gov F/SER47, Fritz.Rohde@noaa.gov, Keith.Hanson@noaa.gov