

APPENDIX A: AGENCY COORDINATION LETTERS

DEC 20 2010

In Reply Refer to: HFPP-15

Mr. Barry Dragon
Bridge Branch Chief
USCG Seventh District
Brickell Plaza Federal Building
909 SE 1st Avenue
Miami, FL 33131-3050

Subject: PRA-FOPU 10(3)
Fort Pulaski Bridge
Fort Pulaski National Monument

Dear Mr. Dragon:

The National Park Service, in cooperation with the Federal Highway Administration (FHWA), is initiating an Environmental Assessment for the repair and/or replacement of the Fort Pulaski Bridge located in Savannah, Georgia. The Fort Pulaski Bridge provides access to Fort Pulaski from U.S. Route 80 and crosses the South Channel of the Savannah River. The bridge was built in 1938, and has been rehabilitated several times. The timber piles have deteriorated, and the bridge does not meet current safety standards. The Environmental Assessment will analyze a range of bridge repair and replacement alternatives. Repairs to the bridge or replacement of the bridge have the potential to impact navigation along the South Channel of the Savannah River.

Please review the proposed project and provide us with comments and information in regard to potential impacts to navigation in the South Channel of the Savannah River. If possible, please identify specific areas where concerns are present, and include any required or suggested measures to avoid or minimize impacts. A quad map indicating the study area is enclosed. If you have any questions concerning this matter, please contact Ms. Lisa Landers, Environmental Protection Specialist, at Lisa.Landers@dot.gov, or (571) 434-1592.

Sincerely,



Kevin S. Rose
Environmental Compliance Specialist

Enclosures



cc:

Mr. Randy Wester, Superintendent, National Park Service, FOPU, Savannah, GA

Mr. Steven Wright, Environmental Protection Specialist, National Park Service, Southeast
Region, Atlanta, GA

Mr. Kent Cochran, Southeast Region FLHP Coordinator, National Park Service, Atlanta, GA



Eastern Federal Lands
Highway Division

21400 Ridgetop Circle
Sterling, VA 20166-6511

FEB 17 2011 In Reply Refer to: HFPP-15

Mr. Barry Dragon
Bridge Branch Chief
USCG Seventh District
Brickell Plaza Federal Building
909 SE 1st Avenue
Miami, FL 33131-3050

Subject: PRA-FOPU 10(3)
Fort Pulaski Bridge Rehabilitation/Replacement
Cooperating Agency Request

Dear Mr. Dragon:

The National Park Service, in cooperation with the Federal Highway Administration (FHWA), is initiating an Environmental Assessment (EA) for the repair and/or replacement of the Fort Pulaski Bridge located in Savannah, Georgia. The Fort Pulaski Bridge provides access to Fort Pulaski from U.S. Route 80 and crosses the South Channel of the Savannah River. The bridge was built in 1938, and has been rehabilitated several times. The timber piles have deteriorated, and the bridge does not meet current safety standards. The EA will analyze a range of bridge repair and replacement alternatives.

FHWA would like to invite the Coast Guard to be a Cooperating Agency because proposed alternatives may impact navigation in the South Channel of the Savannah River. Upon completion, the EA should include information in the project environmental documents that cooperating agencies need to discharge their NEPA responsibilities and any other requirements regarding jurisdictional approvals, permits, licenses, and/or clearances.



We look forward to your response to this request. If you have any questions concerning this matter, please contact Ms. Lisa Landers, Environmental Protection Specialist, at Lisa.Landers@dot.gov, or (571) 434-1592.

Sincerely,



Kevin S. Rose
Environmental Compliance Specialist

Enclosures

cc:

Mr. Randy Wester, Superintendent, National Park Service, FOPU, Savannah, GA

Mr. Steven Wright, Environmental Protection Specialist, National Park Service, Southeast Region, Atlanta, GA

Mr. Kent Cochran, Southeast Region FLHP Coordinator, National Park Service, Atlanta, GA

Mr. Brodie Rich, Federal Permitting Agent, Coast Guard Bridge Branch, Miami, FL

U.S. Department of
Homeland Security

United States
Coast Guard



Commander
Seventh Coast Guard District

909 SE First Avenue
Miami, FL 33131-3028
Staff Symbol: dpb
Phone: (305) 415-6736
Fax: (305) 415-6763
Email: Brodie.E.Rich@uscg.mil

16591/1071
Ser: 1992
February 25, 2011

Mr. Kevin Rose
Environmental Compliance Specialist
Federal Highway Administration
Eastern Federal Lands Highway Division
21400 Ridgetop Circle
Sterling, VA 20166-5611

Dear Mr. Rose:

This is in response to your letter dated February 17, 2011, requesting that we accept the designation as Cooperating Agency for the environmental documentation about the proposed repair and/or replacement of the Fort Pulaski Bridge across the South Channel Savannah River, mile 0.8, Savannah, Georgia.

If the existing bridge is repaired or rehabilitated than a Coast Guard bridge permit will not be required, so we would not need an environmental document. It is inherent within the existing bridge permit for the bridge that it be maintained, kept in good repair and remains operational. However, if the existing bridge structure is proposed to be replaced, than we will adopt the proposed environmental document for the processing of a new Coast Guard bridge permit for the new replacement bridge structure.

We, therefore, accept the designation as Cooperating Agency for the proposed environmental documentation relative to the replacement of the existing Fort Pulaski Bridge structure.

If you have any questions about our permitting requirements, please feel free to contact me at (305)415-6736.

Sincerely,

A handwritten signature in blue ink that reads "Brodie E. Rich".

BRODIE E. RICH
Bridge Management Specialist
U. S. Coast Guard
By direction



Eastern Federal Lands
Highway Division

21400 Ridgetop Circle
Sterling, VA 20166-6511

DEC 20 2010 In Reply Refer to: HFPP-15

Mr. Matt Elliott
Georgia Natural Heritage Program
Wildlife & Natural Heritage Section
Georgia Department of Natural Resources
2065 US Hwy. 278 SE
Social Circle, GA 30025

Subject: PRA-FOPU 10(3)
Fort Pulaski Bridge
Fort Pulaski National Monument

Dear Mr. Elliott:

The National Park Service, in cooperation with the Federal Highway Administration (FHWA), is initiating an Environmental Assessment for the repair and/or replacement of the Fort Pulaski Bridge located in Savannah, Georgia. The Fort Pulaski Bridge provides access to Fort Pulaski from U.S. Route 80 and crosses the South Channel of the Savannah River. The bridge was built in 1938, and has been rehabilitated several times. The timber piles have deteriorated, and the bridge does not meet current safety standards. The Environmental Assessment will analyze a range of bridge repair and replacement alternatives. Repairs to the bridge or replacement of the bridge have the potential to impact species protected by the State of Georgia.

Please review the proposed project and provide us with comments and information in regard to potential impacts to any protected species. If possible, please identify specific areas where concerns are present, and include any required or suggested measures to avoid or minimize impacts. A quad map indicating the study area is enclosed. If you have any questions concerning this matter, please contact Ms. Lisa Landers, Environmental Protection Specialist, at Lisa.Landers@dot.gov, or (571) 434-1592.

Sincerely,

A handwritten signature in blue ink, appearing to read "K. S. Rose".

Kevin S. Rose
Environmental Compliance Specialist

Enclosures



cc:

Mr. Randy Wester, Superintendent, National Park Service, FOPU, Savannah, GA

Mr. Steven Wright, Environmental Protection Specialist, National Park Service, Southeast
Region, Atlanta, GA

Mr. Kent Cochran, Southeast Region FLHP Coordinator, National Park Service, Atlanta, GA



WILDLIFE RESOURCES DIVISION

MARK WILLIAMS
COMMISSIONER

DAN FORSTER
DIRECTOR

January 18, 2011

Kevin Rose
Environmental Compliance Specialist
US Dept. of Transportation, Federal Hwy Administration
21400 Ridgetop Circle
Sterling, VA 20166-6511

Subject: Known occurrences of natural communities, plants and animals of highest priority conservation status on or near Fort Pulaski Bridge Repair or Replacement, Chatham County, Georgia

Dear Mr. Rose:

This is in response to your request of December 20, 2010. According to our records, within a three-mile radius of the project site there are the following Natural Heritage Database occurrences:

- Acacia farnesiana* (Sweet Acacia) approx. 0.5 mi. NE of site
- GA *Forestiera segregata* (Florida Wild Privet) approx. 0.5 mi. SE of site
- GA *Forestiera segregata* (Florida Wild Privet) approx. 1.0 mi. SE of site
- GA *Haematopus palliatus* (American Oystercatcher) approx. 2.5 mi. SW of site
- GA *Haliaeetus leucocephalus* (Bald Eagle) approx. 2.0 mi. NW of site
- Lasiurus intermedius* (Northern Yellow Bat) 0.4 mi. N of site
- GA *Malaclemys terrapin* (Diamondback Terrapin) approx. 2.5 mi. W of site
- Nycticorax nycticorax* (Black-crowned Night-heron) [HISTORIC] approx. 2.5 mi. E of site
- Pseudorca crassidens* (False Killer Whale) approx. 2.5 mi. E of site
- GA *Rynchops niger* (Black Skimmer) [HISTORIC?] approx. 1.0 mi. N of site
- GA *Sternula antillarum* (Least Tern) [HISTORIC] approx. 2.0 mi. NW of site
- US *Trichechus manatus* (Manatee) on site in tidal waters
- Fort Pulaski National Monument [National Park Service] on site
- Little Tybee-Cabbage Island NA [Department of Natural Resources] approx. 2.0 mi. S of site
- Savannah River [High Priority Stream] 0.2 mi. SW of site
- Tybee Island Tract [Department of Natural Resources] approx. 2.0 mi. E of site

* Entries above preceded by "US" indicates species with federal status (Protected, Candidate or Partial Status). Species that are federally protected in Georgia are also state protected; "GA" indicates Georgia protected species.

Recommendations:

A federally listed species, *Trichechus manatus* (Manatee) may be found at this site. Section 9 of the Endangered Species Act states that taking or harming of a listed species is prohibited. We recommend all requestors with projects located near federally protected species consult with the United States Fish and Wildlife Service. For southeast Georgia, please contact Strant Colwell (912-265-9336, ext.30 or Strant_Colwell@fws.gov). In southwest Georgia, please contact John Doresky (706-544-6999 or John_Doresky@fws.gov). In north Georgia, please contact Robin Goodloe (706-613-9493, ext.221 or Robin_Goodloe@fws.gov).

We also have a record of a nesting Bald Eagle (*Haliaeetus leucocephalus*) within three miles of the proposed project. Although Bald Eagles are no longer considered an endangered species, they are still protected by the Migratory Bird Treaty Act, the Bald and Golden Eagle Protection Act and the Georgia Endangered Species Act. These Acts continue to protect bald eagles from potentially harmful human activities. For more information on how to prevent impacts to bald eagles that could violate the Eagle Act, download the National Bald Eagle Management Guidelines:

<http://www.fws.gov/migratorybirds/issues/BaldEagle/NationalBaldEagleManagementGuidelines.pdf>

Please minimize disturbance to stream banks, wetlands, and riparian zones during bridge rehabilitation. Conduct activities from a stable stream bank or reinforced platform that does not cause degradation or destabilization of stream banks. Prohibit operation of equipment in the channel or use of the channel as a ford. We recommend that stringent erosion control practices be used during construction activities and that vegetation is re-established on disturbed areas as quickly as possible. Silt fences and other erosion control devices should be inspected and maintained until soil is stabilized by vegetation. Please use natural vegetation and grading techniques (e.g., vegetated swales, turn-offs, vegetated buffer strips) that will ensure that the road or ROW does not serve as a conduit for storm water or pollutants into the stream during or after construction. No uncured concrete or water used to facilitate curing should be discharged directly into the stream; curing water should be pumped into filter bags (i.e., "dirt bags") or detention basins before coffer dams or other diversion structures are dismantled. These measures will help protect water quality in the vicinity of the bridge crossings as well as downstream.

Before any bridge work is completed, please survey the bridge for roosting birds and bats. If any are present, please delay bridge work until the birds and/or bats are no longer using the site.

Please also keep in mind that this project occurs near the Savannah River, a high priority stream. As part of an effort to develop a comprehensive wildlife conservation strategy for the state of Georgia, the Wildlife Resources division has developed and mapped a list of streams that are important to the protection or restoration of rare aquatic species and aquatic communities. High priority waters and their surrounding watersheds are a high priority for a broad array of

conservation activities, but do not receive any additional legal protections. We now have GIS ESRI shapefiles of GA high priority waters available on our website (<http://www.georgiawildlife.com/content/displaycontent.asp?txtDocument=89&txtPage=13>). Please contact the Georgia Natural Heritage Program if you would like additional information on high priority waters.

Data Available on the Nongame Conservation Section Website

By visiting the Nongame Conservation Section Website you can view the highest priority species and natural community information by Quarter Quad, County and HUC8 Watershed. To access this information, please visit our GA Rare Species and Natural Community Information page at: <http://www.georgiawildlife.com/conservation/species-of-concern?cat=conservation>

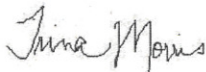
An ESRI shape file of our highest priority species and natural community data by quarter quad and county is also available. It can be downloaded from: <http://georgiawildlife.com/sites/default/files/uploads/wildlife/nongame/zip/gnhpds.zip>

Disclaimer:

Please keep in mind the limitations of our database. The data collected by the Nongame Conservation Section comes from a variety of sources, including museum and herbarium records, literature, and reports from individuals and organizations, as well as field surveys by our staff biologists. In most cases the information is not the result of a recent on-site survey by our staff. Many areas of Georgia have never been surveyed thoroughly. Therefore, the Nongame Conservation Section can only occasionally provide definitive information on the presence or absence of rare species on a given site. Our files are updated constantly as new information is received. **Thus, information provided by our program represents the existing data in our files at the time of the request and should not be considered a final statement on the species or area under consideration.**

If you know of populations of highest priority species that are not in our database, please fill out the appropriate data collection form and send it to our office. Forms can be obtained through our web site (<http://www.georgiawildlife.com/node/1376>) or by contacting our office. If I can be of further assistance, please let me know.

Sincerely,



Katrina Morris
Environmental Review Coordinator



Eastern Federal Lands
Highway Division

21400 Ridgetop Circle
Sterling, VA 20166-6511

DEC 20 2010 In Reply Refer to: HFPP-15

Mr. Eric Hawk
Section 7 Coordinator
Southeast Regional Office
National Marine Fisheries Service
263 13th Avenue South
St. Petersburg, FL 33701

Subject: PRA-FOPU 10(3)
Fort Pulaski Bridge
Fort Pulaski National Monument

Dear Mr. Hawk:

The National Park Service, in cooperation with the Federal Highway Administration (FHWA), is initiating an Environmental Assessment for the repair and/or replacement of the Fort Pulaski Bridge located in Savannah, Georgia. The Fort Pulaski Bridge provides access to Fort Pulaski from U.S. Route 80 and crosses the South Channel of the Savannah River. The bridge was built in 1938, and has been rehabilitated several times. The timber piles have deteriorated, and the bridge does not meet current safety standards. The Environmental Assessment will analyze a range of bridge repair and replacement alternatives. Repairs to the bridge or replacement of the bridge have the potential to impact federally-listed marine and anadromous species per the Endangered Species Act of 1973 and Essential Fish Habitat per the Magnuson-Stevens Act.

Please review the proposed project and provide us with comments and information in regard to potential impacts to any federally-listed species, critical habitat, and Essential Fish Habitat. If possible, please identify specific areas where concerns are present, and include any required or suggested measures to avoid or minimize impacts. A quad map indicating the study area is enclosed. If you have any questions concerning this matter, please contact Ms. Lisa Landers, Environmental Protection Specialist, at Lisa.Landers@dot.gov, or (571) 434-1592.

Sincerely,

A handwritten signature in blue ink, appearing to read "K. S. Rose".

Kevin S. Rose
Environmental Compliance Specialist

Enclosures



cc:

Mr. Randy Wester, Superintendent, National Park Service, FOPU, Savannah, GA

Mr. Steven Wright, Environmental Protection Specialist, National Park Service, Southeast
Region, Atlanta, GA

Mr. Kent Cochran, Southeast Region FLHP Coordinator, National Park Service, Atlanta, GA



Eastern Federal Lands
Highway Division

21400 Ridgetop Circle
Sterling, VA 20166-6511

DEC 20 2010

In Reply Refer to: HFPP-15

Dr. David Crass
Deputy State Historic Preservation Officer
Georgia Historic Preservation Division
Department of Natural Resources
254 Washington Street, SW
Ground Level
Atlanta, GA 30334

Subject: PRA-FOPU 10(3)
Fort Pulaski Bridge
Fort Pulaski National Monument

Dear Dr. Crass:

The National Park Service, in cooperation with the Federal Highway Administration (FHWA), is initiating an Environmental Assessment for the repair and/or replacement of the Fort Pulaski Bridge located in Savannah, Georgia. The Fort Pulaski Bridge provides access to Fort Pulaski from U.S. Route 80 and crosses the South Channel of the Savannah River. The bridge was built in 1938, and has been rehabilitated several times. The timber piles have deteriorated, and the bridge does not meet current safety standards. The Environmental Assessment will analyze a range of bridge repair and replacement alternatives. Although the Fort Pulaski Bridge is not eligible for listing on the National Register of Historic Places, repairs to the bridge or replacement of the bridge have the potential to disturb the ground surrounding the existing bridge structure.

Please review the proposed project and provide us with comments and information in regard to potential impacts to any cultural resources and eligible or potentially eligible National Register of Historic Places properties. If possible, please identify specific areas where concerns are present, and include any required or suggested measures to avoid or minimize impacts. A quad map indicating the study area is enclosed.



If you have any questions concerning this matter, please contact Ms. Lisa Landers, Environmental Protection Specialist, at Lisa.Landers@dot.gov or (571) 434-1592.

Sincerely,



Kevin S. Rose
Environmental Compliance Specialist

Enclosures

cc:

Mr. Randy Wester, Superintendent, National Park Service, FOPU, Savannah, GA
Mr. Steven Wright, Environmental Protection Specialist, National Park Service, Southeast Region, Atlanta, GA
Mr. Kent Cochran, Southeast Region FLHP Coordinator, National Park Service, Atlanta, GA

DEC 20 2010

In Reply Refer to: HFPP-15

Ms. Carol Bernstein
Coastal Branch Chief, Regulatory Division
U.S. Army Corps of Engineers, Savannah District
ATTN: CESAS-RD-C
PO Box 889
100 West Oglethorpe Avenue
Savannah, GA 31402

Subject: PRA-FOPU 10(3)
Fort Pulaski Bridge
Fort Pulaski National Monument

Dear Ms. Bernstein:

The National Park Service, in cooperation with the Federal Highway Administration (FHWA), is initiating an Environmental Assessment for the repair and/or replacement of the Fort Pulaski Bridge located in Savannah, Georgia. The Fort Pulaski Bridge provides access to Fort Pulaski from U.S. Route 80 and crosses the South Channel of the Savannah River. The bridge was built in 1938, and has been rehabilitated several times. The timber piles have deteriorated, and the bridge does not meet current safety standards. The Environmental Assessment will analyze a range of bridge repair and replacement alternatives. Repairs to the bridge or replacement of the bridge have the potential to impact to wetlands and waters of the United States and also to the navigability of the Channel.

A wetland delineation will be completed to support the Environmental Assessment; however, FHWA appreciates your early review of the project to identify any potential concerns. A quad map indicating the study area is enclosed. If you have any questions concerning this matter, please contact Ms. Lisa Landers, Environmental Protection Specialist, at Lisa.Landers@dot.gov, or (571) 434-1592.

Sincerely,



Kevin S. Rose
Environmental Compliance Specialist

Enclosures



cc:

Mr. Randy Wester, Superintendent, National Park Service, FOPU, Savannah, GA

Mr. Steven Wright, Environmental Protection Specialist, National Park Service, Southeast
Region, Atlanta, GA

Mr. Kent Cochran, Southeast Region FLHP Coordinator, National Park Service, Atlanta, GA

JAN - 3 2011 In Reply Refer to: HFPP-15

Mr. Strant Colwell
U.S. Fish and Wildlife Service
4980 Wildlife Drive NE
Townsend, GA 31331

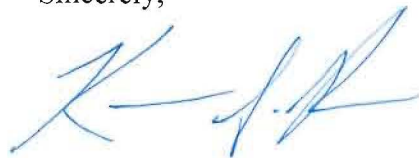
Subject: PRA-FOPU 10(3)
Fort Pulaski Bridge
Fort Pulaski National Monument

Dear Mr. Colwell:

The National Park Service, in cooperation with the Federal Highway Administration (FHWA), is initiating an Environmental Assessment for the repair and/or replacement of the Fort Pulaski Bridge located in Chatham County, Georgia. The Fort Pulaski Bridge provides access to Fort Pulaski from U.S. Route 80 and crosses the South Channel of the Savannah River. The bridge was built in 1938, and has been rehabilitated several times. The timber piles have deteriorated, and the bridge does not meet current safety standards. The Environmental Assessment will analyze a range of bridge repair and replacement alternatives. Repairs to the bridge or replacement of the bridge have the potential to impact federally-listed species per the Endangered Species Act of 1973.

Please review the proposed project and provide us with comments and information in regard to potential impacts to any federally-listed species and critical habitat. If possible, please identify specific areas where concerns are present, and include any required or suggested measures to avoid or minimize impacts. A quad map indicating the study area is enclosed. If you have any questions concerning this matter, please contact Ms. Lisa Landers, Environmental Protection Specialist, at Lisa.Landers@dot.gov, or (571) 434-1592.

Sincerely,



Kevin S. Rose
Environmental Compliance Specialist

Enclosures



cc:

Mr. Randy Wester, Superintendent, National Park Service, FOPU, Savannah, GA

Mr. Steven Wright, Environmental Protection Specialist, National Park Service, Southeast
Region, Atlanta, GA

Mr. Kent Cochran, Southeast Region FLHP Coordinator, National Park Service, Atlanta, GA



United States Department of the Interior

Fish and Wildlife Service

105 West Park Drive, Suite D
Athens, Georgia 30606
Phone: (706) 613-9493
Fax: (706) 613-6059

West Georgia Sub-Office
Post Office Box 52560
Fort Benning, Georgia 31995-2560
Phone: (706) 544-6428
Fax: (706) 544-6419

Coastal Sub-Office
4980 Wildlife Drive
Townsend, Georgia 31331
Phone: (912) 832-8739
Fax: (912) 832-8744

February 2, 2011

Lisa Landers
Federal Highway Administration
Eastern Federal Lands Highway Division
214000 Ridgetop Circle
Sterling, Virginia 20166-6511

Re: USFWS File Number 2011-0051

Dear Ms. Landers:

Thank you for your letter requesting a review of the information provided regarding the rehabilitation/replacement of the Fort Pulaski Bridge in Chatham County, Georgia. These comments are provided in accordance with provisions of the Endangered Species Act of 1973, as amended; (16 U.S.C. 1531 *et seq.*) and the Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*) to further the conservation of fish and wildlife resources and their habitat, including federally listed threatened and endangered species.

We recommend the consideration of inclusion of the following additional measures to minimize impacts to fish and wildlife resources:

1. Maintaining a minimal footprint for the bridge approaches through the saltmarsh.
2. If feasible, we recommend that the replacement structure incorporate fewer in-stream structures with minimization of the number of bents/piers in the stream channel. The existing structure has a large number of piers in the channel
3. West Indian manatee (*Trichechus manatus*) is on the Federal list as endangered and is known to occur in the Savannah River and the South Channel. Both current and long term threats from human-related activities are reasons for protecting the manatee under the ESA. The largest identified cause of manatee death is collisions with watercraft (USFWS, 2001). Manatees migrate northward from Florida to Georgia and are found in our coastal waters during all but the coldest months of the year. To

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EASTERN FEDERAL LANDS
HIGHWAY DIVISION
STERLING, VA

reduce the likelihood of collisions with manatees during federally permitted activities, the U. S. Fish and Wildlife Service, with cooperation from the U. S. Corps of Engineers (USACE), developed the enclosed 2007 Standard Manatee Conditions for Boating Facilities. We recommend that these Conditions be included in any work in manatee waters being authorized by the Savannah District USACE. We also enclosed the State's "Marine Facility Manatee Signs Placement Procedures" and depictions of "Temporary Construction Signs" that are mentioned in the Conditions.

4. The existing bridge does not appear to have lights on it. If feasible, we recommend that the new structure be designed in the same way, in this regard. Otherwise we recommend the use of minimal safety lighting on the bridge to minimize potential effects to sea turtles. Follow guidelines in "Coastal Roadway Lighting Manual" at <http://www.bstp.net/PDFs/FL%20Conservation%20Coastal%20Roadway%20Lighting%20manual.pdf>.

We appreciate the opportunity to comment during the planning stages of your project. If you have any additional questions, please write or call our Coastal Georgia Sub Office staff biologist, Christopher Coppola, at 912-832-8739 extension 6.

Sincerely,



Sandra S. Tucker
Field Supervisor

for

Enclosures

cc: USFWS, Athens, Georgia

2007 Standard Manatee Conditions for Boating Facilities
Savannah District – U. S .Army Corps of Engineers
January 2008

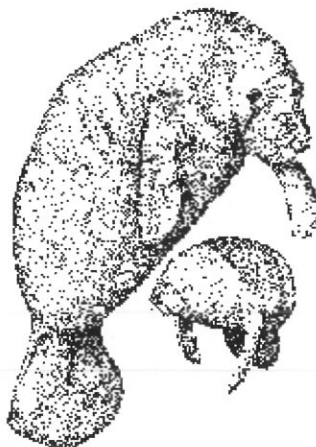
- a. The permittee agrees that all personnel associated with the project will be advised that there are civil and criminal penalties for harming, harassing or killing manatees, which are protected under the Endangered Species Act of 1973 and the Marine Mammal Protection Act of 1972. The permittee and contractor will be held responsible for any manatee harmed, harassed, or killed as a result of construction activities.
- b. Siltation barriers will be made of material in which manatees cannot become entangled, are properly secured, and are regularly monitored to avoid manatee entrapment. Barriers must not block manatee entry to or exit from essential habitat.
- c. All vessels associated with the project will operate at “no wake/idle” speeds at all times while in the construction area. All vessels will follow routes of deep water whenever possible.
- d. All on-site project personnel are responsible for observing water-related activities for the presence of manatees. All construction and activities in open water will cease upon sighting of manatees within 50 feet of the project area. Construction activities will not resume until the manatees have left the project area for at least thirty minutes.
- e. Extreme care will be taken in lowering equipment or materials, including, but not limited to piles, sheet piles, casings for drilled shaft construction, spuds, pile templates, anchors, etc., below the water surface and into the stream bed; taking any precaution not to harm any manatee(s) that may have entered the construction area undetected. All such equipment or materials will be lowered at the lowest possible speed.
- f. The permittee agrees that all manatee collisions, injuries and mortalities shall be reported immediately to the US Army Corps of Engineers (912-652-5347), the US Fish and Wildlife Service Coastal Suboffice (912-265-9336), and Georgia Department of Natural Resources (GDNR; 800-2-SAVE-ME). Any dead manatee(s) found in the project area must be secured to a stable object to prevent the carcass from being moved by the current before the authorities arrive. In the event of injury or mortality of a manatee, all aquatic activity in the project area must cease pending section 7 consultation under the Endangered Species Act with the US Fish and Wildlife Service and the lead Federal agency.
- g. The permittee agrees that the contractor shall keep a log detailing sightings, collisions, or injury to manatees, which have occurred during the contract period.
- h. The permittee agrees that following project completion, a report summarizing the above incidents and sightings will be submitted to the US Fish and Wildlife Service, 4980 Wildlife Drive, NE, Townsend, Georgia 31331 and to the GDNR, Nongame Conservation Section, 1 Conservation Way, Brunswick, Georgia 31520.

- i. All temporary construction materials will be removed upon completion of the work, and salt marsh areas will be restored. No construction debris or trash will be discarded in the water.
- j. The permittee shall regularly maintain all hoses, faucets, and/or freshwater discharges to prevent freshwater leakage into manatee habitat. This minimizes attraction of manatees to the marina where boats are concentrated and a potential for increased boat/manatee collisions exists. Oil and sewage spill contingency plans should be in place for the marina to protect manatees.
- k. The permittee shall identify one or more individuals associated with the facility who can be contacted regarding manatee sightings, boat strikes, or other manatee-related concerns. Such individuals' contact information shall be submitted to the US Fish and Wildlife Service and GDNR at the addresses listed in condition "h". Any subsequent changes in contact information shall be reported also.
- l. Prior to initiation of construction, the permittee shall install temporary manatee awareness construction signs as outlined in the attached "Marine Facility Manatee Signs Procedures" (Attachment A). The signs shall be displayed and maintained throughout construction and shall be removed by the permittee upon completion of construction.
- m. Prior to operation of the facility, the permittee shall install two or more permanent manatee waterway signs on either end of the facility and in locations clearly visible from the navigation channel, as outlined in the attached "Marine Facility Manatee Signs Procedures" (Attachment A).
- n. Prior to operation of the facility, the permittee shall install one or more permanent manatee boater education signs as outlined in the attached "Marine Facility Manatee Signs Procedures" (Attachment A).
- o. Prior to operation of the facility, the permittee shall submit a notarized verification letter to the US Army Corps of Engineers, Savannah District Office, stating that all required permanent manatee signs have been installed (as outlined in "m" and "n" above and in Attachment A). It shall be the responsibility of the permittee to insure that permanent manatee signs are maintained in a clearly visible condition for the life of the facility.
- p. Prior to operation of the facility, the permittee shall develop and implement a manatee boater education and awareness program. The objectives of the education program shall be to educate all users of the facility about: 1) manatee biology, 2) the impacts of watercraft on manatees, and 3) ways that boaters can reduce the probability of impacting manatees. The permittee shall be responsible for overseeing development of the educational program, developing a strategy for implementing the program, and paying for all costs associated with development and implementation of the educational program. The permittee shall submit copies of all educational materials to the US Fish

and Wildlife Service and GDNR Nongame Conservation Section for approval prior to implementation of the program and operation of the facility. For information on education programs and manatee facts, please visit the web pages for the Florida Wildlife Conservation Commission, Bureau of Protected Species Management, Manatee Program (<http://floridaconservation.org/psm/manatee/>) and Save the Manatee Club (www.savethemanatee.org/). The US Fish and Wildlife Service also has examples of educational material.

Attachment A: Marine Facility Manatee Signs Placement Procedures, Temporary Construction Signs, Protect Georgia's Manatees Sign, Manatees Basics for Boaters

MARINE FACILITY MANATEE SIGNS PLACEMENT PROCEDURES



The West Indian manatee (*Trichechus manatus*) is an endangered species throughout its range. Manatees are protected at the Federal level by the Endangered Species Act of 1973 and the Marine Mammal Protection Act of 1972, as amended. Protection measures such as these signs are necessary to increase boater awareness. The increased level of Georgia coastal development and associated marinas and boat traffic will increase the probability of negative impacts to the seasonal manatee population. Manatees inhabit Georgia waters from March through November. The main threat to manatee populations is human related boat/barge collisions. Raising boater awareness and educating the public is necessary for manatee conservation in Georgia waters and has been proven effective.

The informational/educational display sign, "Manatee Basics for Boaters" and waterway display sign, "Protect Georgia's Manatees", are intended to increase boater awareness of manatees that are present in Georgia waters. These signs inform boaters of the potential threat boats pose to the animals and how to help decrease negative impacts caused by those recreational vessels. Although the placement of these signs is mandatory and required by permit, they are informative and non-regulatory in nature.

Procedure for Approval of Sign Installation:

1. The applicant should forward a project site plan, including the proposed location for the permanent signs to: Manatee Sign Approval, Nongame Conservation Section, Department of Natural Resources, One Conservation Way, Brunswick, Georgia 31520. The applicant should also include a chart indicating the location of the facility in relation to waterways, location within a given county (specify county name), Contact person with phone number, and the Permit and/or Lease number associated with the project

2. The Nongame Conservation Section of the Georgia Department of Natural Resources (GDNR) will review the proposed sign placement site plan and will respond to the applicant within 30 days. If the proposed location is unacceptable, guidance on an alternate site will be provided. The contact person should notify the Nongame Conservation Section when sign placement has been completed (912-264-7218). A photograph(s) of the posted manatee signage at your facility must be submitted with the required permit compliance form to the Marsh and Shore Regulatory Program of the Coastal Resources Division/Georgia Department of Natural Resources.
3. If during a site visit, approved signs, and their locations are found not to be in compliance with the instructions given in this document, relocation or addition of signs will be required. Annual site visits will be conducted to document sign placement and condition. All signs locations will be recorded in the GDNR manatee database.

Sign Placement Requirements:

Both “Manatee Basics for Boaters” and “Protect Georgia’s Manatees” permanent signs are required for all facility types (marinas, community docks, etc.). Private single or dual family docks are not required to have manatee signs.

Approved Sign Suppliers:

The signs are available through the companies listed below and may also be available from other local suppliers throughout the state. Permit/lease holders, marinas, and boat docking/launching facilities should contact sign companies directly to obtain pricing information and arrange for shipping and billing.

Approved Suppliers of Manatee Signs:

Grafix, Inc.
455 Montgomery Street
Post Office Box 1028
Savannah, Georgia 31402
Voice: 912-691-1117
Fax: 912-232-3845

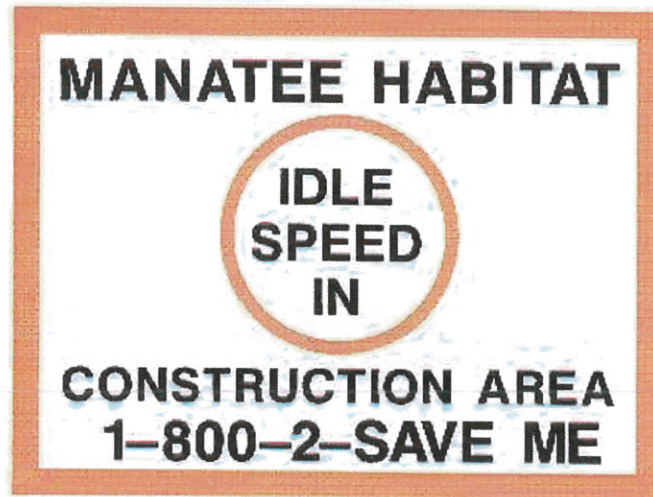
Image Sign Company
785 King George Blvd., Bldg. 3
Savannah, Georgia 31419
Voice: 912-961-1444
Fax: 912-961-1499

Doug Bean Signs, Inc.
160 Dean Forest Rd
Savannah, Georgia 31408
Voice: 912-964-1900
Fax: 912-964-2900

Fendig Signs
411 Arnold Rd
Saint Simons Island, Georgia 31522

Good & Associates
Saint Simons Island, Georgia
(912) 638-7664

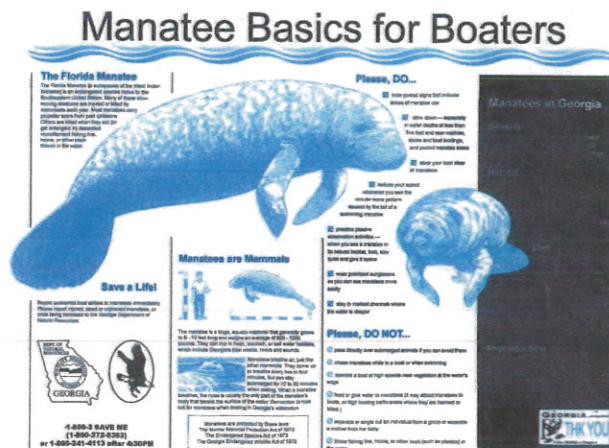
Temporary Construction Signs



Permanent Signs



“Protect Georgia’s Manatees” sign – At least one sign will be required to face the waterway for each facility. This is dependent upon the size of the facility and the number of docks/piers present. The number and placement of signs will be determined on a site-by-site basis by GDNR biologists. Each approach to the marina from the waterway to the facility will need a visible sign. This sign is intended to alert any passing boater that may or may not be associated with the facility that manatees may be present and again raise awareness of this endangered species.



“Manatee Basics for Boater” sign – One sign is required for each entry point to any dock /pier space. It should be placed where anyone boarding or launching a boat will easily see the sign. This sign is intended to provide detailed information about manatees, how to avoid negative impacts to manatees, and to raise awareness of their presence in Georgia to any person using the facility. Sign placement approval by the Nongame Conservation Section is required.



U.S. Department
of Transportation

**Federal Highway
Administration**

Eastern Federal Lands
Highway Division

21400 Ridgetop Circle
Sterling, VA 20166-6511

AUG 23 2012

In Reply Refer to: HFPP-15

FEDERAL EXPRESS

Dr. David Crass
Deputy State Historic Preservation Officer
Georgia Historic Preservation Division
Department of Natural Resources
254 Washington Street, SW
Ground Level
Atlanta, GA 30334

Subject: PRA-FOPU 10(3), Fort Pulaski Bridge
Fort Pulaski National Monument
Request for Concurrence

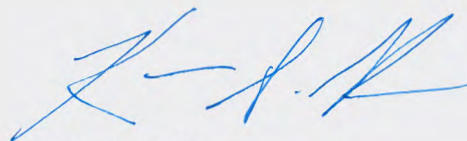
Dear Dr. Crass:

The National Park Service, in cooperation with the Federal Highway Administration (FHWA), is preparing an Environmental Assessment for the repair and/or replacement of the Fort Pulaski Bridge located in Savannah, Georgia. The Fort Pulaski Bridge provides access to Fort Pulaski from U.S. Route 80 and crosses the South Channel of the Savannah River. The bridge was built in 1938, and has been rehabilitated several times. The timber piles have deteriorated, and the bridge does not meet current safety standards. The preferred alternative in the Environmental Assessment, Rehabilitation of the Existing Bridge, would include installing fiber-reinforced polymer shells (FRP) on the deteriorated timber piles. The shell would be filled with epoxy grout to encapsulate the timber and protect it from further deterioration. The wrapping would extend approximately to but not below the mud line and above the high water level. Sections of severely deteriorated timber pile would be replaced, if needed. Additional substructure repairs would include replacing timber cross bracing and bent caps, installing timber corbels, and repairing concrete bent caps. Superstructure repairs would also be completed, and would likely consist of cleaning and painting all of the structural steel in the main span, cleaning exposed rebar in the bridge deck and diaphragms in the main span and coating them with protective sealant, and replacing timber deck shims. Riprap would also be placed around the bridge abutments.

The Fort Pulaski Bridge has been modified substantially from the original 1930's structure as a result of several repair and rehabilitation projects. The proposed repairs would be similar in nature to those already completed on the bridge. Therefore, the FHWA has determined that the proposed project would have no adverse effect to any historic structures or cultural resources. The FHWA requests your concurrence with our determination. Please respond within 30 days of the receipt of this letter. If no response is received, agreement with our determination will be assumed.

If you have any questions, or require any additional information, please contact Ms. Lisa Landers, Environmental Protection Specialist, at Lisa.Landers@dot.gov or (571) 434-1592.

Sincerely,



Kevin S. Rose
Environmental Compliance Specialist

Enclosures

cc:

Mr. Randy Wester, Superintendent, National Park Service, FOPU, Savannah, GA

Mr. Steven Wright, Environmental Protection Specialist, National Park Service, Southeast Region, Atlanta, GA

Mr. Kent Cochran, Southeast Region FLHP Coordinator, National Park Service, Atlanta, GA

 **GEORGIA**
DEPARTMENT OF NATURAL RESOURCES
HISTORIC PRESERVATION DIVISION

MARK WILLIAMS
COMMISSIONER

DR. DAVID CRASS
DIVISION DIRECTOR

October 1, 2012

Kevin S. Rose
Environmental Compliance Specialist
Federal Highway Administration
U.S. Department of Transportation
21400 Ridgetop Circle
Sterling, Virginia 20166-6511
Attn: Lisa Landers, Lisa.Landers@dot.gov

**RE: Fort Pulaski National Monument: Repair/Replace Fort Pulaski Bridge, Savannah
PRA-FOPU 10(3)
Chatham County, Georgia
HP-101228-002**

Dear Mr. Rose:

The Historic Preservation Division (HPD) has reviewed the information submitted concerning the above referenced project. Our comments are offered to assist the National Park Service (NPS) in cooperation with the Federal Highway Administration (FHWA) in complying with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA).

The subject project consists of repairs to the Fort Pulaski Bridge. HPD concurs that Fort Pulaski National Monument is listed in the National Register of Historic Places (NRHP). Based on the information provided, HPD concurs that the subject project, as proposed, will have **no adverse effect** to historic properties within its area of potential effects (APE), as defined in 36 CFR Part 800.5(d)(1).

This letter evidences consultation with our office for compliance with Section 106 of the NHPA. Please refer to project number **HP-101228-002** in any future correspondence on this project. If we may be of further assistance, please do not hesitate to contact Elizabeth Shirk, Environmental Review Coordinator, at (404) 651-6624.

Sincerely,



Karen Anderson-Cordova
Program Manager
Environmental Review and Preservation Planning

KAC:jad

Cc: Randy Wester, Superintendent, NPS
Tommy Jones, NPS
Lupita McClenning, Coastal Regional Commission of Georgia



U.S. Department
of Transportation

**Federal Highway
Administration**

Eastern Federal Lands
Highway Division

21400 Ridgetop Circle
Sterling, VA 20166-6511

AUG 29 2012 In Reply Refer to: HFPP-15

Federal Express

Ms. Sandra Tucker
Field Supervisor
U.S. Fish and Wildlife Service
105 West Park Drive, Suite D
Athens, GA 30606

Subject: PRA-FOPU 10(3), Fort Pulaski Bridge Project
Fort Pulaski National Monument
Request for Concurrence

Dear Ms. Tucker:

The National Park Service, in cooperation with the Federal Highway Administration (FHWA), is preparing an Environmental Assessment for the repair and/or replacement of the Fort Pulaski Bridge located in Chatham County, Georgia. The Fort Pulaski Bridge provides access to Fort Pulaski from U.S. Route 80 and crosses the South Channel of the Savannah River. The bridge was built in 1938, and has been rehabilitated several times. The timber piles have deteriorated, and the bridge does not meet current safety standards. The preferred alternative in the Environmental Assessment, Rehabilitation of the Existing Bridge, would include installing fiber-reinforced polymer shells (FRP) on the deteriorated timber piles. The shell would be filled with epoxy grout to encapsulate the timber and protect it from further deterioration. The wrapping would extend approximately to, but not below, the mud line and above the high water level. Sections of severely deteriorated timber pile would be replaced, if needed. Additional substructure repairs would include replacing timber cross bracing and bent caps, installing timber corbels, and repairing concrete bent caps. Superstructure repairs would also be completed, and would likely consist of cleaning and painting all of the structural steel in the main span, cleaning exposed rebar in the bridge deck and diaphragms in the main span and coating them with protective sealant, and replacing timber deck shims. Riprap would also be placed around the bridge abutments. Dewatering would be necessary in order to install the riprap and may also be necessary to replace sections of deteriorated timber piles. It is anticipated that access for the repairs would be from a barge located along side the pile bents. The barge would likely be moored through the use of pilings. No explosives will be used to complete the repairs.

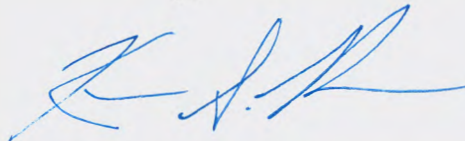
By letter dated February 2, 2011, you indicated that the West Indian manatee (*Trichechus manatus*), a Federally-listed species, is known to occur in the Savannah River and the South Channel. The preferred alternative would have negligible impacts to the river channel, because the repairs would be made to the existing structural components. Riprap would be placed only at the bridge abutments. Also, the 2007 Standard Manatee Conditions for Boating Facilities will be implemented with the project to minimize the potential for adverse effects to the manatee.

Therefore, the FHWA has determined that the proposed action, Rehabilitation of the Existing Bridge, may affect, but is not likely to adversely affect the West Indian manatee. Also, in accordance with your letter, lights would not be placed on the bridge. This alternative would have no impact to the salt marsh located adjacent to the bridge approaches.

The FHWA respectfully requests your concurrence with our determination. If you determine that any Federally-listed species may be present or affected by the proposed project, please provide any restrictions or mitigation requirements that should be included in the project plans and specifications in order to ensure that this project does not adversely affect any Federally-listed threatened or endangered species.

Please provide us with your concurrence and/or comments within thirty (30) days of the receipt of this letter. A topographic map indicating the project area, photos of the project area, and an aerial photo of the project location, are enclosed for your review and information. If you have any questions concerning this matter, please contact Ms. Lisa Landers, Environmental Protection Specialist, at Lisa.Landers@dot.gov, or (571) 434-1592.

Sincerely,



Kevin S. Rose
Environmental Compliance Specialist

Enclosures

cc:

Mr. Randy Wester, Superintendent, National Park Service, FOPU, Savannah, GA

Mr. Steven Wright, Environmental Protection Specialist, National Park Service, Southeast Region, Atlanta, GA

Mr. Kent Cochran, Southeast Region FLHP Coordinator, National Park Service, Atlanta, GA



United States Department of the Interior

Fish and Wildlife Service

105 West Park Drive, Suite D
Athens, Georgia 30606
Phone: (706) 613-9493
Fax: (706) 613-6059

West Georgia Sub-Office
Post Office Box 52560
Fort Benning, Georgia 31995-2560
Phone: (706) 544-6428
Fax: (706) 544-6419

Coastal Sub-Office
4980 Wildlife Drive
Townsend, Georgia 31331
Phone: (912) 832-8739
Fax: (912) 832-8744

October 25, 2012

Mr. Kevin S. Rose
Environmental Compliance Specialist
Federal Highway Administration
21400 Ridgetop Circle
Sterling, Virginia 20166-6511
Attention: Lisa Landers

Re: USFWS File Number 2012-1043

Dear Mr. Rose:

Thank you for your correspondence received September 20, 2012, initiating informal section 7 consultation for National Park Service project PRA-FOPU 10(3) in Chatham County, Georgia. The proposed project would repair the structurally deficient bridge over the South Channel of the Savannah River connecting U. S. Route 80 to Fort Pulaski. These comments are provided in accordance with provisions of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (ESA) to further the conservation of fish and wildlife resources and their habitat, including federally listed threatened and endangered species.

The field survey of the project corridor identified the presence or potential presence of species listed under the ESA. Habitat for the West Indian manatee (*Trichechus manatus*) was identified in and around the proposed project work area. The proposed project would repair deteriorated timber piles by encapsulating the pile in a fiber-reinforced polymer shell and injecting epoxy grout. Some timber piles, cross bracing, and bent caps may also be replaced. Structural steel components of the superstructure would be cleaned and sealed with a protective coating. Riprap would be added to the abutments. The bridge repairs would be conducted from a barge moored through the use of pilings. The 2007 Standard Manatee Conditions for Boating Facilities will be implemented as part of the project action for the protection of West Indian manatees.

Based on the information provided, we concur with your determination of "not likely to adversely affect" for West Indian manatee. The requirements of section 7 of the ESA have been satisfied and no further consultation is required. However, obligations under section 7 of the ESA must be reconsidered if: (1) new information reveals impacts of this identified action that 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 determined that may be affected by the identified action.

We appreciate the opportunity to comment on your project. If you have any additional questions, please write or call our Coastal Georgia Sub Office staff biologist, Christopher Coppola, at 912-832-8739 extension 6.

Sincerely,

A handwritten signature in blue ink, appearing to read "Sandra S. Tucker".

Sandra S. Tucker
Field Supervisor *for*

cc: ISEWS Athens Georgia



U.S. Department
of Transportation

**Federal Highway
Administration**

Eastern Federal Lands
Highway Division

21400 Ridgetop Circle
Sterling, VA 20166-6511

AUG 29 2012

In Reply Refer to: HFPP-15

FEDERAL EXPRESS

Mr. Pace Wilber
National Marine Fisheries Service
Atlantic Branch
Charleston Branch Office (F/SER47)
217 Fort Johnson RD.
Charleston, SC 29412-9110

Subject: PRA-FOPU 10(3), Fort Pulaski Bridge Project
Request for Concurrence per Section 305(b)(2) of the Magnuson-Stevens Act

Dear Mr. Wilber:

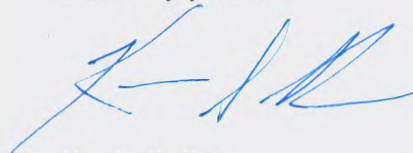
The Eastern Federal Lands Highway Division, of the Federal Highway Administration (FHWA), in cooperation with the National Park Service, is preparing an Environmental Assessment for the repair and/or replacement of the Fort Pulaski Bridge located in Chatham County, Georgia. The Fort Pulaski Bridge provides access to Fort Pulaski from U.S. Route 80 and crosses the South Channel of the Savannah River. The preferred alternative in the Environmental Assessment, Rehabilitation of the Existing Bridge, would include installing fiber-reinforced polymer shells (FRP) on the deteriorated timber piles. The shell would be filled with epoxy grout to encapsulate the timber and protect it from further deterioration. The wrapping would extend approximately to but not below the mud line and above the high water level. Sections of severely deteriorated timber pile would be replaced, if needed. Additional substructure repairs would include replacing timber cross bracing and bent caps, installing timber corbels, and repairing concrete bent caps. Superstructure repairs would also be completed, and would likely consist of cleaning and painting all of the structural steel in the main span, cleaning exposed rebar in the bridge deck and diaphragms in the main span and coating them with protective sealant, and replacing timber deck shims. Riprap would also be placed around the bridge abutments. Dewatering would be necessary in order to install the riprap and may also be necessary to replace sections of deteriorated timber piles. It is anticipated that the access for the repairs would be from a barge located along side the pile bents. The barge would likely be moored through the use of pilings. No explosives will be used to complete the repairs.

The bridge repair action area has been designated as Essential Fish Habitat (EFH) by the South Atlantic Fishery Management Council. The action could potentially harm the EFH by release of debris and chemicals into the water during the repair of the bridge. A FRP shell will be used to encapsulate the piles. The FRP shell will be fully sealed and the injected grout will be contained to prevent it from entering the surrounding waters. Localized turbidity curtains and debris shields will be used to capture any debris released due to construction. The turbidity curtains will also be used in the few locations of shallow water where the river floor maybe disturbed by

the pile encapsulation in order to not increase the turbidity of the river. Based on the type of construction proposed and the mitigative measures to be employed, the FHWA has determined that the action will not result in any adverse effects to the EFH.

FHWA requests your concurrence on the determination of affect for the proposed action in consultation required by Section 305(b)(2) of the Magnuson-Stevens Act. Enclosed you will find a topographic map and photos of the project site. If you have any questions, please contact Ms. Lisa Landers, Environmental Protection Specialist at 571-434-1592 or Lisa.Landers@dot.gov.

Sincerely yours,



Kevin S. Rose
Environmental Compliance Specialist

Enclosures

cc:

Mr. Randy Wester, Superintendent, National Park Service, FOPU, Savannah, GA

Mr. Steven Wright, Environmental Protection Specialist, National Park Service, Southeast Region, Atlanta, GA

Mr. Kent Cochran, Southeast Region FLHP Coordinator, National Park Service, Atlanta, GA

From: [Pace Wilber](#)
To: [Landers, Lisa \(FHWA\)](#)
Cc: [Mark Padgett](#)
Subject: PRA-FOPU 10(3), Fort Pulaski Bridge Project; Request for Concurrence per Section 305(b)(2) of the Magnuson-Stevens Act
Date: Thursday, November 01, 2012 12:58:15 PM

Hi Lisa.

NOAA's NMFS has reviewed the draft Environmental Assessment provided by the National Park Service for refurbishing the Fort Pulaski Bridge in Chatham County.

The bridge provides access to Fort Pulaski National Monument from US 80 and crosses the South Channel of the Savannah River. The Environmental Assessment describes seven alternatives in depth, including the "no action" alternative.

Alternative D is identified as the preferred alternative, and it consists of using FRP jackets on the most deteriorated timber piles. The jackets would be filled with epoxy grout to encapsulate the timber and protect it from further deterioration. The wrapping would extend from the mud line (but not below) to above the high water level. Sections of severely deteriorated timber piles would be replaced. It is estimated that 20 piles would have new FRP jackets installed, 30 piles would have their existing FRP jackets replaced, and that five piles would have sections replaced and FRP jackets installed. Additional substructure repairs would include replacing timber cross bracing and bent caps, installing timber corbels, and repairing concrete bent caps. Superstructure repairs would also be completed, and would likely consist of cleaning and painting all of the structural steel in the main span, cleaning exposed rebar in the bridge deck and diaphragms in the main span and coating them with protective sealant, and replacing timber deck shims. Riprap would be replaced around the bridge abutments. It is estimated that 18,500 cubic feet of riprap would be placed at the northern abutment and 29,000 cubic feet would be placed at the southern abutment.

The Environmental Assessment does not include an essential fish habitat (EFH) assessment; however, the Federal Highway Administration has provided EFH information in a separate letter that includes a determination that no adverse impacts to EFH are expected from refurbishing the Fort Pulaski Bridge. Based on our review of the information provided and knowledge of the area, NMFS agrees with this determination and offers no EFH conservation recommendations pursuant to the Magnuson-Stevens Fishery Conservation and Management Act. If the permitting process administered by the U.S. Army Corps of Engineers leads to an additional EFH consultation, NMFS expects to provide the Corps with a similar conclusion unless project changes or new information arise.

Please note this determination does not cover the Endangered Species Act. Should the National Park Service or Federal Highway Administration conclude the project may effect endangered or threatened species under NMFS' jurisdiction, such as Atlantic or shortnose sturgeon, our Protected Resources Division in St. Petersburg, Florida, should be contacted.

If you have any questions, please let us know.

Thanks,
Pace

--

Pace Wilber, Ph.D.
HCD Atlantic Branch Supervisor
NOAA Fisheries Service
219 Ft Johnson Road
Charleston, SC 29412

Voice: [843-762-8601](tel:843-762-8601)
FAX: [843-953-7205](tel:843-953-7205)
Pace.Wilber@noaa.gov

AUG 29 2012

In Reply Refer to: HFPP-15

FEDERAL EXPRESS

Mr. David Bernhart
National Marine Fisheries Service
Protected Resources Division
263 13th Ave. South,
St. Petersburg, FL 33701

Subject: PRA-FOPU 10(3), Fort Pulaski Bridge Project
Section 7 of Endangered Species Act of 1973 - Request for Concurrence

Dear Mr. Bernhart:

The Eastern Federal Lands Highway Division, of the Federal Highway Administration (FHWA), in cooperation with the National Park Service, is preparing an Environmental Assessment for the repair and/or replacement of the Fort Pulaski Bridge located in Chatham County, Georgia. The Fort Pulaski Bridge provides access to Fort Pulaski from U.S. Route 80 and crosses the South Channel of the Savannah River. The FHWA previously consulted with your office for a similar project to make repairs to the Fort Pulaski Bridge in late 2007. The project was completed in 2008; however, further deterioration has made additional repairs to the bridge necessary.

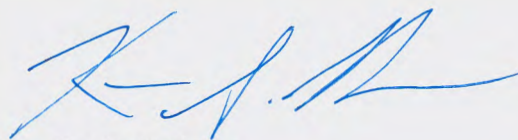
The preferred alternative in the Environmental Assessment, Rehabilitation of the Existing Bridge, would include installing fiber-reinforced polymer shells (FRP) on the deteriorated timber piles. The shell would be filled with epoxy grout to encapsulate the timber and protect it from further deterioration. The wrapping would extend approximately to but not below the mud line and above the high water level. Sections of severely deteriorated timber pile would be replaced, if needed. Additional substructure repairs would include replacing timber cross bracing and bent caps, installing timber corbels, and repairing concrete bent caps. Superstructure repairs would also be completed, and would likely consist of cleaning and painting all of the structural steel in the main span, cleaning exposed rebar in the bridge deck and diaphragms in the main span and coating them with protective sealant, and replacing timber deck shims. Riprap would also be placed around the bridge abutments. Dewatering would be necessary in order to install the riprap and may also be necessary to replace sections of deteriorated timber piles. It is anticipated that access for the repairs would be from a barge located along side the pile bents. The barge would likely be moored through the use of pilings. No explosives will be used to complete the repairs.

The range of Federally-listed Shortnose Sturgeon (*Acipenser brevirostrum*) includes the South Channel of the Savannah River. Construction activities that result in increased turbidity are known to adversely affect pre-spawning adult sturgeon, and may disrupt spawning during late winter and spring. To mitigate the potential affect, FHWA will implement measures to avoid adverse impacts to the species. Localized turbidity curtains and debris shields will be used to

capture any debris released due to construction. The turbidity curtains will also be used in the few shallow locations where the river floor may be disturbed by the pile encapsulation in order to not increase the turbidity of the river. Due to the potential disruption of the Shortnose Sturgeon spawning season, work below the water surface will not be allowed December 1 through February 28. The bridge repair has a nominal possibility of affecting the Shortnose Sturgeon, and the potential affects have been reduced by the mitigation measures. FHWA has made the determination that the proposed action including mitigation measures may affect, but is not likely to adversely affect the Shortnose Sturgeon.

FHWA requests your concurrence on the determination of effect for the proposed action in consultation required by Section 7 of the Endangered Species Act of 1973. Enclosed you will find a topographic map and photos of the project site. If you have any questions, please contact Ms. Lisa Landers, Environmental Protection Specialist at 571-434-1592 or Lisa.Landers@dot.gov.

Sincerely yours,



Kevin S. Rose
Environmental Compliance Specialist

Enclosures

cc:

Mr. Randy Wester, Superintendent, National Park Service, FOPU, Savannah, GA
Mr. Steven Wright, Environmental Protection Specialist, National Park Service, Southeast Region, Atlanta, GA
Mr. Kent Cochran, Southeast Region FLHP Coordinator, National Park Service, Atlanta, GA



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
(727) 824-5312; FAX (727) 824-5309
<http://sero.nmfs.noaa.gov>

F/SER31:KPB

Kevin S. Rose
Environmental Compliance Specialist
Federal Highway Administration
21400 Ridgetop Circle
Sterling, VA 20166-6511

NOV 27 2012

Re: Repair of the Fort Pulaski Bridge to Cockspur Island, Chatham County, Georgia (PRA-FOPU 10(3))

Dear Mr. Rose:

This responds to your August 29, 2012, request for Section 7 consultation under the Endangered Species Act (ESA). We requested additional information on September 14 and September 28, 2012. In your responses on September 25 and October 4, 2012, you included sea turtles and Atlantic sturgeon in your effects determination, included the additional information requested, and provided the environmental assessment for the project. You determined the referenced project may affect but is not likely to adversely affect shortnose sturgeon, Atlantic sturgeon, and sea turtles. You requested concurrence from the National Marine Fisheries Service (NMFS) with these determinations. We provided a preliminary noise assessment on October 5, 2012, and suggested noise reduction technologies to reduce the noise footprint from the project. On October 10, 2012, you indicated that the project would use a vibratory hammer in lieu of impact hammering for the project. Our findings on the project's potential effects are based on the project description in this response. Changes to the proposed action may negate our findings and require reinitiating consultation.

The Federal Highway Administration (FHWA) proposes to conduct repairs to the existing Fort Pulaski Bridge located at 32.020731°N, 80.899011°W (North American Datum 1983). The bridge was originally constructed in 1938 and reconstructed in 1965. It crosses the South Channel of the Savannah River and connects U.S. Highway 80 with Cockspur Island. There are a total of 320 existing timber piles supporting the roadway, many of which are showing signs of deterioration and are proposed for repair. The FHWA proposes to install fiber-reinforced polymer shells around five of the deteriorated timber piles. The shells will be placed around the piles from above the surface to the mud line, and each shell will be filled with epoxy grout to encapsulate the timber and prevent further deterioration. Sections of cross members will be repaired above the water, and no pile driving of new timber piles is proposed as part of the repair work. Bridge repairs will be conducted from a barge anchored by two spuds.



Below-water repair work includes repairing severely damaged timber piles using divers and placement of 15,900 ft² of riprap at the bridge abutments. Before placement of riprap can occur, a cofferdam will be installed around each abutment with interlocking sheet piles and the area dewatered. The south abutment will require 180 piles, and the north abutment approximately 170 piles. Each 20-ft by 1.5-ft pile will require approximately 10 to 20 minutes to install to a depth of 12 feet with a vibratory hammer. Approximately 12 piles will be driven each day. Work will not be conducted at night.

FHWA Proposed Harm Avoidance Measures

The FHWA proposed several measures to reduce the probability of interactions with listed species.

- A vibratory hammer will be used in lieu of an impact hammer to reduce the noise footprint in the river.
- Localized turbidity curtains and debris shields will be used to capture any debris released due to construction. The turbidity curtains will also be used in the few shallow locations where the river floor may be disturbed by the pile encapsulation, in order to not increase the turbidity of the river.
- Due to the potential for disruption of the Atlantic sturgeon spawning migration in the lower Savannah River during February and March, work below the water surface will not be allowed between February 1 and March 31.

Listed fish species that occur in the action area include Atlantic sturgeon (*Acipenser oxyrinchus*) and shortnose sturgeon (*Acipenser brevirostrum*). Listed species of sea turtles in the project area include the green (*Chelonia mydas*), Kemp's ridley (*Lepidochelys kempii*), and loggerhead (*Caretta caretta*).

Shortnose sturgeon typically remain within their natal rivers.¹ Research has indicated that juvenile shortnose sturgeon can be found during the year within the Lower Savannah River from river mile 19.3 to 29.5, and adult sturgeon from river mile 3.4 to 29.5.² Although shortnose typically do not occur beyond the freshwater/saltwater mixing area, a few adult sturgeon have been detected in the main North Channel of the Savannah River as low as river mile 3.4 (Figure 1), but not in the lesser South Channel. A habitat suitability analysis that was conducted for the Savannah Harbor Expansion Project also indicates suitable shortnose sturgeon habitat does not occur downstream of Elba Island (see yellow square in Figure 1). Based on the location of the project close to the Atlantic Ocean and no reports in the first several river miles of the lower Savannah River, shortnose sturgeon occurrences would be very rare in the action area and any potential project effects are discountable.

¹ Kynard, B. 1997. Life history, latitudinal patterns and status of shortnose sturgeon, *Acipenser brevirostrum*. Environmental Biology of Fishes 48: 319-334.

² Collins, M. R., W.C. Post, and D.C. Russ. 2001. Distribution of shortnose sturgeon in the lower Savannah River. Final Report to the Georgia Ports Authority. 21 p.



Figure 1. A map showing the location of the project area (red star) and the lowermost river detections of shortnose sturgeon in the Savannah River (blue triangles).

Pile Driving Noise Effects on Atlantic Sturgeon and Sea Turtles

Construction noise may disrupt the migration of Atlantic sturgeon from the ocean to upriver spawning sites during February and March. To mitigate the potential effect, FHWA will implement measures to avoid adverse impacts to the species. Work below the water surface will not be allowed between February 1 through March 31. With this seasonal work restriction, the likelihood that construction activities will adversely affect the Atlantic sturgeon migration is discountable.

Sea turtles and Atlantic sturgeon may forage in the project area. Pile driving noise was further considered for its potential to expose animals to harmful noise levels and disrupt foraging (Table 1). FHWA has agreed to use a vibratory hammer to reduce the potential for behavioral and physical injury that could result from impact pile driving methods. Using a vibratory hammer avoids any risk of injury to sea turtles or Atlantic sturgeon and reduces the potential for behavioral disturbance to the area immediately around the bridge abutments (Figure 2).

Table 1. Noise exposure thresholds and impact zones for vibratory pile driving used for sturgeon and sea turtles in the effects analysis.

Effect	Organism	Threshold Level	Source Level	Distance from Pile (m)
Injury	Fish \geq 102 grams and sea turtles	234 dB (SEL _{CUM})	231 dB (1 Pile SEL _{CUM})	NA
			221 dB (12 Pile SEL _{CUM})	NA
Behavior	Fish	150 (RMS)	175 dB (RMS)	47
	Sea turtles	160 dB (RMS)	175 dB (RMS)	10

Thresholds are based on the recommended criteria for vibratory pile driving found in Hastings (2012).³ Cumulative source levels were back calculated using 20 minutes to drive each pile and 15 logR intermediate spreading loss based on reference levels for 24-inch AZ sheet pile noise using a vibratory hammer reported in Illinworth and Rodkin (2007).⁴



Figure 2. The 47-m behavioral impact zone for Atlantic sturgeon from the vibratory piling of sheet piles to create coffer dams around the two bridge abutments.

³ Hastings, M.C. 2010. Recommendations for Interim Criteria for Vibratory Pile Driving. Submitted to ICF Jones & Stokes, Sacramento, CA, for task order on vibratory pile driving. Caltrans Contract 43A0228. June 30.

⁴ Illinworth and Rodkin. 2007. Compendium of Pile Driving Sound Data. Report Prepared for the California Department of Transportation. September 27, 2007.

The potential for sea turtles to be disturbed by the vibratory pile driving is limited to a small area within 10 m of the bridge abutments and does not extend across the river. Any behavioral effects that may occur are considered insignificant due to the small area impacted and ample suitable habitat available in the area.

Atlantic sturgeon may be behaviorally affected within 47 m from the pile driving activities and may avoid the area. The width of the river at the bridge from abutment to abutment is approximately 392 m. Any avoidance of the small area around the abutments due to noise is not expected to significantly affect the foraging success or movement of Atlantic sturgeon in the river since the majority of the river will be unaffected by noise.

The general construction effects of turbidity and construction debris falling into the water will be reduced to minimal levels due to the proposed use of turbidity curtains and debris shields to capture any debris released during bridge repairs. Turbidity curtains will also be used in the few shallow locations where the river floor may be disturbed by the pile encapsulation. The placement of riprap around the abutments will be conducted from a stationary barge to the dewatered area behind the cofferdams. Turbidity curtains, debris shields, and cofferdams are expected to reduce the potential for physical impacts, noise, and turbidity from general construction activities to discountable levels.

We believe the project may affect, but is not likely to adversely affect shortnose sturgeon, Atlantic sturgeon, and sea turtles. This concludes your consultation responsibilities under the ESA for species under NMFS' purview. 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 the 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 other relevant information for your review. If you have any questions, please contact Kyle Baker, consultation biologist, at (727) 551-5789 or by e-mail at Kyle.Baker@noaa.gov. Thank you for your continued cooperation in the conservation of listed species.

Sincerely,



for

Roy E. Crabtree, Ph.D.
Regional Administrator

Enclosure

File: 1514-22.L.3

Ref: I/SER/2012/03774

**PCTS Access and Additional Considerations for ESA Section 7 Consultations
(Revised 7-15-2009)**

Public Consultation Tracking System (PCTS) Guidance: PCTS is an online query system at <https://pcts.nmfs.noaa.gov/> that allows federal agencies and U.S. Army Corps of Engineers' (COE) permit applicants and their consultants to ascertain the status of NMFS' Endangered Species Act (ESA) and Essential Fish Habitat (EFH) consultations, conducted pursuant to ESA section 7, and Magnuson-Stevens Fishery Conservation and Management Act's (MSA) sections 305(b)2 and 305(b)(4), respectively. Federal agencies are required to enter an agency-specific username and password to query the Federal Agency Site. The COE "Permit Site" (no password needed) allows COE permit applicants and consultants to check on the current status of Clean Water Act section 404 permit actions for which NMFS has conducted, or is in the process of conducting, an ESA or EFH consultation with the COE.

For COE-permitted projects, click on "Enter Corps Permit Site." From the "Choose Agency Subdivision (Required)" list, pick the appropriate COE district. At "Enter Agency Permit Number" type in the COE district identifier, hyphen, year, hyphen, number. The COE is in the processing of converting its permit application database to PCTS-compatible "ORM." An example permit number is: SAJ-2005-000001234-IPS-1. For the Jacksonville District, which has already converted to ORM, permit application numbers should be entered as SAJ (hyphen), followed by 4-digit year (hyphen), followed by permit application numeric identifier with no preceding zeros. For example: SAJ-2005-123; SAJ-2005-1234; SAJ-2005-12345.

For inquiries regarding applications processed by COE districts that have not yet made the conversion to ORM (e.g., Mobile District), enter the 9-digit numeric identifier, or convert the existing COE-assigned application number to 9 numeric digits by deleting all letters, hyphens, and commas; converting the year to 4-digit format (e.g., -04 to 2004); and adding additional zeros in front of the numeric identifier to make a total of 9 numeric digits. For example: AL05-982-F converts to 200500982; MS05-04401-A converts to 200504401. PCTS questions should be directed to Eric Hawk at Eric.Hawk@noaa.gov. Requests for username and password should be directed to PCTS.Usersupport@noaa.gov.

EFH Recommendations: In addition to its protected species/critical habitat consultation requirements with NMFS' Protected Resources Division pursuant to section 7 of the ESA, prior to proceeding with the proposed action the action agency must also consult with NMFS' Habitat Conservation Division (HCD) pursuant to the MSA requirements for EFH consultation (16 U.S.C. 1855 (b)(2) and 50 CFR 600.905-.930, subpart K). The action agency should also ensure that the applicant understands the ESA and EFH processes; that ESA and EFH consultations are separate, distinct, and guided by different statutes, goals, and time lines for responding to the action agency; and that the action agency will (and the applicant may) receive separate consultation correspondence on NMFS letterhead from HCD regarding their concerns and/or finalizing EFH consultation.

Marine Mammal Protection Act (MMPA) Recommendations: The ESA section 7 process does not authorize incidental takes of listed or non-listed marine mammals. If such takes may occur an incidental take authorization under MMPA section 101 (a)(5) is necessary. Please contact NMFS' Permits, Conservation, and Education Division at (301) 713-2322 for more information regarding MMPA permitting procedures.