



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

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F/SER4:BH/pw

(Sent via Electronic Mail)

Ann Broadwell
Environmental Administrator
Planning and Environmental Management Office
Florida Department of Transportation, District 4
3400 West Commercial Boulevard
Fort Lauderdale, Florida 33309-3421

Dear Ms. Broadwell:

NOAA's National Marine Fisheries Service (NMFS) reviewed the Florida Department of Transportation's (FDOT) Wetland Mitigation Plan dated January 15, 2010, and its revised version dated March 29, 2010, for the proposed Indian Street (SW 36th Street) bridge over the South Fork of the St. Lucie River in Martin County. Under 50 CFR 600.920(e), FDOT is the non-federal representative of the Federal Highway Administration (FHWA) for the purpose of the essential fish habitat (EFH) consultation required by the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). As detailed below, coordination between NMFS and FDOT has been ongoing for several years on this project, and that coordination included review of an Environmental Impact Statement (EIS). Although the EIS was completed in 2006, one outcome of the coordination was that FDOT would revise the EFH Assessment to include a detailed mitigation plan that would be provided to NMFS for review and approval prior to construction.

EFH Consultation History

Consultation between NMFS and FHWA/FDOT for the Indian Street bridge project:

- On November 10, 1999, NMFS provided preliminary comments on the Advanced Notification of a corridor for a new bridge that would cross over the South Fork of the St. Lucie River.
- On May 16, 2003, NMFS provided comments to the Advanced Notification for the Indian Street Bridge PD&E Study including the Draft EIS. NMFS requested additional information and raised concerns about impacts to EFH.
- On December 1, 2003, NMFS again provided comments on the Draft EIS and Wetlands Evaluation Report. This evaluation included a thorough review of the alternatives analysis as well as comments regarding EFH.
- On July 15, 2004, NMFS provided comments on the Final EIS and the indirect impacts to



wetlands and EFH. Our comments indicated the amount of wetland impacts may be underestimated. NMFS requested a revised EFH Assessment.

- On September 27, 2005, NMFS provided comments on the revised Final EIS dated August 2005. Direct impacts to approximately 6.84 acres of EFH were proposed, and the extent of indirect impacts to EFH were not determinable at that time. While the revised Final EIS indicated that compensatory mitigation would be provided via Florida's Regional Mitigation Program (Senate Bill 1986) and would include restoration and enhancement of freshwater and estuarine wetlands in Martin County, NMFS could not approve the plan based on the limited detail available at that time. FDOT agreed to provide an addendum to the EFH Assessment that would address NMFS' remaining concerns.
- FDOT provided the Final EIS on January 9, 2006, as a response to our previous letters. NMFS did not provide additional technical comments but did reaffirm by letter dated February 10, 2006, that an addendum to the EFH Assessment and final mitigation plan were expected.
- A site inspection and meeting were conducted on April 23, 2009, to view wetlands within the project footprint and to discuss overall environmental concerns. Functional assessment scores were also discussed. NMFS indicated which areas were EFH and provided technical assistance regarding avoidance, minimization, and compensatory mitigation for unavoidable impacts to EFH.
- Technical assistance provided resulted in the receipt of a draft EFH Addendum/Assessment on September 25, 2009. Feedback was provided on September 29, 2009, outlining deficiencies in the document. Specifically, the document lacked an adequate plan for compensatory mitigation. Based on this feedback, FDOT withdrew the EFH Addendum.
- A site visit was conducted to review potential mitigation options on October 19, 2009. Sites known as the Delaplane Peninsula and the Mapp Road Parcel were inspected and discussed. It was agreed that restoring these two sites would be good mitigation alternatives; however, there would be challenges associated with logistics, design, and maintenance.
- A public notice was issued by the U.S. Army Corps of Engineers (COE) on November 20, 2009, for the project. The COE acknowledged that EFH consultation was being conducted with FDOT on behalf of FHWA. NMFS responded to the public notice on December 4, 2009, providing an EFH conservation recommendation requesting that the permit be held in abeyance until a sufficient mitigation plan was provided to NMFS for review.
- On December 30, 2009, a meeting was held at the COE Palm Beach Gardens Regulatory Office to discuss revisions to the mitigation plan. The meeting was attended by COE staff, NMFS, and FDOT's consultant. FDOT opted to abandon the wetland enhancement mitigation that was previously discussed. FDOT now wanted to purchase mitigation bank credits. Since the functional assessment scoring for examining the impacts had been performed using the Uniform Mitigation Assessment Method (UMAM) and some banks being considered for the mitigation used the Estuarine Wetland Rapid Assessment Procedure (E-WRAP) to track credits, we agreed to have another meeting to discuss the overall mitigation plan in the context of E-WRAP.
- A teleconference was held on January 5, 2010, to discuss the final functional assessment scores and the use of mitigation banks to compensate for unavoidable impacts to wetlands. The meeting was attended by representatives from FDOT, NMFS, COE, and the South Florida Water Management District.

- On March 1, 2010, a revised mitigation plan was submitted to NMFS and the COE for review. Modifications to the plan were requested and subsequently provided by FDOT on March 29, 2010.

Impacts to Wetlands and EFH

FDOT proposes impacts to 26.85 acres of EFH and jurisdictional wetlands that are not EFH. The EFH that would be impacted (25.46 acres) include mangroves, tidal freshwater wetlands, and open water. The non-EFH wetland impacts (1.40 acres) are to freshwater wetlands. Direct impacts would result from clearing and shading beneath the bridge structure. Temporary impacts would result from construction of a work trestle. Indirect impacts are estimated to occur within a 250-foot buffer surrounding the bridge and would be due to noise, dust, and vibration. The following table shows how these impacts are apportioned between wetland and impact types.

Wetland Type	Permanent Impact (acres)	Temporary Impact (acres)	Indirect Impacts (acres)	Total (acres)
EFH-Mangroves	1.23	0.39	7.87	9.49
EFH-Tidal freshwater wetlands	1.27	0.37	7.31	8.95
EFH-Open water	5.57	0.76	0.00	7.02
EFH Total	8.07	2.21	15.18	25.46
Non-EFH-wetlands and waters	0.92	0.02	0.46	1.40
Grand Total	8.99	2.23	15.64	26.85

Compensatory Mitigation

Compensatory mitigation is needed for the unavoidable impacts to tidal freshwater wetlands (bay swamp) and mangrove. FDOT will treat the temporary impacts to these habitats as if they were permanent impacts due to the expected time for recovery and FDOT’s uncertainty about its ability to protect the areas from future construction activities. No mitigation is necessary for the impacts to open water because the shading from the temporary and new bridges is not likely to impair significantly the services this habitat provides to fishery resources.

FDOT used E-WRAP to assess the impacts to mangrove and tidal freshwater wetlands and to determine mitigation amounts because the authorization from the COE for the Bear Point Mitigation Bank (BPMP) requires use of E-WRAP to track the bank’s credits. E-WRAP shows 5.64 credits are needed to offset the impacts to mangroves and tidal freshwater wetlands. Two mitigation banks would be used to provide these credits. The Hutchinson Island/Florida Oceanographic Society (FOS) site provides the functional lift needed to offset impacts to the tidal freshwater wetlands and a portion of the mangrove wetlands. However, only 3.99 credits are available from this bank. The remaining credits needed to offset the impacts to EFH would be provided by BPMB on Hutchinson Island. Credits from BPMB would be used specifically to offset the impacts to mangrove wetlands. Due to the excessive distance of this mitigation bank from the impact site, mitigation scores were adjusted using the Mitigation Proximity Factor Worksheet to increase the credits needed from 1.65 to 3.20. While translating E-WRAP credits into acres should be done cautiously, mitigation for the impacts to mangroves and tidal freshwater wetlands equates to approximately 51.55 acres (23.42 acres at BPMB and 28.13 at FOS).

Compensatory mitigation also is necessary for the unavoidable impacts to freshwater wetlands that are not EFH. Impacts to these freshwater wetlands would be mitigated using guidance developed by the South Florida Water Management District. Unlike the credit-based E-WRAP system, the Water Management District's guidance is based on ratios of mitigation acres to impact acres. For the freshwater wetlands, a 4:1 ratio for direct, permanent impacts is used; a 2:1 ratio for direct, temporary impacts is used, and variable ratios are used mitigating indirect impacts. The Dupuis Reserve in southwestern Martin County would be used to provide the 5.34 acres of mitigation needed. The South Fork of the St. Lucie River will benefit from this mitigation since waters that enter the C-44 Canal are partially treated by the Dupuis Reserve. The C-44 Canal ultimately discharges through the South Fork of the St. Lucie River.

Conclusion

NMFS concludes that the compensatory mitigation proposed by FDOT is likely to adequately offset the proposed impact to EFH and other wetlands. If this mitigation plan is included in the Department of the Army's authorization for this project, NMFS would conclude the goals of the EFH provisions of the Magnuson-Stevens Act will have been met for this project and the EFH consultation complete.

We appreciate the efforts by your staff to protect NOAA trust resources. Please direct subsequent correspondence on this project to Mr. Brandon Howard. He may be reached by telephone at (561) 616-8880 extension 210, by email at Brandon.Howard@noaa.gov or at US Environmental Protection Agency, 400 N Congress Avenue, Suite 120, West Palm Beach, Florida 33401.

Sincerely,



Miles M. Croom
Assistant Regional Administrator
Habitat Conservation Division

cc:

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Attachment: Mitigation Summary Table (2 pages)

Indian Street Bridge Essential Fish Habitat (EFH) Impact/Mitigation Summary Tables

Wetland Impacts (Acres)

	Impacted Wetlands	Permanent Direct Ac	Temporary Direct Ac	Indirect Ac	Total
EFH	Mangrove Wetlands 28, 29, 30 a/c	1.23	0.39*	7.87	9.49
EFH	Tidal Fresh (Wetlands 25 & 30 b)	1.27	0.37*	7.31	8.95
EFH Wetlands Subtotal		2.50	0.76	15.18	18.44
EFH	Open Water	5.57	1.45	0.00	7.02
EFH Grand Total		8.07	2.21	15.18	25.46
Not EFH	Other Fresh (Wetlands 26, Indian Run 2A)	0.92	0.02	0.46	1.40
Project Impacts Total		8.99	2.23	15.64	26.85

*= mitigated as permanent impact

Project will also impact 0.724 ac of man-made wet ditch (non-wetland, non-EFH) impacts.

Credits Needed for Offset

	Impacted Wetlands	Permanent Direct	Temporary Direct	Indirect	Total
EFH	Mangrove Wetlands 28, 29, 30 a/c	1.21	N/A (mitigated as permanent impacts)	1.69	2.90
EFH	Tidal Fresh (Wetlands 25 & 30 b)	1.15	N/A (mitigated as permanent impacts)	1.59	2.74
E-WRAP EFH Total					5.64
Not EFH	Other Fresh (Wetlands 26, Indian Run 2A)	3.67 acres (4:1 ratio)	0.04 acre (2:1 ratio)	0.18 acre (0.23 acre at 0.5:1 ratio, 0.23 acre at 0.25:1 ratio)	3.89*
Not EFH	Other Surface Waters/Wood Stork CFH	0.724 (2:1 ratio)			1.45*

*= To be mitigated as total of 5.34 acre-credits from Dupuis Reserve

Indian Street Bridge Essential Fish Habitat (EFH) Impact/Mitigation Summary Tables (cont.)

Credits Provided and How Applied

		FOS	BPMB	Dupuis
EFH	All permanent/ temporary direct impacts to mangrove wetlands 28, 29, and 30a/c; secondary/ indirect impacts to WL 28	1.23	0.00	0.00
EFH	All impacts direct and indirect impacts tidally- influenced WLS 30b and 25	2.74	0.00	0.00
EFH	All secondary/ indirect impacts to mangrove wetlands 29, and 30a/c	0.00	1.68*	0.00
Not EFH	Non-tidal Freshwater systems (Wetlands 26, Indian Run 2A, Other Surface Water)	0.00	0.00	5.34
	Total	3.97 needed, but will provide 3.99 E-WRAP credits to close out USACE ledger	3.2 E-WRAP (1.68 E-WRAP score X 1.9 proximity factor)	5.43 acre- credits

* = Due to USACE-req'd bank proximity factor for mitigation out-of-basin, will be debited as 3.2 E-WRAP credits