National Marine Fisheries Services
ETDM Comments

ETDM #: 14199
Project Name: US 1 Bridge over the Loxahatchee River
ETDM Phase: Programming Screen
Project Type: Bridge Replacement
Comment Period: 12/23/14 to 02/6/15
NMFSs File Name: D4PAB-0499_ETDM-14199_US1overLoxahatchee_EFH_FINAL
Date of Response: 01/27/15
NMFSs Action: IC

Purpose and Need Statement: Understood

Comments: NONE

Agency Involvement: Continue
Degree of Effect: Moderate

ISSUE(S): Coastal and Marine
Wetland

COMMENTS:
Identify resources and level of importance:

Based on our review of the information provided on the ETDM website, a site visit on January 26, 2015, NOAA's National Marine Fisheries Service (NMFS) has determined that mangrove wetlands and seagrass occurs at the project site. These mangrove wetlands are of moderate quality and are dominated by a subcanopy of red mangrove (*Rhizophora mangle*). Seagrass beds are present along the west side of the bridge with the dominate species being Johnson's seagrass, which is listed as threatened under the Endangered Species Act. The South Atlantic Fishery Management Council (SAFMC) has designated mangrove and seagrass as essential fish habitat (EFH) as well as a Habitat Area of Particular Concern (HAPC). HAPC's are subsets of EFH that are rare, particularly susceptible to human-induced degradation, especially ecologically important, or located in an environmentally stressed area.

Federally managed fishery species associated with mangrove and seagrass habitat include postlarval, juvenile, and adult gray, lane and schoolmaster snappers; juvenile goliath grouper and mutton snapper; adult white grunt; and subadult lane snapper. SAFMC provides detailed information on types and locations of EFH in amendments to fishery management plans and in *Fishery Ecosystem Plan of the South Atlantic Region* (available at *www.safmc.net*). In addition to these designations by the SAFMC, NMFS also notes that mangroves in this area provide nursery, foraging, and refuge habitat for other commercially and recreationally important fish such as snook, striped mullet, and tarpon, and that the cumulative loss of mangroves has reduced overall fisheries production within the Lake Worth Lagoon ecosystem. Further, mangroves in the project area indirectly support fishery habitat by controlling runoff and turbidity and by stabilizing sediment, ecological functions essential to supporting the seagrass in Lake Worth Lagoon.

*Comments on effects to resources**:***

The use of barges, cranes, and the potential use of a temporary trestle could impact EFH adjacent to the bridge. Top-down construction should be utilized if possible. This could minimize impacts to adjacent EFH. Bicycle and pedestrian lanes will expand the footprint of the bridge. Shading impacts to EFH and wetlands will result. These impacts should be considered during PD&E. The area on the northwest side of the bridge is mitigation for impacts associated with the replacement of the two US 1 bridges south of the Loxahatchee River at Burt Reynolds Park. This area should be avoided. If impacts cannot be avoided this mitigation may need to be offset at another location.

With construction of the new bridge, impervious surface area will be replaced. Surface and stormwater runoff into the surrounding wetlands and Lake Worth Lagoon may result. The discharge of hydrocarbons and other contaminants may degrade water quality. Subsequently, NOAA trust resources located in the receiving waters in the Lake Worth Lagoon could be adversely affected. To the extent practicable, runoff from the new bridge should be treated before discharged into the lagoon.

Johnson's seagrass is present at the project site and may be impacted. This species is listed as threatened under the Endangered Species Act. Other listed species in the area include green, Kemp's ridley, and loggerhead sea turtles; and smalltooth sawfish.

Additional comments (optional):

An EFH assessment and endangered species biological assessment will be required for this project. Given the proximity of the proposed project to HAPC and to ensure that adequate wetland conservation and impact avoidance measures are being implemented, NMFS recommends that the following measures be implemented as project development progresses from EST to PD&E, design, and construction:

1) Adverse impacts to wetlands should be sequentially avoided and/or minimized, and unavoidable impacts should be offset in a manner that precludes a net loss of wetland function.

2) A habitat characterization of the wetlands within the project site, including the size and location of wetlands that would be directly and/or indirectly impacted by the proposed project should be prepared.

3) Information on measures to avoid and/or minimize adverse impacts to EFH within the vicinity of the project site should be identified.

4) Conservation measures (i.e., best management practices for water quality and erosion control) should be included in the project design and implemented during project construction.

5) A Stormwater Management Plan for containment/treatment of surface and stormwater runoff from impervious surfaces should be prepared. Treatment should be in accordance with state and federal (NPDES) standards. Details of the stormwater plan should include location, area, and cross section of proposed stormwater swales, and/or ponds and information on wetland vegetation planting if proposed.

6) A mitigation plan should be developed that includes the following items:

   - Detailed overview and cross-sectional drawings of the mitigation area(s) with elevations.
   - A vegetative planting plan for the mitigation site.
   - A detailed description of the proposed mitigation plan, including success criteria. The mitigation plan should contain sufficient detail to ensure no net loss of wetland functions and values as a result of project authorization.

7) Timely coordination between NMFS and FDOT staff should continue through project planning and until environmental issues are addressed and resolved.

8) A seagrass survey should be performed in accordance with the "Recommendations for sampling *Halophila johnsonii* at a project site" contained in the Final Recovery Plan for Johnson's Seagrass and is available from our Web site (http://sero.nmfs.noaa.gov/pr/protres.htm).