Determination of Effect on Essential Fish Habitat from Florida Big Lagoon State Park project

EFH overview from Magnuson Stevens Act

The 1996 Magnuson-Stevens Act requires cooperation among the National Marine Fisheries Service (NMFS), anglers, and federal and state agencies to protect, conserve, and enhance Essential Fish Habitat (EFH). EFH is defined as those waters and substrates necessary to fish for spawning, breeding, feeding, or growth to maturity. The designation and conservation of EFH seek to minimize adverse effects on habitat caused by fishing and non-fishing activities.

Project description

The proposed restoration work for the Big Lagoon State Park Boat Ramp Improvement project includes adding an additional lane to the boat ramp, expanding boat trailer parking, improving traffic circulation at the boat ramp, and providing a new restroom facility to connect the park to the Emerald Coast Utilities Authority (ECUA) regional sanitary sewer collection system. Big Lagoon State Park is located at 12301 Gulf Beach Highway, approximately 10 miles southwest of the city of Pensacola in Escambia County, Florida (see Figure 1). Big Lagoon is part of the Pensacola Bay system and consists of approximately 655 upland acres and two bodies of water (the freshwater Long Pond and the saltwater Grand Lagoon Lake). It contains beaches, shallow bays, open woodlands, an observation tower, boardwalks, nature trails, camping areas, picnic areas, an amphitheater, and the boat ramp which provides easy access to Big Lagoon (FDRP 2013). The Park preserves a natural area along the north shoreline of Big Lagoon and the Intracoastal Waterway, providing wildlife and plant habitat and preserving large wetland expanses.

The existing two-lane boat ramp in the Park requires maintenance, is congested, and does not meet the current recreational demand. The facility improvements would improve traffic circulation at the boat ramp and reconfigure the ramp lanes to accommodate two vehicles at the same time. which would help address safety and over-use concerns by park visitors and authorities. The boat ramp improvement project is part of an ongoing plan by the state park system to enhance and improve the ability of the public to use Florida's natural resources. Most of the project would involve upland construction. Standard best management practices (BMPs) for this type of construction with limited in-water work would be used to minimize impacts including potential turbdity increases associated with the construction. These controls would include upland erosion controls (e.g., use of hay bales) and the isolation of the ramp by a silt curtain and dewatering of the area during the replacement of the ramp surface.

Mechanical excavation would occur on land and in the nearshore area (subtidal waters) during the new boat ramp lane construction. In addition, some of the in-water portion of the existing ramp would be

removed so that it can be renovated and to allow excavation and construction of the new ramp. The direct in-water portion of the proposed work would be limited to the renovation of the portion of the existing boat ramp that extends into the water and the equivalent portion of the new ramp to be constructed. Mechanical excavation may involve use of equipment such as an excavator, a backhoe, and a bobcat; some additional hand digging may occur. Ramp construction would likely require excavation in an area of approximately 500 square meters, of which a small portion would be in the subtidal area. Disturbed areas would be excavated to an average depth of 2 feet. Materials planned for removal may include some soil, sand, rubble, and asphalt. Posts may be temporarily placed as part of the construction effort (e.g., to secure concrete forms). These emplacements would generally be driven and have a narrow whole width (i.e., ¼- to ½-inch consistent with a rebar or spike-type anchor). Construction-related materials such as sand, gravel, and concrete forms may be emplaced on the surface of the site. These materials would be staged on existing paved areas to avoid additional surface disturbance.

Federally managed fisheries and EFH (develop table from

Information on designated EFH in the Gulf of Mexico was obtained in September, 2013 from the NMFS' EFH web site at *http://www.habitat.noaa.gov/protection/efh/newInv/index.html*. Table 1 provides a summary of the species identified as having designated EFH for one or more life stages within the potential project implementation area defined in Figure 1.

Table 1. Federally managed fisheries with designated Essential Fish Habitat (EFH) in the proposed project area

EFH Category	Species
Atlantic Highly Migratory Species	
	Atlantic Sharpnose Shark - Neonate
	Bull Shark - Adult
	Sandbar Shark - Neonate
	Scalloped Hammerhead Shark - Neonate
	Spinner Shark - Juvenile
	Tiger Shark - Juvenile
	Tiger Shark - Neonate
Coastal Migratory Pelagics of the Gulf of Mexico AND South Atlantic	
	Cobia
	King Mackerel
	Spanish Mackerel
Gulf of Mexico Red Drum	
	Red Drum
Gulf of Mexico Shrimp	

EFH Category	Species
	Brown Shrimp
	Pink Shrimp
	Rock Shrimp
	Seabob Shrimp
	White Shrimp
Reef Fish Resources of the Gulf of Mexico	
	Almaco Jack
	Banded Rudderfish
	Black Grouper
	Blackfin Snapper
	Blueline Tilefish
	Cubera Snapper
	Gag
	Goldface Tilefish
	Gray (Mangrove) Snapper
	Gray Triggerfish
	Greater Amberjack
	Hogfish
	Lane Snapper
	Lesser Amberjack
	Mutton Snapper
	Nassau Grouper
	Queen Snapper
	Red Grouper
	Red Snapper
	Scamp
	Silk Snapper
	Snowy Grouper
	Speckled Hind
	Tilefish
	Vermilion Snapper
	Warsaw Grouper
	Wenchman
	Yellowedge Grouper

EFH Category	Species
	Yellowfin Grouper
	Yellowmouth Grouper

Assessment of effects to EFH

Restoration actions at Big Lagoon State Park are expected to have only minor impacts on EFH. The project work would take place within the footprint of the existing marina facility and would occur primarily in upland areas. Replacing and expanding the existing boat ramp would convert a small subtidal area that may provide some fish habitat. However, given the location of the ramp expansion, it is unlikely that any habitat existing in the area is high-quality or frequently used by species present in the area. Further, the size of the impact and potential habitat conversion would be very small relative to the amount of habitat available in the surrounding area. Finally, because the project is not intended to significantly increase the number of boats that could use the facility or increase their size it is not anticipated that any increase in boat traffic would negatively impact any nearby important fishery habitats such as submerged aquatic vegetation beds.

Construction activities would likely have a temporary negative impact on habitat. Disturbance caused by the use of heavy equipment, sediment disturbance, posts, potential increase of debris in the water, and increased noise associated with removing, replacing, and expanding the boat ramp may affect species using the habitat near the marina. During construction, all appropriate BMPs would be followed to minimize the potential impacts of construction activities on EFH and species in the area.

No analysis has been completed to evaluate how the improvements to the Big Lagoon Boat Ramp may affect future use by recreators. Some additional use may result with the expansion of boat trailer parking but the ramp characteristics are not going to be significantly changed to enable launching of boats that are larger than can be currently launched from the existing ramp.

The FWC does, on occasion, recommend the installation of seagrass information signs (Caution: Seagrass) in shallow waters around dredged channels or in areas affected by human activities. FWC's Boating and Waterways unit, part of the Division of Law Enforcement, lacks authority to permit regulatory signs for natural resource protection, but it has the authority to permit informational signs. Generally, seagrass informational signs are installed in waters along a 3' contour adjacent to shallow seagrass beds in order to warn boaters of the potential for running a ground or striking the bottom and damaging seagrass. This is not always recommended for permitted projects, but it is often employed when attempting to prevent damage by boaters along dredged channels and from boating access corridors.

Figure 2 provides examples of the approved informational signs that FWC can recommend along with the critieria such signage must meet (see the Florida administrative code section on waterway markers for reference - 68D-23 - 10-2006). As part of the project implementation, FWC and DEP will evaluate whether a recommendation for placing such informational seagrass signage should be made to the Big Lagoon state park staff to ensure sea grass habitat is protected.

Additionally, adjacent areas with equivalent or better habitat would be available and undisturbed so organisms could move away from disturbed areas. The existing boat ramp at the park is not adequate for current use so the ramp expansion may prevent future long-term habitat disturbance from occurring as a result of over-use in areas adjacent to the boat ramp. Park managers may also seek to install navigation markers or signage identifying sensitive habitats (e.g., SAV beds) to avoided if they feel it is appropriate or needed. While uncertain, there may also be water quality benefits to the adjacent aquatic habitat that result from ceasing use of the existing septic system and connecting the restroom facilities to the regional sanitary sewer system.

Conclusion

The project is not likely to adversely affect EFH. The proposed marina restoration would take place within the footprint of the existing facility. A very small area of subtidal habitat would be converted and disturbed during construction, however, this would take place within the existing developed boundaries where the habitat is already likely to be significantly disturbed as a result of the current use of the boat launch structure. Disturbance to species would be minor and brief and adjacent and similar habitat would be available for use during construction.

Figure 1. Location of envisioned Big Lagoon State Park Boat Ramp Project.

Figure 2. Example of FWC approved sea grass signage.

USCG & FWC Approved Signage for Marking Seagrass Areas

These drawings represent the approved methods for posting seagrass beds, *in a non-regulatory manner*

"Buoy on a Stick" - This is a hollow buoy; it must always float in the water, traversing the PVC pipe with the tide. Must be secured from PVC to buoy by chain and/or cable.

"Pile with Sign" - This method would entail the use of at least a 3' x 4' sign board.

"Collared Buoy" - This method would be used in areas where the water is shallow, the collar type buoy will assist in maintaining upright position.

All borders must be International Orange. Signage background will be of reflective white material, and @ least 3'x4'

All characters must be black block a minimum of 1" in height.

Collared Buoys and "Bouys on a Stick" must extend at least 36" above the waterline.

Failure to adhere to these specifications will result in revocation of your permit