Subject: DWH-Early Restoration- Essential Fish Habitat Consultation Initiation-Cat Point Living Shoreline Project-Florida
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Date: 2/26/2014 3:20 PM
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Mr. Thompson,
Attached is the Essential Fish Habitat Assessment for the **Cat Point Living Shoreline Project** . This project is being proposed in the Deepwater Horizon Draft Phase III Early Restoration plan and Programmatic Environmental Impact Statement. Please consider this our initiation of our Essential Fish Habitat consultation. If you anticipate this consultation requiring more than 30 days (March 28, 2014) please let me know.

If you have any questions or require additional information, please contact me at 409-621-1248 or at jamie.schubert@noaa.gov.
Thanks,

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Attachments:

DWH-ER-FINAL_EFH_CatPoint LSL 2014-02-13.docx 514 KB

Determination of Effect on Essential Fish Habitat from Florida Cat Point Living Shoreline

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 Trustees proposed Cat Point Living Shoreline would implement living shoreline techniques at the Apalachicola National Estuarine Research Reserve Office Complex and Nature Center in Eastpoint, Florida in Franklin County (see Figure 1 for location). Apalachicola Bay is located in the northwestern region of Florida and the proposed Cat Point Living Shoreline project is located along the northwestern portion of St. George Sound, approximately 6 miles east of Apalachicola in Franklin County, Florida.

To reduce erosion and restore habitat, living shoreline and marsh creation techniques would be used in this project to stabilize eroding shorelines by dampening wave energy while also providing habitat that was once present in the project area. As this general area has been the location of previous successful living shorelines projects, there is great potential for this project to be successful. More specifically, the constructed breakwater will also serve to protect and support approximately 1 acre of salt marsh habitat that will be planted as part of the project.

To meet the project objectives of reducing shoreline erosion and providing habitat, this project would create breakwater structures to reduce wave energy, increase benthic secondary productivity, and support/protect the acre of salt marsh habitat. The restoration work proposed includes placing the breakwater structures approximately 30 feet from the shoreline. These structures which will likely have an approximate 5 feet crest width with a height that falls within the mean high and low water lines of the site (i..e., they will be intertidal). The specific breakwater elevation and technique design will be selected to maximize shoreline protection and meet state regulatory requirements. These living shoreline techniques will be employed along approximately 0.3 mile of shoreline. Additionally, plugs of Saltmarsh Cordgrass *(Spartina alterniflom)* shall be planted on 1-foot centers in the area located landward of the breakwater. Plants shall be installed within 30-days of the first growing period subsequent to construction of the breakwater.

Monitoring would be conducted to ensure project designs are correctly implemented and to evaluate project effectiveness. Performance criteria would be used to determine project success or the need for corrective actions. The monitoring has been designed around the project objectives, which are to protect created marsh habitat from erosion and to promote reef development for bivalves and other invertebrates. Monitoring activities are planned for 5 years following the completion of the project. Specific success criteria includes the construction of breakwaters that meet project design criteria, support benthic secondary productivity, reduce wave energy affecting the shoreline, and are sustained for the expected life of the project. Also included is the creation of salt marsh habitat that meets project design criteria and achieves the designed percent cover of native salt marsh vegetation; and the reduction of shoreline erosion, which would protect created salt marsh habitat.

Baseline monitoring would be conducted to collect data that would be used as points of comparison for implementation and post-implementation monitoring data. Implementation monitoring would be conducted to ensure that the breakwaters were constructed with the appropriate dimensions. In general, components of this monitoring would evaluate the production and support of organisms on the breakwater (e.g., benthic secondary productivity), the performance of the breakwater in protecting the shoreline (e.g., salt marsh habitat), and the creation of salt marsh habitat. Performance criteria would be established to determine whether the project achieves the desired breakwater specifications, benthic secondary productivity, and salt marsh habitat created.

Components of this monitoring may include collecting information with respect to:

- Structural integrity of breakwater/reef structure;
- Height/elevation and width of breakwater/reef structure;
- Consolidation rate of reef structure;
- Shoreline profile;
- Shoreline position;
- Bivalve density, size, biomass, and survival;
- Non-bivalve invertebrate density and biomass; and
- Percent cover and survival of planted vegetation.

Furthermore, for the salt marsh plantings to be considered a success a minimum of 80% of the plantings would be viable at the end of the first growing season. If this standard is net additional planting/replanting will be required of the contractor. Monitoring of the plantings would occur for 5 years, with a minimum of one site inspection per year. Annual reports and photographs would be prepared during the monitoring period.

Figure 1. Map illustrating the potential locations for the Cat Point Living Shorelines project.

Federally managed fisheries and EFH

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 areas.

Table 1. Designated Essential Fish Habitat (EFH) in the proposed project area.

EFH Category	species
Atlantic Highly Migratory Species	Atlantic Sharpnose Shark Adult
	Atlantic Sharpnose Shark Juvenile
	Atlantic Sharpnose Shark Neonate
	Blacknose Shark Adult
	Blacknose Shark Juvenile
	Blacknose Shark Neonate
	Blacktip Shark Adult
	Blacktip Shark Juvenile
	Blacktip Shark Neonate
	Bonnethead Shark Adult
	Bonnethead Shark Juvenile
	Bonnethead Shark Neonate
	Bull Shark Juvenile
	Finetooth Shark Adult and Juvenile
	Great Hammerhead Shark All
	Nurse Shark Juvenile
	Scalloped Hammerhead Shark Juvenile
	Scalloped Hammerhead Shark Neonate
	Spinner Shark Juvenile
	Spinner 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	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
	Yellowfin Grouper
	Yellowmouth Grouper

Assessment of effects to EFH

The effect on hydrology from project implementation would be measurable, but it would be small and localized. The footprint of the project is near to the shore and encompasses approximately 0.3 acre of land. The effect to water quality from the project implementation would be short term and minor. During the construction phase of the project, it is likely that sandy soils would be disturbed as the substrate is placed in the water. This would result in a detectable change to water quality, but the change would be expected to be small and localized

and impacts would quickly become undetectable. State water quality standards, as required by the Clean Water Act, would not be exceeded.

The proposed project area is not in a wetland. However, by installing the living shoreline/breakwaters, wetlands would be created behind the breakwaters. This is a beneficial effect as it would create additional estuarine habitat that can host many species that are present in the region.

Construction activities would incorporate best management practices (BMPs) and are anticipated to last 3 to 6 months from the time site preparation and access activities begin. The calendar year timing would depend on the timing of funding availability and the contract award along with any permit constraints required as a result of listed species considerations. BMPs may include, but would not necessarily be limited to, the following:

- Installation of floating turbidity barriers
- Installation of erosion control measures along the perimeter of all work areas
- Stabilization of all filled areas with sod, mats, barriers, or a combination
- Storing and fueling vehicles away from aquatic areas
- Re-vegetation of exposed soils when construction activities are complete

During the construction phase of the project, increased noise from operation of the crane and other construction equipment could attract attention, but their contribution to the soundscape would be localized and not of consequence, nor would it affect current user activities. Once built, the proposed project would not cause long-term noise impacts.

Impacts to EFH or the natural processes sustaining them may be detectable, but would be localized and would not measurably alter natural conditions. Small changes to local population numbers, population structure, and other demographic factors would be unlikely to occur. Sufficient habitat would remain functional at both the local and range-wide scales to maintain the viability of the species. Therefore, adverse effects to EFH would be short term and minor.

The proposed project would likely result in short-term, minor adverse impacts due to construction of the breakwater structures in shallow, intertidal habitat that may harbor invertebrates or sessile organisms. Small fish that frequent the intertidal area within the construction envelope are highly mobile and would be displaced to suitable habitat in the restoration area. However, these species are typically numerous in the area and recolonize quickly. The proposed breakwaters would benefit the fish and invertebrate community by providing additional structures that attract prey. Impacts would be detectable and localized, but small. Disturbance of individual species would occur; however, there would be no change in the diversity or local populations of marine and estuarine species. Any disturbance would not

interfere with key behaviors such feeding and spawning. There would be no restriction of movements daily or seasonally.

The proposed project would provide long-term benefits to marine species providing additional fish habitat, increased benthic productivity, and enhanced recruitment and production of fish and invertebrates. The proposed breakwaters and restoration of the salt marsh communities would benefit numerous aquatic species such as blue crab (*Callinectes sapidus*), bivalves (*oysters*) and gastropods (*Gastropoda sp.),* red drum (*Sciaenops ocellatus*), and speckled sea trout (*Cynoscion nebulosus).* Over the life of the project, the quality of fish habitat would increase, and the stabilization of shoreline community would allow it to become more productive. The greater overall beneficial impact resulting from the restored habitat would outweigh potential short-term impacts to these species. Therefore, short- and long-term effects to marine and estuarine fauna are expected to be minor as a result of project construction.

Conclusion

Potential impacts to EFH from the Cat Point Living Shorelines project have been assessed and it has been determined that the construction is not likely to adversely affect EFH. Although implementing the project would result in a small amount of habitat conversion of one EFH habitat type to another, adjacent habitat would be available use. Additionally, the habitat conversion would be expected to improve habitat quality long-term, which could benefit some species. Disturbance to any EFH and species using adjacent habitat to the project locations would be brief and insignificant, with risks further mitigated by following identified best management practices during construction. No adverse impacts to other EFH types would result from the proposed construction techniques.