UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
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St. Petersburg, Florida 33701-5505
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June 19, 2015 F/SER46:MS/RS

MEMORANDUM FOR: Leslie Craig
Southeast Region Supervisor, NOAA Restoration Center

FROM: Virginia M. Fay
Assistant Regional Administrator, Habitat Conservation Division

SUBJECT: Essential fish habitat review of the Florida Seagrass Recovery Project

In response to the Deepwater Horizon oil spill, NOAA and the other Trustee agencies propose to fund the construction of the National Park Service Seagrass Recovery Project at the Gulf Islands National Seashore in Santa Rosa Sound, Escambia County, Florida using Phase IV Early Restoration funds. The project activities described in the essential fish habitat (EFH) assessment would result in minimal temporary impacts to estuarine water column and underlying submerged aquatic vegetation (SAV) habitats categorized as EFH under provisions of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act).

As specified in the Magnuson-Stevens Act, EFH consultation is required for federal actions which may adversely impact EFH. The NOAA Restoration Center prepared an EFH assessment for this project and provided the document for our review by electronic mail dated May 27, 2015. The Southeast Region's Habitat Conservation Division (SER HCD) has reviewed the EFH assessment and finds the document adequately evaluates proposed project impacts to EFH supportive of a number of federally managed fishery species. Project implementation would result in minimal temporary EFH impacts to restore propeller scars within SAV habitat. Best management practices to minimize both short term construction impacts and long term impacts to sensitive habitats have been developed and were included in the EFH assessment. The SER HCD has no EFH conservation recommendations to provide pursuant to Section 305(b)(2) of the Magnuson-Stevens Act at this time. Further consultation on this matter is not necessary unless future modifications are proposed and such actions may result in adverse impacts to EFH.

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National Park Service's Seagrass Recovery Project at Gulf Islands National Seashore's Florida District Essential Fish Habitat (EFH) Assessment

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 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 seeks to minimize adverse effects on habitat caused by fishing and non-fishing activities.

Project Description

The proposed project would include the restoration of seagrass beds on Department of the Interior - managed submerged lands through the transplanting of donor seagrasses within prop scar and foot traffic damaged areas in the Naval Live Oaks Unit of Gulf Islands National Seashore (GUIS), Santa Rosa County, Florida. Seagrasses are important wildlife habitat and food sources. The most common species in GUIS is turtle grass (*Thalassia testudinum*), which is particularly slow to recover from physical damage, can take many years to recover naturally from propeller damage , and may never recover within severely scarred areas. At GUIS, seagrass beds are injured through propeller scars, blow holes, and via repeated human foot traffic which damages root systems. Propeller scars occur when boat propellers cut up roots, stems, and leaves of seagrasses, producing long, narrow furrows devoid of vegetation.

The project would be located in Santa Rosa Sound in Santa Rosa County, on the south side of the Naval Live Oaks unit of GUIS (see Figure at the end of this document for project location). This area contains important turtle grass habitat which if not restored, could continue to degrade and impact more of the adjacent healthy seagrass habitat.

The objective of the proposed Seagrass Recovery Project at GUIS is to restore approximately 0.02 acre of seagrass injured from propeller scars, blow holes, and trampling when fishers and other recreationalists wade into the shallow beds. An initial assessment survey would be conducted in the project area to identify priority restoration sites. The proposed restoration work includes: (1) harvesting shoal grass (*Halodule wrightii*), (a hardy, fast growing pioneer species of seagrass which helps establish proper site conditions for the future colonization of healthy turtle grass) from nearby donor sites and transplant them into the injured areas, (2) installing bird stakes to condition the sediments to promote survival and growth of seagrasses within the restored site, and (3) monitoring the sites to measure and report on the success of the restoration work. An associated education component will include signage, both in water within the transplant areas and on shore near public access points, to alert visitors to the restoration project and the danger of their actions to seagrass beds. Every effort will be made to complete the seagrass transplant during the spring of the year to maximize the potential for seagrass establishment and growth.

Once all site restoration activities are completed and documented, the site will be monitored one year post-planting. The overall goal for this project is to restore seagrass. Given this goal, restoration success for this project will be based on establishment of seagrass transplants in the restored area. Restoration success will be monitored and evaluated using two parameters: structural integrity of stakes and signs and percent coverage of seagrass. The methods are described below:

Objective #1: Stabilize, protect, and enhance seagrass beds through transplanting seagrass, installing bird stakes and signage.

- Was the project implemented as designed?
- Are seagrass planting units surviving?
- Are bird stakes and signage being maintained?

Parameter #1: **Structural Integrity**

a.) Method: Visual observation of bird stakes and signs to ensure they are still in place and performing as designed.
b.) Timing and Frequency: Bird stakes and signage will be inspected during the follow up monitoring event approximately one year after construction.
c.) Sample Size: monitor all stakes and signs.
d.) Performance Criteria: At Year 0 and 1, bird stakes and/or signs are installed as designed and maintained for lifespan of project.
e.) Corrective Action: Repair or replace signs and stakes.

Objective #2: Promote re-growth of native seagrass beds

- Is the transplanted seagrass surviving?

Parameter #1: **Percent Coverage**:

a.) Method: At least ten percent of the restored area will be monitored through random placement of square 0.25m^2 quadrats. Benthic cover of seagrasses will be estimated in the quadrats using a modified Braun-Blanquet scale.
b.) Timing and Frequency: Initially after the transplants are installed (in spring if possible) and again one year later.
c.) Sample Size: At least ten percent of the restored area will be monitored through random placement of square 0.25m^2 quadrats.
d.) Performance Criteria: At Year 1, transplanted seagrass is surviving in restored areas.
e.) Corrective Action: If transplanted seagrass has not survived based on the monitoring conducted, contractor should replant if project funding is available.

Federally managed fisheries and EFH

Information on designated EFH in the Gulf of Mexico was obtained on April 30, 2015 from the NMFS' GMFMC Consolidated EFH table. Table 1 provides a summary of the federally managed highly migratory

species (HMS) identified as having designated EFH for one or more life stages within the potential project implementation area in Figure 1.

Species	Life Stage SAV Habitat Utilized
Red Drum	Larvae
Red Drum	Post-Larvae
Red Drum	Late-Juveniles
Red Drum	Adults
Red Drum	Spawning-Adults
Black grouper	Early-Juvenile
Gag	Early-Juvenile
Gag	Late-Juveniles
Gray (mangrove) snapper	Post-Larvae
Gray (mangrove) snapper	Early-Juvenile
Gray (mangrove) snapper	Late-Juveniles
Hogfish	Early-Juvenile
Hogfish	Late-Juveniles
Lane snapper	Post-Larvae
Lane snapper	Early-Juvenile
Lane snapper	Late-Juveniles
Nassau grouper	Early-Juvenile
Red grouper	Early-Juvenile
Yellowtail	Early-Juvenile
Pink Shrimp	Early-Juvenile

Figure 1.

There are no Habitat Areas of Particular Concern (HAPC) identified in the proposed seagrass restoration areas.

Assessment of effects to EFH

It is unlikely the proposed seagrass restoration activities or bird stakes would result in adverse effects on federally managed species or their designated EFH, because any initial disturbance will be very brief, would not interfere with EFH used for migration, spawning or refuge areas, and eventually would be likely to provide ecological benefit many federally managed species. Placement of bird stakes would occur quickly and any seagrass disturbance is expected to be minimal. Movement of HMS species would likely not be impeded by the stakes. It is anticipated the proposed seagrass replacement will have only brief and minor effects on any federally managed species or designated EFH. The duration and extent of disturbance would likely not interfere with federally managed species migration, nesting or refuge areas, because adjacent areas of similar habitat will be available and undisturbed, and most organisms could easily move away from the minor and temporary disturbance activity. The project would result in

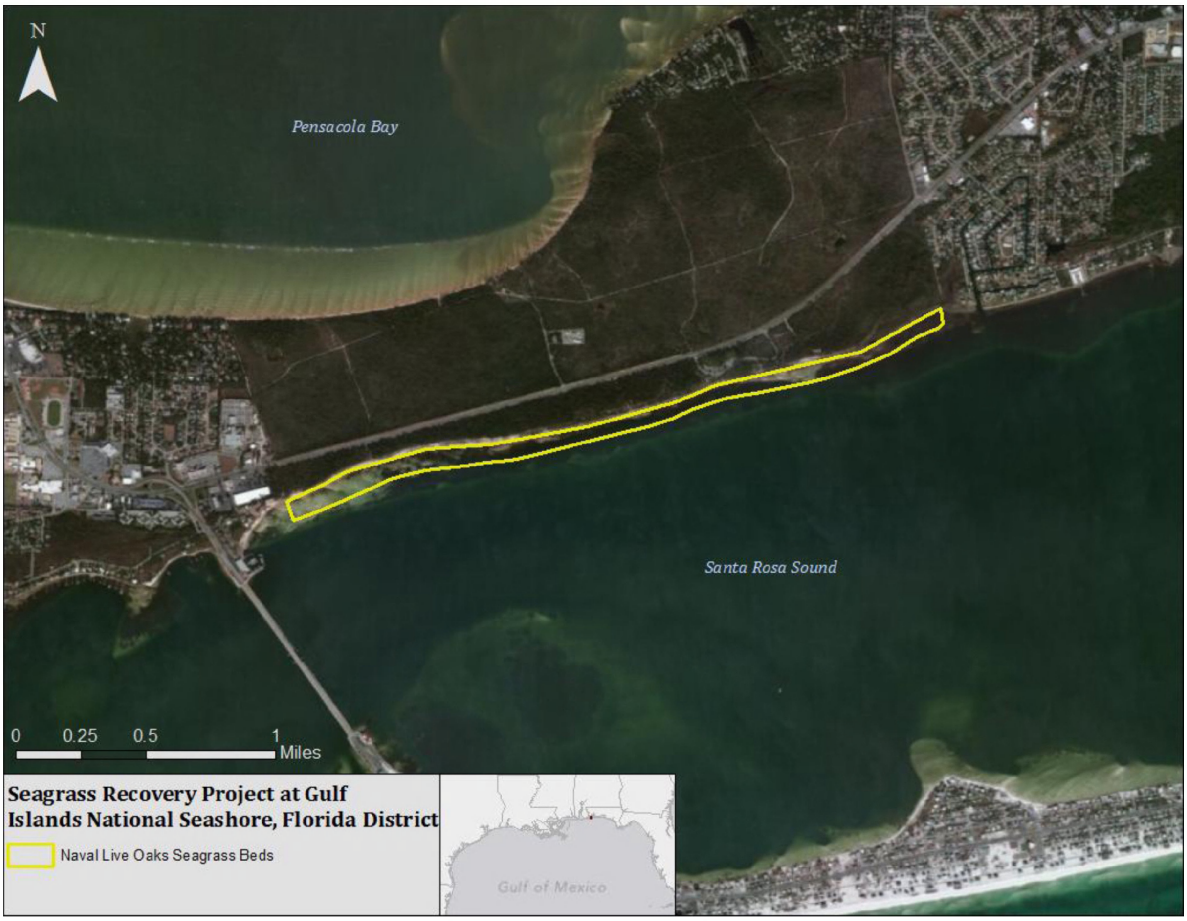
an overall ecological net benefit to the existing benthic and seagrass communities by including improving the quality and quantity of the available seagrass habitat. The placement of the signage within the transplant areas is not likely to adversely affect federally managed species or designated EFH. Seagrass transplants will be selectively removed from healthy seagrass beds in the project area. Donor material will be collected in accordance with necessary permits, using best management practices to ensure that the donor seagrass beds are not degraded. The following best management practices will be followed to minimize impacts:

- No repeated harvest from donor sites within a calendar year;
- No harvest from high current areas;
- To the maximum extent possible, the environment at the donor site would match conditions at the restored site for salinity, sediment types, tidal current speeds, wave exposure, and temperature;
- The donor beds would be located on shallow, sandy shoals where shoal grass grows at densities of at least 3,000 shoots per square meter;
- Harvest of donor seagrass would be spaced at 3-foot radius intervals from the outer edge of any core taken at a maximum; and
- The maximum core size diameter would not exceed 20 centimeters.

No adverse impacts to the ecological health of neighboring seagrass communities are anticipated from collection of seagrass transplant materials.

Conclusion

Potential direct and secondary impacts to EFH in the proposed locations for the seagrass restoration project have been assessed and it has been determined that the restoration would not be likely to adversely affect EFH. Implementing the project would not result in the creation or conversion of one EFH habitat type to another type, as proposed restoration activities are to occur in areas which previously supported seagrass. Disturbance to EFH and associated dependent species where scars would be restored would be temporary and minimal, with risks further mitigated by following identified best management practices during construction. No additional adverse impacts to other categories of EFH are expected to occur from the proposed seagrass restoration activities and therefore mitigation for EFH impacts is not required.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Seagrass Recovery Project at Gulf Islands National Seashore, Florida District
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