



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
National Centers for Coastal Ocean Science
Silver Spring, Maryland 20910

MEMORANDUM FOR: The Record

FROM: Lauren Latchford
Chief of Staff
National Centers for Coastal Ocean Science

SUBJECT: Categorical Exclusion for the RESTORE Act Project:
“Understanding drivers of change in seagrass ecosystems to inform management of critical habitats in the Gulf Islands National Seashore”

The National Environmental Policy Act (NEPA or the Act), 42 U.S.C. §§ 4321 et seq., establishes the national environmental policy of the Federal Government to use all practicable means and measures to foster and promote the general welfare, create and maintain conditions under which humans and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans. The purpose and function of NEPA is satisfied if Federal agencies have considered relevant environmental information and if the public has been informed regarding the decision-making process.

NOAA Administrative Order (NAO) 216-6A, Environmental Review Procedures, requires all proposed projects to be reviewed with respect to environmental consequences on the human environment in compliance with NEPA. This memorandum addresses the determination that the project activities as described qualify to be categorically excluded from further National Environmental Policy Act review.

Informal Endangered Species Act Section 7 consultations have been completed with the National Marine Fisheries Service and the US Fish and Wildlife Service. The services concurred with NCCOS’ determination that project activities *may but are not likely to adversely affect* ESA-listed species.

Categorical Exclusion Determination:

NCCOS has determined that the action proposed falls within the scope of the E5 categorical exclusion described as: Activities involving invasive techniques or methods that are conducted for scientific purposes, when such activities are conducted in accordance with all applicable provisions of the Endangered Species Act, Marine Mammal Protection Act, Migratory Bird Treaty Act, and Magnuson-Stevens Fishery Conservation and Management Act. Such activities will be limited to impacting living resources on a small scale relative to the size of their populations, and limited to methodologies and locations to ensure that there are no long-term adverse ecosystem impacts. Project activities consist of a category of actions that does not normally have a significant effect on the quality of the human environment; is not connected to a



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larger action (40 C.F.R. 1501.3(b)); and does not involve extraordinary circumstances precluding use of the CE. As such, NCCOS has determined that it is categorically excluded from further NEPA review.

Description of the Proposed Action:

NOAA's RESTORE Science Program proposes to fund the University of Southern Mississippi to conduct the project, "Understanding drivers of change in seagrass ecosystems to inform management of critical habitats in the Gulf Islands National Seashore." Project activities support the goal of identifying and monitoring long-term trends and variability in seagrass-dominated ecosystems in the Gulf Islands National Seashore and identifying drivers of change in biodiversity and productivity of these systems to address knowledge gaps and uncertainties prioritized by resource managers.

The field work component involves the regular monitoring of water quality, seagrass extent, and bioacoustics within the Gulf Islands National Seashore (GUIS) (Figure 1). YSI EXO3 sondes will be deployed at two sites (Petit Bois Island, MS and Choctawhatchee Bay, FL). Project staff will acquire both aerial and satellite images of seagrass beds. Tier 2 seagrass monitoring will take place at 248 stations annually within GUIS. During years 2 and 4 of the project, three or more shoots of each species (*Thalassia testudinum*, *Halodule wrightii*, *Syringodium filiforme*, *Ruppia maritima*, and/or *Halophila engelmannii*) present at a random subset of 75 stations will be collected and analyzed for nutrient content. Every year, five shoots of *T. testudinum* will be collected from four quadrats to reconstruct the reproductive history. Sediment cores will be collected at stations that contain *H. wrightii* to obtain seeds. Each quarter, 15 stations each in MS and FL will be randomly selected and sampled for nekton using epibenthic sleds and trawls. Juvenile nekton and smaller species will be sampled with an epibenthic sled, a 75cm wide × 60cm high frame on 75cm long skids, with a 4m long, 2mm mesh net. The sled will be pulled by hand (~0.5m s⁻¹) for 13.3 m, sampling 10m² of habitat. Larger nekton species will be sampled using a 4.88m (16ft) flat trawl towed behind a boat for 2 min at a speed of ~4km h⁻¹, resulting in a total tow length of ~133m, centered on the sampling station. Trawls consist of a 1.5in stretch mesh body, 0.5in stretched mesh bag, 24 × 14in doors, with no tickler chain. Imaging sonar deployments will occur quarterly in conjunction with the trawl surveys. The imaging sonar will be deployed for 30 minutes prior to completing any trawling activities



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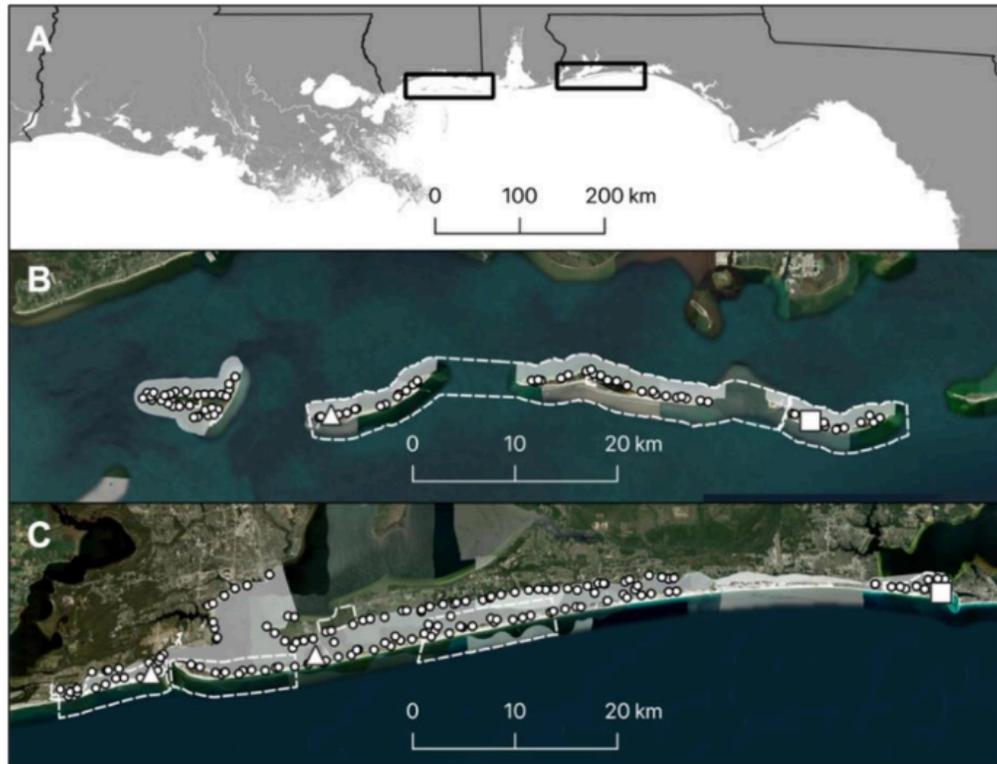


Figure 1: Gulf Islands National Seashore sites where sampling and surveys will occur

Effects of the Proposed Action:

Project activities include collecting seagrass via clippings and sediment cores. Nekton will be sampled via epibenthic sleds and trawls. Potential environmental impacts from seagrass and nekton collection are expected to be minimal because project activities are limited temporally and spatially using standard gear and methods. The project staff will acquire a Gulf Islands Research and Collecting permit from the National Park Service, a Scientific Research Permit from the Mississippi Department of Marine Resources, a Special Activity License from the Florida Fish and Wildlife Commission, and a Scientific Research/Collecting Permit from the Florida Department of Environmental Protection.

Endangered Species Act: Section 7(a)(2) of the Endangered Species Act (ESA) states that each federal agency shall, in consultation with the Secretary, ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. In fulfilling these requirements, each agency must use the best scientific and commercial data available.



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NCCOS completed informal ESA Section 7 Consultations with the USFWS and NMFS. Both services concurred with NCCOS' determination that project activities *may affect but are not likely to adversely affect* ESA-listed species.

Essential Fish Habitat: Magnuson-Stevens Fishery Conservation and Management Act requires that Federal agencies consult with NMFS on actions that “may adversely affect” Essential Fish Habitat (EFH) (16 U.S.C. §1855(b)(2)). NCCOS consulted the NOAA OHC [EFH mapper](#). There are two general locations where the research activities and sampling (described above) would occur: Mississippi portion of the Gulf Islands National Seashore and the Florida portion of GUIs. The EFH resources derived from the EFH Mapper are listed below for each general location as applicable. There were no Habitat Areas of Particular Concern (HAPC) or EFH areas protected from fishing in the general locations queried.

Species or Management Unit within Mississippi and Florida portion of GUIs

Shrimp
Coastal Migratory Pelagics
Reef Fish
Atlantic Sharpnose Shark
Blacknose Shark
Blacktip Shark (neonate and juvenile/adult)
Tiger Shark (neonate and juvenile/adult)
Sandbar Shark (neonate and adult)
Bull Shark (juvenile/adult)
Spinner Shark
Red Drum
Finetooth Shark
Bonnethead Shark (neonate and juvenile/adult)
Scalloped Hammerhead Shark (juvenile/adult)

The proposed research activities included at each general location are; Epibenthic sled tows, Trawl net tows, habitat surveying (vegetation collections, sediment cores) and the deployment of water quality monitors, hydrophones, and stationary multibeam sonar scanners. Based on the limited spatial and temporal extent of the sampling at each general location (~15 days per sampling season), NCCOS determines that project activities will have *no adverse effects* to EFH. For example the epibenthic sled (73x60cm on 75cm long skids with a 4m long, 2mm mesh net) and nekton net (1.5in stretch mesh body with 0.5in stretched mesh bag and 24x14in doors with no tickler chain meters) are small and will cover a limited area of habitat and would not reduce the quantity or quality of EFH. A few 6in deep 3in diameter sediment cores will be collected at a subset of stations with shoalgrass present. Survey methods have a chance of temporarily suspending sediment and reducing water quality, but effects will be limited spatially and temporally. No reduction in the quantity or quality of EFH would occur as a result of the



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surveying activities. deployment of small instruments will be smallscale and will not rise to the level of adversely affecting the quantity and quality of EFH.

Coastal Zone Management Act: The federal consistency provision of the Coastal Zone Management Act (CZMA, 16 U.S.C. §1451) requires federal actions (inside or outside a state's coastal zone) that affect any land or water use or natural resource of a state's coastal zone, to be consistent with the enforceable policies of the state coastal management program (CMP).

This action falls within subpart F of the federal consistency regulations. Based on the analysis of project activities and the employment of BMPs described above NCCOS determines that this action will not have reasonably foreseeable effects on coastal use or resources. In addition, the proposed activities are not on the Federal Consistency lists for [Florida](#) or [Mississippi](#). Therefore, no negative determination is required and no further action is required by NCCOS.

National Historic Preservation Act: Section 106 of the National Historic Preservation Act of 1966 (NHPA) (54 U.S.C. § 300101 et seq.) requires federal agencies to take into account the effects of their undertakings on historic properties in accordance with regulations issued by the Advisory Council on Historic Preservation (ACHP) at 36 C.F.R. Part 800. The regulations require that federal agencies consult with states, tribes, and other interested parties (consulting parties) if project activities have any potential to impact cultural resources.

According to the [National Park Service cultural resources data layer](#) there are no Historic Sites that would be impacted by site activities as none occur in the areas where sampling would occur. Therefore, NCCOS determines that this project's activities would not result in any impact to National Historic Sites.

Extraordinary Circumstances

Based on the limited temporal and spatial extent of the activities, incorporation of best management practices, project activities would have negligible or beneficial effects on areas with unique environmental characteristics, on geographically or ecologically critical areas, (sanctuaries, wetlands, watersheds), and National Historic Sites. We also determine that project activities will have no adverse impacts to marine mammals, EFH, and ESA-listed and MBTA protected birds that are not negligible or discountable.

Vessel operators have decades of experience working in the field locations and will employ Best Management Practices to avoid interactions with protected species; such as 100% observer coverage (operator may double as observer), minimum approach distances and reducing speed if protected species (e.g., sea turtles, marine mammals) are observed. In addition, there is no potential to contribute to the introduction, continued existence or spread of non-native species as only native species would be used in planting activities and gear used would be local to the area or rinsed thoroughly between water bodies as appropriate.



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There would be no adverse effects on human health or safety that are not negligible or discountable. No chemicals would be transported as a result of this work and laboratory activities abide by the appropriate SOPs, as applicable to the activity and the facilities abide by all safety and disposal regulations such as; waste chemicals are disposed of through a licensed hazardous waste Treatment, Storage, and Disposal (TSD) facility and transported by a licensed transportation contractor. Therefore, there is no potential to generate, use, store, transport, or dispose of hazardous or toxic substances in a manner that may have a significant effect on the environment.

Finally, there are no uncertain environmental impacts or unknown risks as project activities and methods are routinely used for the purposes of research. These actions are not uncertain, unique or unknown, have no potential to establish a precedent for future action or to be controversial when combined with other past, present or reasonably foreseeable future actions. There is no potential to violate Federal State or local laws or requirements imposed for the protection of the environment.

The proposed action is not connected to a larger action and can therefore be reviewed independently from other actions under NEPA.

Protective Measures and Best Management Practices

The following BMPs should be employed where applicable, incorporated into project instructions and communicated to the vessel operator and field party.

1. During transit a vessel operator and crew will maintain a look out for protected species and reduce speed as necessary to avoid protected species.
2. Upon sighting, vessel operator will maintain minimum approach distances for:
 - a. Cetaceans:
 - i. 200 yards from large whales,
 - ii. 100 yards from all other species.
 - b. Sea turtles: 50 yards
 - c. Sawfishes: 50 yards
 - d. Sturgeon: 50 yards
 - e. Manatees: 50 yards
3. Minimize vessel disturbance and ship strike potential
 - a. Reduced speeds (<13 knots) when ESA-listed cetaceans are sighted (unless otherwise required, e.g., NOAA Sanctuaries);



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- b. Reduced speeds (<13 knots) while transiting through designated critical habitat (unless slower speeds are required, e.g., < 10 knots in right whale critical habitat and management areas);
 - c. Trained observers aboard all vessels; 100% observer coverage; and
 - d. Species identification keys (for marine mammals, sea turtles, corals, abalone, and seagrasses) available on all vessels.
4. Minimize impacts to seagrasses and other Essential Fish Habitat (EFH) by:
 - a. Anchoring in mud or sand (avoid seagrass or other EFH)
 - b. Minimizing anchor drag (i.e., provide adequate scope)
 - c. Avoid grounding by raising prop or reducing speed as necessary
5. Injured or Dead Protected Species Reporting.
 - a. In the unlikely event of an animal death or injury, vessel operators should immediately contact the appropriate [state agency](#) and NMFS response network:
 - i. NOAA Fisheries Southeast Marine Mammal Stranding Hotline**
 1. **Phone:** (877) WHALE-HELP (877-942-5343)
 - ii. NOAA Fisheries Southeast Sea Turtle Stranding and Salvage Network Hotline**
 1. **Phone:** (844) SEA-TRTL (844-732-8785)
 - iii. Smalltooth Sawfish Encounter Hotline**
 1. **Phone:** (844) 4SAWFISH or (844) 472-9347
 - iv. Sturgeon Salvage Network**
 1. **Phone:** (844) STURG-911 or (844) 788-7491
 - v. Giant Manta Ray Reporting**
 1. **Phone:** (727) 824-5312
 2. **Email:** manta.ray@noaa.gov
 - b. Report a fish kill, diseased fish, or fish with other abnormalities at <https://survey123.arcgis.com/share/2485ecbeded748689725da57b1bc319a> or call 800-636-0511