



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Service
1305 East West Highway
Silver Spring, Maryland 20910

August 24, 2022

FROM: Ms. Giannina DiMaio
Environmental Compliance Coordinator
National Oceanic and Atmospheric Administration
National Ocean Service
1305 East West Highway
Silver Spring, Maryland 20910

TO: Will Underwood, Coastal Section Administrator
State Lands Division,
Alabama Department of Conservation and Natural Resources
31115 5 Rivers Blvd.
Spanish Fort, AL, 36527

J. Scott Brown, Chief
Mobile Field Office, Department of Environmental Management,
2204 Perimeter Road
Mobile, AL, 36615

REFERENCE: Consistency Determination for National Ocean Service Mapping and Surveying
Activities Undertaken in the Alabama Coastal Zone, 2023-2027

Mr. Underwood and Mr. Brown,

This notice serves as the federal Consistency Determination for the referenced action, as required by Section 307 of the Coastal Zone Management Act of 1972, as amended (16 U.S.C. 1451 et seq.) for the implementation of activities that may have reasonably foreseeable effects on coastal uses or resources of Alabama's coastal zone.

This Consistency Determination addresses the potential effects on any coastal use or resource of Alabama from mapping and surveying activities undertaken by the National Oceanic and Atmospheric Administration's (NOAA) National Ocean Service (NOS) in the 2023-2027 timeframe. The Consistency Determination relies extensively upon the activity descriptions and analyses in the NOS *Programmatic Environmental Impact Statement (PEIS) for Surveying and Mapping Projects in U.S. Waters for Coastal and Marine Data Acquisition* which was prepared in accordance with the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. §§ 4321 et seq.). The Draft PEIS and additional information is available online at <https://oceanservice.noaa.gov/about/environmental-compliance/surveying-mapping.html>.

Based on the information, data, and analysis contained herein and in the Draft PEIS, NOS has determined that the Proposed Action is consistent with the enforceable policies of the Alabama Coastal Management Program.

Pursuant to 15 CFR § 930.41(a), Alabama has 60 days from the receipt of this letter to concur with or object to this Consistency Determination, or to request an extension under 15 CFR § 930.41(b). Alabama's concurrence will be presumed if Alabama's response is not received by NOS on the 60th day after receipt of this determination.

Thank you for assisting the National Ocean Service with this important program. Please submit your questions, comments, or other responses by email to the NOS Environmental Compliance Coordinator, Giannina DiMaio at nosaa.ec@noaa.gov or by phone at (240) 339-5565.

1.0 INTRODUCTION

This Consistency Determination (CD) addresses the potential effects on any coastal use or resource of Alabama from mapping and surveying activities undertaken by the National Oceanic and Atmospheric Administration's (NOAA) National Ocean Service (NOS). Specifically, this CD considers mapping and surveying activities undertaken in the 2023 - 2027 timeframe.

NOS is one of six line offices within NOAA.¹ Section 2 of this CD provides a detailed description of NOS's mapping and surveying activities. This CD does not address all NOS activities, nor does it address actions undertaken by other NOAA line offices.

NOS prepared this CD pursuant to the Coastal Zone Management Act (CZMA) of 1972, as amended, and 15 Code of Federal Regulations (CFR) Part 930, Subpart C, for the implementation of activities that may have reasonably foreseeable effects on coastal uses or resources of Alabama's coastal zone. Under the CZMA, federal agency activities with coastal effects are required to be consistent to the maximum extent practicable with federally approved enforceable policies of a State's Coastal Management Program.

Federal agency activities must be consistent to the maximum extent practicable with the standards that underlie a state's permit requirements. However, federal agencies do not have to apply for or obtain a state permit unless required by another Federal law (2020 OCM Federal Consistency Overview; 65 FR at 77140 (2000); and 15 CFR 930.39(e)). Under the CZMA implementing regulations, "the amount of detail in the evaluation of the enforceable policies, activity description and supporting information shall be commensurate with the expected coastal effects of the activity" 15 CFR 930.39(a).

This CD relies extensively upon the activity descriptions and analyses found in the NOS *Programmatic Environmental Impact Statement (PEIS) for Surveying and Mapping Projects in U.S. Waters for Coastal and Marine Data Acquisition*, which was prepared in accordance with the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. §§ 4321 et seq.). The Draft PEIS is available [here](#)² and is incorporated by reference to this CD. On June 25, 2021, the Draft PEIS was published and a notification was distributed by email to all state coastal management program managers and federal consistency contacts. The public comment period for the Draft PEIS closed on November 22, 2021.

The activities to be implemented by NOS are described in the Draft PEIS, Chapter 2 – Description of the Proposed Action and the Alternatives. Reasonably foreseeable environmental effects are described in Chapter 3 of the Draft PEIS. The list of mitigation measures can be found in Appendix A of this CD. These measures were developed through interagency consultations and coordination after publication of the Draft PEIS and will be incorporated into the Final PEIS.

1.1 PROPOSED ACTION, SCOPE, AND IMPACTS

The Draft PEIS contains a programmatic NEPA analysis covering a five-year period of NOS mapping and surveying activities. The Proposed Action evaluated in the Draft PEIS is to continue NOS's data collection projects in the U.S. territorial sea, the contiguous zone, the U.S. Exclusive Economic Zone (U.S. EEZ), U.S. rivers, and states' offshore waters, and some supporting activities in coastal and riparian lands such as the installation of tide gauges. It was determined that a programmatic approach was appropriate because

¹ <https://www.noaa.gov/about/organization/noaa-organization-chart>

² <https://oceanservice.noaa.gov/about/environmental-compliance/surveying-mapping.html>

NOS conducts, authorizes, permits, and funds a suite of similar, ongoing data collection activities associated with recurring projects across a wide geographic area to characterize underwater features (e.g., habitat, bathymetry, marine debris). This Draft PEIS is a comprehensive document that provides detailed analyses of the environmental impacts of surveying and mapping data collection activities based on regional conditions, habitat types, species, and other factors. However, the Draft PEIS does not identify the specific time or place for individual projects or activities over the next five years. The analysis will be used to inform NOS leadership and the public on the environmental impacts of these activities before a decision is made on how to execute each project. Section 1.3 of the Draft PEIS contains detailed information on the programmatic scope of the analysis.

The geographic scope of the Draft PEIS encompasses the U.S. territorial sea; the contiguous zone; the U.S. Exclusive Economic Zone; rivers; states' coastal waters; and coastal and riparian lands. This includes the U.S. portions of the Great Lakes and internal waters such as Lakes Tahoe, Mead, Champlain, Okeechobee, and parts of major rivers. The action area is organized into five regions: Greater Atlantic Region, Southeast Region, West Coast Region, Alaska Region, and Pacific Islands Region. For the purpose of this CD, NOS mapping and surveying activities should be presumed to take place anywhere in the waters of Alabama or in nearshore terrestrial areas, subject to applicable mitigation measures.

NOS projects would include surveys performed from crewed vessels and remotely operated or autonomous vehicles, operated by NOS field crews, other NOAA personnel on behalf of NOS, contractors, grantees, or permit/authorization holders. NOS may use echo sounders and other active acoustic equipment and employ other equipment, including bottom samplers and conductivity, temperature, and depth instruments to collect the needed data. A project could also involve supporting activities, such as the use of divers and the installation of tide buoys. The only terrestrial activities projects would be the installation, maintenance, and removal of tide gauges and GPS reference stations.

The Draft PEIS assesses three alternatives to the Proposed Action: Alternative A, the No Action Alternative, reflecting the technology, equipment, scope, and methods currently in use by NOS at the current level of effort (i.e., the status quo); Alternative B, under which NOS would increase the adoption of new technologies to more efficiently perform surveying, mapping, charting and related data gathering; and Alternative C, which also includes the adoption of new techniques and technologies and includes an overall funding increase of 20 percent. NOS has identified Alternative B as the preferred alternative in the Draft PEIS. Therefore, this CD provides effects determinations for the Proposed Action under Alternative B. The anticipated impacts from Alternative B would be adverse, ranging from negligible to moderate, and insignificant, except for the environmental consequences to socioeconomic resources which are anticipated to be indirect, beneficial, and moderate.³ NOS would re-initiate the Consistency Determination process if a different alternative is selected.

1.2 OTHER FEDERAL AGENCY CONSULTATIONS

In addition to facilitating reviews under CZMA, NOS is engaging in interagency coordination and consultation on the Endangered Species Act (ESA), Marine Mammal Protection Act (MMPA), Magnuson-Stevens Fishery Conservation and Management Act (MSA) for Essential Fish Habitat (EFH), and National Marine Sanctuaries Act (NMSA). NOS has submitted an application for an Incidental Take Authorization to

³ Significance criteria are defined in detail for each resource in the Draft PEIS.

the National Marine Fisheries Service (NMFS) and a petition for Incidental Take Regulations to the U.S. Fish and Wildlife Service (USFWS) for marine mammal species. NOS will initiate project-specific consultations under Section 106 of the National Historic Preservation Act (NHPA) before commencing any activity with the potential to affect cultural or historic resources.

2.0 DESCRIPTION OF THE PROPOSED ACTIVITIES

NOS would operate a variety of equipment and technologies to gather accurate and timely data on the nature and condition of the marine and coastal environment, including:

- Project-Related Crewed Vessel Operations
- Anchoring
- Operation of Remotely Operated Vehicles (ROVs), Autonomous Surface Vehicles (ASVs), and Autonomous Underwater Vehicles (AUVs)
- Use of Echo Sounders
- Use of Acoustic Doppler Current Profilers (ADCPs)
- Use of Acoustic Communication Systems
- Use of Sound Speed Data Collection Equipment
- Operation of Drop/Towed Cameras, Video Systems, and Magnetometers
- Collection of Bottom Grab Samples
- Use of Passive Listening Systems
- SCUBA Operations
- Installation, Maintenance, and Removal of Tide Gauges and Tide Buoys
- Installation of GPS Reference Stations

A single project typically consists of multiple activities listed above and the nature and scope of projects can vary based on the combination of activities. For example, a single Coast Survey project may include the activities of vessel operation, echo sounder operation, anchor deployment, and sound speed data collection.

3.0 COASTAL EFFECTS OF THE PROPOSED ACTIVITIES

In the Draft PEIS, NOS analyzed potential impacts to habitats; marine mammals; sea turtles; fish; aquatic macroinvertebrates; EFH; seabirds, shorebirds and coastal birds, and waterfowl; cultural and historic resources; socioeconomic resources; and Environmental Justice (EJ). Environmental consequences from the Proposed Action are anticipated to be adverse, ranging from negligible to moderate, and insignificant, except for the environmental consequences to socioeconomic resources which are anticipated to be indirect, beneficial, and moderate. These significance criteria are defined by resource and a more complete description of impacts is provided in Chapter 3 of the Draft PEIS. The Proposed Action would provide the public and private sectors with nautical charts, benthic habitat condition maps, current and tide charts, and other products that could support the management of coastal resources. The data collected by NOS are used to conserve, preserve, and restore ecological resources, including marine/aquatic wildlife and habitat, coral reefs, and cultural and historic resources. The sections below summarize the coastal effects of proposed NOS mapping and surveying activities organized by coastal resources and activities generally addressed by the state enforceable policies.

3.1 AIR AND WATER QUALITY

NOS assessed the potential impacts to air and water quality from vessel operations and equipment used during NOS projects. Vessels would emit a variety of criteria air pollutants including nitrogen oxides (NO_x), sulfur oxides (SO_x), particulate matter, volatile organic compounds (VOCs), carbon monoxide (CO), and GHG emissions (e.g., CO₂). NOS vessels would discharge treated sanitary domestic wastes from United States Coast Guard-approved Marine Sanitation Devices (MSDs). The assessment of these impacts can be found in Section 3.14.1 of the Draft PEIS. The potential impacts to air and water quality from air emissions, vessel discharges, and accidental spills would be minimized through compliance with the International Convention for the Prevention of Pollution by Ships (MARPOL) Annexes I, IV, V, and VI. NOS adheres to NOAA's environmental procedures which comply with the MARPOL annexes and relevant implementing legislation, regulations, and guidance. Overall, the impacts on air and water quality are expected to be imperceptible or undetectable.

3.2 WILDLIFE, FISH, AND HABITAT

NOS assessed the potential impacts to marine mammals; sea turtles; fish; aquatic macroinvertebrates; essential fish habitat; seabirds, shorebirds and coastal birds, and waterfowl; and their habitats. All surveying and mapping activities listed in Section 2.0 could impact these resources. Detailed analysis can be found in the following sections of the Draft PEIS: Section 3.5 (Marine Mammals); Section 3.6 (Sea Turtles); Section 3.7 (Fish); Section 3.8 (Aquatic Macroinvertebrates); Section 3.9 (Essential Fish Habitat); and Section 3.10 (Seabirds, Shorebirds and Coastal Birds, and Waterfowl). Among the impacts assessed, effects to marine mammals are expected to be limited to temporary behavioral disturbances from echosounders used for mapping. Impacts to marine and freshwater habitats would be limited to very small-scale bottom disturbance from anchoring, taking grab samples, and installing buoys. Birds, fish, and marine mammals may also experience temporary behavioral disturbance from vessel movements and presence. Serious injury and death could occur to birds and marine mammals in the unlikely event of a vessel strike. NOS developed mitigation measures in coordination and consultation with expert agencies including NMFS and USFWS to avoid and minimize any potential effects. Mitigation measures to protect wildlife, fish, and habitats include implementing mandatory invasive species prevention procedures, maintaining safe distances from protected species, following vessel speed restrictions in specific protected species habitats (e.g., North Atlantic right whale), and avoiding anchoring on sensitive bottoms. The full list of mitigation measures can be found in Appendix A. The overall impacts to wildlife, fish, and habitat would be adverse, minor and insignificant as defined in the Draft PEIS.

3.3 CULTURAL AND HISTORIC RESOURCES

NOS assessed the potential impacts to cultural and historic resources. Anchoring, the collection of bottom grab samples, and the installation/maintenance/removal of tide gauges and GPS reference stations could impact cultural and historic resources; however, all effects are anticipated to be avoided or minimized through NHPA consultation which will occur prior to commencing an individual project. Detailed analysis can be found in Section 3.11 of the Draft PEIS. NOS developed mitigation measures in coordination and consultation with expert agencies including NMFS and USFWS to avoid and minimize any potential effects. Mitigation measures to protect cultural and historic resources include not collecting bottom samples on coral reefs, shipwrecks, obstructions, or hard bottom areas and selecting anchoring locations for which data have already been collected.

NOS will initiate project-specific consultations under Section 106 of the National Historic Preservation Act (NHPA) before commencing any activity with the potential to affect cultural or historic resources. Since NOS will continue to coordinate with SHPOs/THPOs, NHOs, and tribes in compliance with Section 106 of the NHPA, the impacts to cultural and historic resources would be adverse, moderate and insignificant as defined in the Draft PEIS.

3.4 FISHERIES

NOS assessed the potential impacts to fisheries, including fish, aquatic macroinvertebrates, EFH, and socioeconomic resources. Socioeconomic resources include commercial fishing, fish hatcheries and aquaculture, seafood processing, and seafood markets industries. All surveying and mapping activities listed in Section 2.0 could impact fisheries. Detailed analysis can be found in the following sections of the Draft PEIS: Section 3.7 (Fish), Section 3.8 (Aquatic Macroinvertebrates), Section 3.9 (Essential Fish Habitat), and Section 3.12 (Socioeconomic Resources). Among the impacts assessed, effects to fish include some stress responses without permanent physiological damage, and some disturbance to breeding, feeding, or other activities, but without any impacts on population levels; additionally, there would not be long-term changes in habitat availability and use or in fish behavior. NOS also assessed the impact of interactions with fishing gear and survey equipment on the fishing industry. The effects to commercial and recreational fishing from gear interaction is very unlikely. Data collected by NOS would have beneficial effects as that data is used to conserve, preserve, and restore ecological resources, including wildlife, fish, and habitat. The data would provide the public and private sectors with nautical charts, benthic habitat condition maps, current and tide charts, and other products that could support the management of fisheries. These products allow federal, state, and local governments to make informed decisions about fishing areas and other natural resource management issues. NOS developed mitigation measures in coordination and consultation with expert agencies including NMFS and USFWS to avoid and minimize any potential effects. Mitigation measures to protect fisheries include implementing mandatory invasive species prevention procedures and following MARPOL discharge protocols. NOS communicates with the public on future survey projects through announcements such as the annual [Office of Coast Survey story map](#)⁴ and, when appropriate, public “Notices to Mariners” to provide general information on timing and locations. This helps minimize interference with commercial and recreational fishing and reduces the potential for interactions with fishing gear like lobster traps. The full list of mitigation measures can be found in Appendix A of this CD. Overall, the impacts to fishery resources would be adverse, minor and insignificant as defined in the Draft PEIS. NOS data collection and the resulting improvements in charting and mapping are expected to have indirect, beneficial, and moderate impacts on the ocean economy.

3.5 SHORELINE/TERRESTRIAL CONSTRUCTION AND DEVELOPMENT

Some NOS projects under the Proposed Action would include the installation, maintenance, and removal of tide gauges and GPS reference stations, most of which are affixed to existing docks and piers or secured to rocks in more remote locations. Only very small areas would be disturbed, and any affected habitat components would be expected to recover post-installation. NOS developed mitigation measures in coordination and consultation with expert agencies including NMFS and USFWS to avoid and minimize any potential effects from the installation, maintenance, and removal of tide gauges and GPS reference stations. Before commencing any installation, NOS considers the presence of protected species, and

⁴ <https://storymaps.arcgis.com/stories/33758b0990bb4e23a7b61323db3ae670> [accessed 8/11/2022]

assesses potential impacts on known cultural or historic resources in the area. Overall, the installation, maintenance, and removal of tide gauges and GPS reference stations are anticipated to have adverse, negligible to minor, and insignificant impacts on wildlife, fish, and habitat and cultural and historic resources as defined in the Draft PEIS.

3.6 IN-WATER CONSTRUCTION AND DEVELOPMENT

Some projects under the Proposed Action would include the installation of new moorings for tide buoys or the installation of measuring devices on submerged lands. This would require the installation of equipment on the seafloor and cause relatively small amounts (less than one square meter) of bottom substrate disturbance. NOS developed mitigation measures in coordination and consultation with expert agencies including NMFS and USFWS to avoid and minimize any potential effects from the installation of new moorings for tide buoys. NOS would ensure that all instruments in contact with the seafloor are properly secured to minimize bottom disturbance. Moorings would not be installed on coral reefs, vegetated bottoms, or other sensitive habitats. Overall, the installation of new moorings for tide buoys is anticipated to have adverse and negligible to minor and insignificant impacts on wildlife, fish, habitat, and cultural and historic resources as defined in the Draft PEIS.

3.7 DREDGING, REMOVAL, AND RELOCATION OF SEDIMENTS

The Proposed Action does not include dredging; however, it does include disturbance of small amounts of sediment. Collection of bottom grab samples typically involves disturbing a negligible amount of sediment from a 6" by 6" grab sampler. NOS developed mitigation measures in coordination and consultation with expert agencies including NMFS and USFWS to avoid and minimize any potential effects from the collection of bottom grab samples. NOS would pay particularly close attention to sensitive bottom habitats and avoid sampling these areas. Overall, the collection of bottom grab samples is anticipated to have adverse, negligible to minor, and insignificant impacts on wildlife, fish, habitat, and cultural and historic resources as defined in the Draft PEIS.

4.0 CONSISTENCY DETERMINATION FOR THE ENFORCEABLE POLICIES OF THE ALABAMA COASTAL PROGRAM

The Alabama Coastal Area Management Program (ACAMP) was approved by NOAA in 1979. The ACAMP is administered by the Alabama Department of Conservation and Natural Resources (ADCNR) - State Lands Division and the Alabama Department of Environmental Management (ADEM) Coastal Program. The primary authority for the ACAMP is the Alabama Coastal Area Act of 1976 (Act 534). The enforceable policies of the ACAMP regulate various activities on coastal lands and waters seaward of the continuous 10-foot contour in Baldwin and Mobile Counties to preserve, enhance, and develop these valuable resources for present and future generations (ADEM, No Date; OCM, No Date).

4.1 SUMMARY OF FINDINGS

NOS has identified the enforceable policies of the Alabama Coastal Management Program that are applicable to the Proposed Action. Table 1 presents a brief summary of the consistency determinations for each enforceable coastal policy.

Table 1. Summary of Findings

Enforceable Coastal Policy	Consistency Determination
General Rules Applicable to All Uses Subject to the Alabama Coastal Area Management Plan (ACAMP)	Consistent
Dredging and/or Filling	Consistent
Mitigation	Not Relevant
Marinas	Not Relevant
Piers, Docks, Boathouses, and Other Pile Supported Structures	Not Relevant
Shoreline Stabilization and Erosion Mitigation	Not Relevant
Canals, Ditches, and Boatslips	Not Relevant
Construction and Other Activities on Gulf Front Beaches and Dunes	Consistent
Groundwater Extraction	Not Relevant
Siting, Construction and Operation of Energy Facilities	Not Relevant
Commercial and Residential Development	Not Relevant
Discharges to Coastal Waters	Consistent

4.2 ALABAMA STANDARDS AND CRITERIA FOR REVIEW

4.2.1 335-8-2-.01. General Rules Applicable to All Uses Subject to the Alabama Coastal Area Management Plan (ACAMP)

- (1) Uses that are determined by the Department to be in violation of applicable air or water quality standards or associated regulations shall not be permitted or certified to be in compliance with the ACAMP.
- (2) In determining a use's ability to comply with this Administrative Code, the Department shall consider the extent to which the use adversely impacts the following coastal resources:
 - (a) Historical, architectural or archaeological sites designated pursuant to 16 U.S.C. §§ 470 - 470W;
 - (b) Wildlife and fishery habitat especially the designated Critical Habitats of endangered species listed pursuant to 16 U.S.C. §§ 1531 - 1543;
 - (c) Public access to tidal and submerged lands, navigable waters and beaches or other public recreational resources.
- (3) Any person shall notify the Department and the State Historical Officer of any historical, cultural or archaeological resources that are discovered in the course of conducting an authorized activity.
- (4) Uses that are determined by the Department to be inconsistent with a designated special management area shall not be permitted or certified to be in compliance with the ACAMP.
- (5) All projects must comply with all applicable provisions of this Administrative Code.

Determination for NOS Activities: Consistent. A Draft Programmatic Environmental Impact Statement (PEIS) has been prepared for NOS Surveying and Mapping Projects in U.S. Waters for

Coastal and Marine Data Acquisition under the National Environmental Policy Act (NEPA). The Draft PEIS includes the analysis of potential impacts to habitats; marine mammals; sea turtles; fish; aquatic macroinvertebrates; essential fish habitat; seabirds, shorebirds, coastal birds, and waterfowl; cultural and historic resources; socioeconomic resources; and environmental justice. Impacts are expected to be insignificant. NOS intends to coordinate with the Alabama State Historic Preservation Officer (SHPO) and Tribal Historic Preservation Officers (THPOs) regarding compliance with Section 106 of the National Historic Preservation Act (NHPA). NOS is engaging in interagency coordination and consultation on environmental compliance regulations including the Marine Mammal Protection Act (MMPA), Endangered Species Act (ESA), Magnuson-Stevens Fishery Conservation and Management Act (MSA), and National Marine Sanctuaries Act (NMSA). The Proposed Action would not affect public access to tidal or submerged lands.

4.2.2 335-8-2-.02. Dredging and/or Filling

- (1) Dredging and/or filling of State water bottoms or adjacent wetlands may be permitted or certified to be in compliance with the ACAMP provided that:
 - (a) the activity is related to an existing or approved water dependent use, or use of regional benefit or related to an approved beach nourishment, shoreline stabilization or marsh creation, restoration or enhancement project, elimination of dead-end canals or boatslips exhibiting poor water quality or other similar beneficial use;
 - (b) there will be no dredging or filling in close proximity to existing natural oyster reefs, as defined pursuant to Code of Alabama 1975, § 9-12-21, except in association with the approved creation or enhancement of oyster reefs or artificial fish attracting structures;
 - (c) there will be no dredging or filling in close proximity to existing submersed grassbeds;
 - (d) dredging, filling or trenching methods and techniques are such that reasonable assurance is provided that applicable water quality standards will be met; and
 - (e) no alternative project site or design is feasible and the adverse impacts to coastal resources have been reduced to the greatest extent practicable.
- (2) Dredging, filling, or trenching resulting in a temporary disturbance may be permitted or certified to be in compliance with the ACAMP provided that all areas are returned to preproject elevations and all wetland areas are revegetated and the requirements set forth in § 335-8-2 -.02(l)(b) thru (d) are met.
- (3) Dredging or filling of non-adjacent wetlands may be permitted or certified to be in compliance with the ACAMP provided that:
 - (a) no alternative project sites or designs which avoid the dredging or filling are feasible and the adverse impacts have been reduced to the greatest extent possible; and
 - (b) the Department determines, on a site specific basis, that the non-adjacent wetlands to be dredged or filled have a limited functional value.
- (4) For projects impacting wetlands, the applicant mitigates for wetland impacts in accordance with the provisions of 335-8-2-.03, unless the Department determines that, due to the scope and nature of the project, mitigation is unnecessary or the project is subject to the provisions of 335-8-1-.03(4).
- (5) Any fill material placed on State water bottoms or in wetlands shall be free of toxic pollutants in toxic amounts and shall be devoid of sludge and/or solid waste.

- (6) Dredge material shall not be placed in wetlands unless specifically permitted or authorized by the Department.
- (7) The disposal of dredge material into open state waters may be permitted or certified to be in compliance with the ACAMP, provided that it complies with the relevant provisions of this Administrative Code.
- (8) The salinity of return waters from dredge disposal sites shall be similar to that of the receiving waters and reasonable assurance provided that applicable water quality standards will be met.

Determination for NOS Activities: Consistent. The Proposed Action does not include dredging. Collection of bottom grab samples typically involves removing less than one cubic foot of sediment and may include the underwater release of this sediment from the sampler. Mitigation measures would be implemented, which include avoiding the sampling of sensitive bottom substrates and ensuring all instruments in contact with the sea floor are properly secured to minimize bottom disturbance.

4.2.3 335-8-2-.03. Mitigation

- (1) Mitigation for wetland impacts resulting from an approved project shall involve the creation of wetlands or the restoration and enhancement of existing degraded wetlands.
- (2) Prior to permitting or certification of a use for which mitigation is required, the applicant shall submit to the Department for review and approval a mitigation plan which shall include but not be limited to the following:
 - (a) a survey of the proposed mitigation site which shall include a delineation of existing vegetative cover, the location of all drainageways and water courses, and property location, size and description;
 - (b) an indication of site preparation techniques which shall include initial and final elevations, planting and fertilization schedules, plant spacing, and source and vegetative species to be planted;
 - (c) documentation that, by instrument of law, the mitigation site will be set aside and protected; and
 - (d) a monitoring, maintenance and reporting schedule which covers the first five years of mitigation.

Determination for NOS Activities: Not relevant. NOS would not need to provide compensatory mitigation for wetland impacts because wetlands would not be affected to the extent of losing ecosystem functions. The Draft PEIS concludes that the Proposed Action is not anticipated to result in significant impacts for any resource. As such, NOS has not proposed a discrete set of additional mitigation measures.

4.2.4 335-8-2-.04. Marinas

- (1) Applicants desiring to construct and operate a new or expand an existing marina within the coastal area must provide:
 - (a) a comprehensive site plan showing location, size, and number of all upland and water-dependent facilities including boatslips, parking, storage facilities, maintenance and repair facilities, and pile-supported structures;

- (b) an "Operation and Maintenance Plan" describing the manner in which the facility will be operated, to include the use of best management practices and a demonstration that:
 - 1. applicable water quality standards will be maintained;
 - 2. applicable measures relating to proper disposal of solid waste, litter, fish carcasses and offal, and other refuse are provided; and
 - 3. adequate sewage pump out and disposal facilities will be provided for vessels and adequate restrooms for patrons will be provided;
 - (c) if applicable, a spill prevention control and countermeasure plan meeting the requirement of 40 CFR Part 112;
 - (d) if applicable, an application for a stormwater permit, or if such permit has already been obtained, a copy of the same; and
 - (e) a submerged lands lease or waiver from the Alabama Department of Conservation and Natural Resource.
- (2) Marinas shall not be located within, or in close proximity to, submersed grassbeds or existing public oyster reefs.
 - (3) Open water marinas constructed in the coastal area shall not have breakwaters, groins, or jetties which significantly interfere with the normal ebb and flow of coastal waters.
 - (4) Proposals involving excavated marinas shall include appropriate analyses and demonstrations that the facility will not result in contravention of water quality standards in the adjoining waters.
 - (5) Entrance channels and boat basins shall be constructed to a depth no greater than that of the receiving water.

Determination for NOS Activities: Not relevant. The Proposed Action does not include the construction, operation, or expansion of marinas.

4.2.5 335-8-2-.05. Piers, Docks, Boathouses, and Other Pile Supported Structures

- (1) Piers, docks, boathouses, and other pile supported structures shall be constructed on pilings that permit a reasonable unobstructed ebb and flow of the tide.
- (2) Platforms, decks, "T's", "L's", boathouses, and other similar minor structures associated with residential piers and docks should be located at the waterward end of the pier or dock and shall not be constructed over wetlands or submersed grassbeds nor shall they be habitable.
- (3) Piers and docks shall be of sufficient length to reach navigational depths adequate for the proposed use of the pier or dock, to the extent that a hazard to navigation will not be created as determined by the U.S. Coast Guard.
- (4) Piers, docks, boathouses, and other pile supported structures shall be designed and constructed such that impacts to wetlands and submersed grassbeds are minimized.

Determination for NOS Activities: Not relevant. The Proposed Action does not include the construction of piers, docks, boathouses, or other similar structures.

4.2.6 335-8-2-.06. Shoreline Stabilization and Erosion Mitigation

- (1) Bulkheads, the placement of rip-rap, and other structural shoreline armament shall not be permitted or certified to be in compliance with the ACAMP unless it is demonstrated to the satisfaction of the Department that:

- (a) no fill material will be placed in wetlands or submersed grassbeds unless specifically authorized pursuant to 335-8-2-.02;
 - (b) the structure will be placed at or above mean high tide and landward of any wetlands;
 - (c) the structure will be designed so as to allow the normal hydrologic regime to be maintained in wetland areas; and
 - (d) there are no feasible non-structural alternatives available including, but not limited to, preservation and restoration of dunes, beaches, wetlands, submersed grassbeds, and shoreline restoration and nourishment and retreat or abandonment.
- (2) Jetties, groins, breakwaters and like structures may be permitted or certified to be in compliance with the ACAMP provided it is demonstrated to the satisfaction of the Department that:
- (a) they are necessary to protect an existing navigational channel or a use of regional benefit;
 - (b) there are no other feasible non-structural alternatives; and
 - (c) there are no significant impacts to adjacent shorelines.

Determination for NOS Activities: Not relevant. The Proposed Action does not include the construction of shoreline stabilization or erosion mitigation structures.

4.2.7 335-8-2-.07. Canals, Ditches, and Boatslips

- (1) Canals constructed for the purposes of providing navigable access to an existing or approved water dependent facility or Use of Regional Benefit may be permitted or certified to be in compliance with the ACAMP.
- (2) Construction of new canals or expansions of existing canals through wetlands or uplands with the purpose or effect of creating new waterfront property, shall not be permitted or certified to be in compliance with the ACAMP.
- (3) Stormwater drainage ditches may be permitted or certified to be in compliance with the ACAMP provided that the applicant demonstrates to the satisfaction of the Department that they are hydrologically designed and constructed such that a positive stormwater flow results, standing water is minimized.
- (4) Excavated boatslips may be permitted or certified to be in compliance with the ACAMP only in areas where it is demonstrated that the construction of a pier and dock will obstruct navigation.

Determination for NOS Activities: Not relevant. The Proposed Action does not involve the construction of canals, ditches, or boatslips.

4.2.8 335-8-2-.08. Construction and Other Activities On Gulf Front Beaches and Dunes

- (1) No person shall remove primary dune or beach sands and/or vegetation or otherwise alter the primary dune system, construct any new structure, or make any substantial improvement to any existing structure, on, beneath or above the surface of any land located between mean high tide and the construction control line.
- (2) No person shall construct any new structure on, beneath or above the surface of any state owned lands located in the following areas:
 - (a) between mean high tide and a line originating at plane coordinate (x = 339,562.58 feet; y = 83,758.99 feet) and extending South 77° 59' 16" West in Baldwin County;

- (b) between mean high tide and Alabama Highway 180 between plane abscissas ($x = 339,562.58$ feet) and ($x = 343,833.777$ feet);
 - (c) in Sections 2 and 3 of Township 4 South, Range 33 West (Tallahassee Meridian) in Baldwin County. No person shall construct any new structure on, beneath or above any lands located between the westernmost end of Dauphin Island and a north-south plane represented by the abscissa ($x = 281,573.2$ feet) in Mobile County.
- (3)
- (a) No person shall construct any new structure or make any substantial improvement to an existing structure, on, beneath or above the surface of any parcel of land owned by a person if any portion of such parcel is intersected by the construction control line without first having obtained a permit therefor from the Department except as may be provided for by 335-8-1-.05.
 - (b) A permit for construction of a new structure may be issued if the Department is satisfied that the proposed structure is not on, beneath or above the surface of any lands located between mean high tide and the construction control line.
 - (c) An application for a permit to construct a single-family dwelling or duplex pursuant to this rule shall contain:
 - 1. a legal description of the property on which the structure is proposed, as well as the street address;
 - 2. an area map showing the location of the property and proposed structure in relation to roads and other recognized landmarks;
 - 3. a survey of the property and site plan prepared by a duly licensed land surveyor of the State of Alabama showing the location of the construction control line, as determined from the state plane coordinates, the distance from the nearest construction control line monument to the lot, and the location and dimensions of all proposed structures;
 - 4. a certified copy of the deed, lease or other instrument under which the applicant claims title, possession or permission from the owner of the property to carry out the project;
 - 5. an identification of the water supply source and wastewater disposal system;
 - 6. such other information as the Department may reasonably require to assure compliance with the Department's rules and regulations.
 - (d) An application for a permit to construct a motel, hotel, condominium, or planned multi-unit development shall contain:
 - 1. all information required by 335-8-2-.08(3)(c);
 - 2. an "Environmental Impact and Natural Hazards Study" which will include, at a minimum, the following:
 - (i) wave height study addressing the flood hazard and erosion potential at the project site using eroded beach profiles for pre and post developed conditions;
 - (ii) location and delineation of velocity zone; and
 - (iii) analysis of the project's potential to significantly increase the likelihood that damage will occur from floods, hurricanes, or storms.

3. a "Beach and Dune Enhancement Plan" which includes, at a minimum, the following:
 - (i) fence placed along the CCL prior to and during construction activities to prevent material and equipment seaward of the line;
 - (ii) dune walkovers designed to accommodate the anticipated pedestrian traffic from the completed project;
 - (iii) the placement of sand fences;
 - (iv) planting of suitable natural vegetation in areas devoid of vegetation; and
 - (v) a maintenance program for the sand fences and plantings.
- (4) Bulkheads, retaining walls, or similar structures shall not be permissible on Gulf beaches or primary dunes unless it can be demonstrated that:
 - (a) the bulkhead or retaining wall is landward of the CCL and it is necessary to protect and ensure the structural integrity of an existing or previously permitted structure; and
 - (b) there are no other feasible non-structural alternatives, including retreat.
- (5) No person shall operate a motorized vehicle on the beach or primary dune system, except as may be provided by the provisions of this Administrative Code.
- (6) Beach cleaning equipment and safety and law enforcement vehicles operating on flat beach sand may be permissible, provided it is demonstrated to the satisfaction of the Department that:
 - (a) the equipment will not be operated within the primary dune system;
 - (b) a route of ingress and egress has been designated and approved by the Department or its Contractor;
 - (c) beach and dune vegetation will not be impacted or destroyed; and
 - (d) the equipment will be operated only in areas specified by the Department or its contractor.
- (7) Septic tanks and other on-site sewage disposal systems shall not be permitted on a lot intersected by the construction control line, unless no wastewater disposal system is available for the site and the system has been approved by the Department of Public Health.
- (8) The Department has determined that the following activities conducted seaward of the construction control line are not subject to the ACAMP: the placement of items associated with daily recreational use that are of a temporary and removable nature, including but not limited to, chairs, umbrellas, volleyball and similar equipment, provided the posts are not permanently installed in the ground, and provided these items are removed from the beach prior to major storm events.

Determination for NOS Activities: Consistent. The Proposed Action does not include land development, septic tanks, or bulkheads, retaining walls, or similar structures. The only terrestrial activities included in the Proposed Action are the installation, maintenance, and removal of tide gauges and GPS reference stations. The majority of onshore installations would only occupy very small areas of terrestrial habitat and any affected habitat components are expected to recover post-installation. Federal agency activities must be consistent to the maximum extent practicable with the standards that underlie a state or territory permit. However, federal agencies do not have to apply for or obtain a state or territory permit (2020 OCM Federal Consistency Overview and 65 FR at 77140 (2000)). NOAA regulations at 15 CFR 930.39(e) further clarify that neither the CZMA nor OCM's approval of state enforceable policies authorize the application of state or territory permit requirements to federal agencies unless required by a Federal law.

4.2.9 335-8-2-.09. Groundwater Extraction

- (1) Installation of a new well, or alteration of an existing well, for the purposes of extracting groundwater at a rate of 50 gallons per minute or greater requires a permit from the Department. This provision is applicable to a well whose surface location is in the coastal area and one whose surface location is not in the coastal area but whose 50 year capture zone extends into the coastal area.
 - (a) An application for a permit to construct and operate a well which is subject to these provisions shall include:
 1. a detailed plan for drilling, sampling, and testing the well;
 2. results of analyses which provide the predicted 50 year capture zone of the proposed well at maximum designed pumping capacity;
 3. the identification of existing wells, which are capable of pumping 50 gallons per minute or more, and their respective 50 year capture zones, which are located within one mile of the proposed well's 50 year capture zone; and
 4. reasonable assurance by the applicant that the proposed activity will not impact groundwater.
 - (b) The applicant may proceed to install and test the well unless the Department objects in writing within 30 days after receipt of a complete application; however, the lack of an objection by the Department should not be construed as obligating the Department to issue a permit to operate.
- (2) Wells shall be drilled and sampled using specialized techniques designed to determine if saltwater zones overlie the target production zone, and shall be logged by a qualified geologist in sufficient detail to establish permeable and impermeable zones and their associated quality.
 - (a) After the well is constructed, it shall be pump tested to establish aquifer characteristics of transmissivity and storage coefficient using an observation well which is located an appropriate distance from the pumping well and screened in the production zone of the pumping well.
 1. The distance from the observation well to the production well shall be equal to or greater than the value derived by the following equation:
$$1.5m (PH/PV)^{0.5}$$

Where M = aquifer thickness in feet

PH = aquifer horizontal conductivity in gallons per day per sq. ft.

PV = aquifer vertical conductivity in gallons per day per sq. ft.
 2. The pump test shall be of sufficient duration to establish aquifer characteristics and groundwater quality. The duration shall be sufficient for the water level to stabilize at design capacity of the well, but in no case shall the duration be less than 12 hours. An evaluation of the pump test data and water quality analysis shall be submitted to the Department for review.
- (3) Water samples taken for analysis shall be obtained in accordance with the ADEM Field Operations Standard Operating Procedures or other methods approved by the Department. Parameter coverage shall be specified by the Department.

- (4) If the Department determines that saltwater intrusion should be evaluated, a monitoring well may be required to be placed at the 50 year capture zone perimeter in the direction of the most likely source of vertical or horizontal saltwater intrusion into the production aquifer.
- (5) Based upon all available information, if it is demonstrated to the satisfaction of the Department that the normal operation of the well will not adversely impact the existing quality of groundwater, a permit to operate the well may be issued.
- (6) The Department may deny a permit if the operation of a new or altered well would adversely impact existing drinking water wells.

Determination for NOS Activities: Not relevant. The Proposed Action does not include groundwater extraction.

4.2.10 335-8-2-.10. Siting, Construction and Operation of Energy Facilities

- (1) All new energy facilities located wholly or partially within the coastal area and which require a federal license or permit or a state agency permit must also receive coastal consistency from the Department prior to any land clearing or construction. In addition to the information provided to the federal and state permitting agencies, the following supplemental information shall be provided to the Department:
 - (a) a survey of the property, encompassing the entire project, prepared by a duly licensed land surveyor of the State of Alabama which shows all property boundaries, existing topographic features, all existing water courses, any and all areas which have been delineated as wetlands, and the proposed location(s) of all improvements and facilities;
 - (b) identification of all environmental permits which may be required for construction; discharges to water; air emissions; hazardous waste generation; transportation; storage and disposal; solid waste disposal; groundwater extraction; etc; and
 - (c) an indication of the potential impacts to the following coastal resources, as applicable:
 - Water Quality Groundwater Resources
 - Air Quality Wildlife Habitat
 - Wetlands and Cultural Resources
 - Submersed GrassBeds
 - Beaches and Dunes
- (2) The siting, construction and operation of energy facilities shall be conducted in a manner which minimizes significant impacts to coastal resources.
- (3) Discharge of untreated produced waters resulting from energy exploration or production activities to the coastal waters of Alabama shall not be permissible.
- (4) Discharge of untreated drill muds and/or cuttings to coastal waters shall be permissible only in the Gulf of Mexico, and provided that:
 - (a) the discharge complies fully with the requirements of ADEM Admin. Code R. 335-8-2-.12 even though the discharge may not be continuous;
 - (b) discharges shall not occur within two nautical miles of the shores of gulf beaches; and

- (c) discharges shall not occur within 3000 meters of another active permitted mud or cuttings discharge.
- (5) Routing of pipelines, cables, and other such energy facility related appurtenances which are buried under or placed upon state waterbottoms shall comply with the provisions of 335-8-2-.02.
- (6) To the maximum extent possible, pipelines, cables and other such energy facility related appurtenances which are buried under or placed upon state waterbottoms shall be routed through existing pipeline corridors to make landfall.

Determination for NOS Activities: Not relevant. The Proposed Action does not involve the siting, construction, or operation of energy facilities.

4.2.11 335-8-2-.11. Commercial And Residential Development

- (1) All new commercial and residential developments located wholly or partially within the coastal area which are or will be greater than five (5) acres in size and have areas which are or could be delineated as wetlands or are adjacent to coastal waters or are intercepted by the coastal control line shall apply for a permit pursuant to § 335-8-1-.11 unless the project requires a federal license or permit pursuant to § 335-8-1-.09. In either case, applications shall contain:
 - (a) a survey of the property, encompassing the entire project, prepared by a duly licensed land surveyor of the State of Alabama which shows all property boundaries, existing topographic features, all existing water courses, any and all areas which have been delineated as wetlands, the proposed location of all paved and unpaved roads and other improvements, and proposed platting of individual sub-parcels and lots;
 - (b) identification of the source or supplier of potable water to the development;
 - (c) type of wastewater collection and treatment system(s);
 - (d) an application for a stormwater permit, or if such permit has already been obtained, a copy of the same; and
 - (e) such other information as may be required by the Department.
- (2) Developments resulting in the platting or subdividing of lots or subparcels on which construction or other reasonable use would not be consistent with the ACAMP shall not be permitted or certified to be in compliance with the ACAMP.

Determination for NOS Activities: Not relevant. The Proposed Action does not include commercial or residential developments.

4.2.12 335-8-2-.12. Discharges To Coastal Waters

- (1) Permit applicants for new continuous or frequent discharges to coastal waters which are greater than 1 million gallons per day, or otherwise classified as a major discharge by the Department or EPA Regional Administrator, shall:
 - (a) characterize the sediments and benthic macroinvertebrate community present along the circumferences of two concentric circles, one with a radius of 400 feet and the other with a radius of 800 feet, both having their origin at the proposed discharge point;
 - (b) such characterization shall be completed prior to the initiation of a discharge and shall be repeated if the discharger fails accelerated toxicity testing and is required to initiate a Toxicity Reduction Evaluation (TRE) pursuant to the applicable NPDES permit.

1. Upon notification by the Department the discharger shall repeat the characterization of the sediments and benthic community employing the same sampling locations used in the initial characterization.
 2. The Department shall be provided an analysis of the toxicity test and characterization results, to include plans for any necessary corrective action.
- (2) Existing permitted NPDES dischargers to coastal waters with a continuous or frequent discharge of greater than 1 million gallons per day, or otherwise classified as a major discharge by the Department, shall, upon request for a permit renewal perform a sediment and benthic community characterization as described in paragraph (a) above prior to applying for permit renewal. If a sediment and benthic characterization has been performed in the past then the renewal characterization shall use the same sampling locations as the original characterization and be conducted during the same season. An analysis of the results shall be provided to the Department with the application for renewal. Such characterization shall be repeated if the discharger fails accelerated toxicity testing and is required to initiate a Toxicity Reduction Evaluation (TRE) pursuant to the applicable NPDES permit.
- (3) If the Department determines that the discharge is resulting in significant adverse impact to the benthic community or sediment quality in an area beyond the boundaries of the original characterization or 400 feet if an original characterization was not performed, the discharger shall be required to submit plans to identify corrective actions which will be taken.
- (4) The Department may suspend or otherwise modify the monitoring requirements of this rule if:
- (a) the Department determines, through review of discharger information and/or its own monitoring efforts, that the discharge is having no significant impact to coastal resources beyond 400 feet of the discharge point; or
 - (b) the Department determines, through review of discharger information and/or its own monitoring efforts, that the discharge monitoring is inadequate to detect significant impacts to coastal resources beyond 400 feet of the discharge point; or
 - (c) the Department determines, based on available biological and chemical data that, due to the nature of the discharge, no significant impacts to coastal resources will occur beyond 400 feet of the discharge point; or
 - (d) deemed necessary by the Department to ensure the protection of coastal resources.

Determination for NOS Activities: Consistent. The Proposed Action would not discharge over one million gallons per day or otherwise include major discharges. NOS vessels would discharge treated sanitary domestic wastes from United States Coast Guard-approved Marine Sanitation Devices (MSDs), but could potentially accidentally spill oil, fuel, or chemicals into the water. The potential impacts to water quality from wastewater discharges and accidental spills would be minimized through compliance with International Convention for the Prevention of Pollution by Ships (MARPOL) Annexes I and IV. NOS adheres to NOAA's environmental procedures which comply with the MARPOL annexes and relevant water quality implementing legislation, regulations, and guidance listed in Section 3.14.1 of the Draft PEIS. In addition, NOS projects are dispersed throughout the action area, which would minimize any impact from wastewater discharges or spills from a single vessel. NOS vessels also represent only a negligible portion of total oceanic vessel traffic, and any resulting impacts produced would be indistinguishable from those produced by all other vessels within the action area. Potential impacts on water quality are expected to be imperceptible or undetectable.

4.3 DETERMINATION

Based on the information, data, and analysis contained herein and in the Draft PEIS, NOS has determined that the Proposed Action is consistent with the enforceable policies of the Alabama Coastal Management Program.

Pursuant to 15 CFR § 930.41(a), Alabama has 60 days from the receipt of this letter to concur with or object to this CD, or to request an extension under 15 CFR § 930.41(b). Alabama's concurrence will be presumed if Alabama's response is not received by NOS on the 60th day after receipt of this determination.

Thank you for assisting the National Ocean Service with this important program. Please submit your questions, comments, or other responses by email to the NOS Environmental Compliance Coordinator, Giannina DiMaio at nosaa.ec@noaa.gov or by phone at (240) 339-5565.

REFERENCES

(ADEM, No date). Alabama Department of Environmental Management. No date. Coastal Programs. Accessed October 25, 2021 at <http://adem.alabama.gov/programs/coastal/default.cnt>.

(OCM, No Date). Office for Coastal Management. No Date. Coastal Zone Management Programs. Accessed October 25, 2021 at: <https://coast.noaa.gov/czm/mystate/>.

APPENDIX A: MITIGATION MEASURES CURRENTLY PROPOSED BY NOS

Mitigation Measures for the Protection of NMFS Species During NOS Mapping and Surveying Activities

General Note: These requirements do not apply when (1) compliance would create an imminent threat to a person or vessel, or (2) to the extent that a vessel cannot comply because it is restricted in its ability to maneuver.

Triggering Event	Crew Response
General	
Vessel and equipment maintenance	All NOS projects would implement mandatory invasive species prevention procedures including, but not limited to, vessel and equipment washdown (including diving equipment), cleaning, and de-ballasting (exchange of ballast water in open ocean waters for those vessels used by NOS that have ballast tanks).
At all times while in transit or on-project	Do not attempt to feed, touch, ride, or otherwise intentionally interact with any marine protected species.
At all times while in transit or on-project	Vessel crew must maintain at least one Protected Species Observer at all times. This individual may perform other duties simultaneously. PSOs should use all means necessary to enhance visibility (e.g., spotlights, night vision, Forward Looking Infrared), and will be trained according to NOS Standard Operating Procedures.
Project Planning / Coordination	
Project planning and coordination	NOS would internally coordinate the location and timing of a given project, wherever possible, to ensure that areas are not repeatedly surveyed, except as needed to achieve research or monitoring goals.
	NOS would not perform surveys on or near ongoing Navy exercises.
General Area Restrictions for Vessel and Vehicle Movement	
Entry into North Atlantic right whale critical habitat	Report into the Mandatory Ship Reporting System.
Before proceeding with operations onboard a vessel 65 feet or longer in any right whale seasonal management areas, when those areas are active. See maps and coordinates on https://www.fisheries.noaa.gov/national/angered-species-conservation/reducing-vessel-strikes-north-atlantic-right-whales#:~:text=PDF%2C%201197%20pages)-	<p>Maintain a vessel speed of 10 knots or less.</p> <p>Check with various communication media for general information regarding avoiding ship strikes and specific information regarding North Atlantic right whale sighting locations. These include NOAA weather radio, U.S. Coast Guard NAVTEX broadcasts, the WhaleAlert app (www.whalealert.org), and Notices to Mariners. Commercial mariners calling on United States ports should view the most recent version of the NOAA/USCG produced training CD entitled “A Prudent Mariner’s Guide to Right Whale Protection” (contact the NMFS Southeast Region, Protected Resources Division for more information regarding the CD). For North Pacific right whales, contact the Alaska stranding hotline by sat phone, 877-925-7773.</p>

Mitigation Measures for the Protection of NMFS Species During NOS Mapping and Surveying Activities

General Note: These requirements do not apply when (1) compliance would create an imminent threat to a person or vessel, or (2) to the extent that a vessel cannot comply because it is restricted in its ability to maneuver.

Triggering Event	Crew Response
Vessel%20Speed%20Restrictions,endangered%20North%20Atlantic%20right%20whales.	
Transit areas cross North Pacific right whale critical habitat	Avoid transit through North Pacific right whale critical habitat. For unavoidable transits, vessels must maintain a speed of 10 knots or less.
Entry into Rice's whale areas (Core Distribution Area and the 100 - 400m isobath in the Gulf of Mexico).	a. minimize all transits b. do not exceed 10 knots c. do not enter at night. If vessels are present in the CDA/isobath at night, the vessel must be anchored, moored, or otherwise immobile.
Use of HRG sources in all areas north of the Forelands in Cook Inlet, Alaska. HRG surveys are defined as surveys using an electromechanical source that operates at frequencies less than 180 kHz, other than those defined at § 217.184(c)(1) (i.e., side-scan sonar, multibeam echosounder, or CHIRP sub-bottom profiler) per the 2020 BOEM BiOp on the Federally Regulated Oil and Gas Program Activities in the Gulf of Mexico.	The Forelands in Cook Inlet are described as 60°43'10.9"N 151°24'35.8"W (east side of the Inlet, Nikiski, AK) and West Foreland (60°42'48.1"N 151°42'38.3"W). For dedicated mapping and surveying work north of this area (i.e., a specific project involving the use of echo sounders), contact the Alaska Region (akr.prd.section7@noaa.gov) for instructions on how to proceed.
Entry into sensitive Steller sea lion areas	Maintain a vessel separation distance three nautical miles from Steller sea lion critical habitat, rookeries listed in (per 50 CFR 223.202), and other haulouts/rookeries as observed during operations. In areas of mandated charting, contact akr.prd.section7@noaa.gov on how to proceed.

Mitigation Measures for the Protection of NMFS Species During NOS Mapping and Surveying Activities

General Note: These requirements do not apply when (1) compliance would create an imminent threat to a person or vessel, or (2) to the extent that a vessel cannot comply because it is restricted in its ability to maneuver.

Triggering Event	Crew Response
<p>Entry into sturgeon and sawfish critical habitat (see https://www.fisheries.noaa.gov/resource/map/atlantic-sturgeon-critical-habitat-map-and-gis-data, https://www.fisheries.noaa.gov/resource/map/smalltooth-sawfish-critical-habitat-map-and-gis-data, and https://data.noaa.gov/dataset/dataset/green-sturgeon-critical-habitat-gis-data1)</p>	<p>All vessels in coastal waters will operate in a manner to minimize propeller wash and seafloor disturbance, and transiting vessels should follow deep-water routes (e.g., marked channels), as practicable, to reduce disturbance to sturgeon and sawfish critical habitat.</p>
Vessel Movement Restrictions	
<p>An ESA-listed whale is identified within 500 yards of the forward path of the vessel.</p>	<p>All vessels must steer a course that increases the distance from the whale at a speed of 10 knots (18.5 km/hr) or less until the 500 yard minimum separation distance has been established.</p>
<p>An ESA-listed whale is sighted within 100 yards of the forward path of a vessel.</p>	<p>The vessel operator must reduce speed and shift the engine to neutral. Engines must not be engaged until the whale has moved outside of the vessel's path and beyond 500 yards. If stationary, the vessel must not engage engines until the large whale has moved beyond 500 yards. A single cetacean at the surface may indicate the presence of submerged animals in the vicinity of the vessel; therefore, precautionary measures should always be exercised.</p>
<p>One or more cetaceans (whales, dolphins, or porpoises) are sighted while a vessel is underway.</p>	<p>Attempt to remain parallel to the animal's course if feasible. Avoid excessive speed or abrupt changes in direction until the cetacean has left the area.</p>
<p>One or more sea turtles are sighted while the vessel is underway.</p>	<p>Attempt to maintain a distance of 50 yards (45 meters) or greater whenever possible.</p>
<p>Nighttime vessel operation</p>	<p>Vessel operators on project vessels operating at night would use the appropriate lighting to comply with navigation rules and best safety practices. All project areas would be continually monitored for protected species by posted crewmembers during vessel operations.</p>
Reporting Requirements	

Mitigation Measures for the Protection of NMFS Species During NOS Mapping and Surveying Activities

General Note: These requirements do not apply when (1) compliance would create an imminent threat to a person or vessel, or (2) to the extent that a vessel cannot comply because it is restricted in its ability to maneuver.

Triggering Event	Crew Response
Sighting of any injured, dead, or entangled right whales	Report sighting immediately to the U.S. Coast Guard via VHF Channel 16.
Sighting of any injured, dead, or entangled ESA-listed species	Immediately report to NMFS at: https://www.fisheries.noaa.gov/report
Sightings of critically endangered cetaceans including North Atlantic right whale, North Pacific right whale, Southern Resident killer whale, Main Hawaiian Island insular false killer whale, and Rice’s whale	Report sighting within two hours of occurrence when practicable and no later than 24 hours after occurrence (to https://www.fisheries.noaa.gov/report) . Right whale sightings in any location may also be reported to the U.S. Coast Guard via VHF channel 16 and through the WhaleAlert App (http://www.whalealert.org/) .
Discharge Restrictions	
Sighting of any protected marine species within 100 yards of the vessel	Do not discharge
Operating or maintaining a vessel	Follow the International Convention for the Prevention of Pollution from Ships (MARPOL) discharge protocols
	Meet all Environmental Protection Agency (EPA) Vessel General Permits and Coast Guard requirements.
	Use anti-fouling coatings.
	Clean hull regularly to remove aquatic nuisance species.
	Avoid cleaning of hull in critical habitat.
Avoid cleaners with nonylphenols.	
Restrictions on Instrument / Autonomous System Deployment	
Sighting of any protected marine species within 100 yards of the work area	Suspend deployment of all instruments, divers, and autonomous systems. Work already in progress may continue if that activity is not expected to adversely affect the animal(s).
AUV operation	Equipment such as AUVs would be programmed and operated to avoid sea floor disturbance.
Bottom sampling for sediment verification	NOS would not collect bottom samples for sediment verification on coral reefs, shipwrecks, obstructions, or hard bottom areas.
Instrument Deployment	NOS would ensure that all instruments placed in contact with the seafloor are properly secured to minimize bottom disturbance. NOS would use retrievable instruments, when possible, to avoid abandoning deployed equipment on the seafloor.

Mitigation Measures for the Protection of NMFS Species During NOS Mapping and Surveying Activities

General Note: These requirements do not apply when (1) compliance would create an imminent threat to a person or vessel, or (2) to the extent that a vessel cannot comply because it is restricted in its ability to maneuver.

Triggering Event	Crew Response
Anchoring	Do not anchor in coral critical habitat or other known areas of coral.
	Avoid anchoring in abalone habitat as defined at https://www.fisheries.noaa.gov/resources/maps?title=&term_node_tid_depth%5B1000000069%5D=1000000069&field_species_vocab_target_id=black+abalone&sort_by=created
	Avoid anchoring in seagrass.
	Vessel operators would not drag anchor chains.
	Vessel operators would select the anchor location based on depth, protection from seas and wind, and bottom type. Preferred bottom types are sticky mud or sand, as those characteristics allow the flukes of the anchor to dig into the bottom and hold the chain in place. When working in an un-surveyed area or in an area that has not been surveyed in many years, the ship would try to anchor in bays where data have already been collected, providing the ship with better information on where to drop the anchor.
Equipment/Autonomous Systems Deployment	Stiffer line materials should be used for towing and kept taut during operations to reduce the potential for entanglement in bottom features such as coral habitats and shipwrecks.
SCUBA/ Snorkeling Restrictions	
When using a boat or platform to conduct SCUBA or snorkeling operations	At least one person should maintain a visual watch for mobile protected species to ensure none are sighted within the working area. If a listed species moves into the area of work, cessation of operation of any moving equipment within 50 ft of animal should occur. Activities may resume once the species has departed the project area of its own volition.
Diving on or near coral	Divers/snorkelers/swimmers should not stand or rest on live corals/coral reefs. Bottom contact should only be in unconsolidated areas or non-living hardbottom.

Mitigation Measures for the Protection of NMFS Species During NOS Mapping and Surveying Activities

General Note: These requirements do not apply when (1) compliance would create an imminent threat to a person or vessel, or (2) to the extent that a vessel cannot comply because it is restricted in its ability to maneuver.

Triggering Event	Crew Response
At all times during SCUBA or snorkel operations	SCUBA divers/snorkelers involved in in-water activities should have proper training and be capable of responsible dive/snorkel practices (e.g., proper buoyancy) such that they minimize injury to organisms, avoid unnecessary habitat impacts, and avoid injury to sensitive archaeological materials. It is the responsibility of NOAA or grantees/contractors to ensure that divers/snorkelers are trained to a level commensurate with the type and conditions of the diving activity being undertaken. Divers shall use appropriate dive equipment and tools, expert boat anchoring (e.g., hand placement by divers/snorkelers or verified non-living bottom habitat before deployment), and have diver awareness. The organization must have the capacity (appropriate insurance, safety policies, etc.) to oversee all proposed diving/snorkeling activities. SCUBA divers will avoid inadvertent disturbance to the sea floor.
Restrictions on Buoy Deployment, Maintenance, and Retrieval	
At all times during buoy deployment, maintenance, or retrieval of a buoy	Ensure that any buoys attached to the sea floor use the best available mooring systems: all mooring lines and ancillary attachment lines must use one or more of the following measures to reduce entanglement risk: shortest practicable line length, rubber sleeves, weak-links, chains, cables or similar equipment types that prevent lines from looping, wrapping, or entrapping protected species. Buoys, lines (chains, cables, or coated rope systems), swivels, shackles, and anchor designs must prevent any potential entanglement of listed species while ensuring the safety and integrity of the structure or device. When possible, field crews should use retrievable equipment to avoid abandoning material on the seafloor.
	During all buoy deployment and retrieval operations, buoys should be lowered and raised slowly to minimize risk to listed species and benthic habitat. Additionally, PSOs or trained project personnel (if PSOs are not required) should monitor for listed species in the area prior to and during deployment and retrieval and work should be stopped if listed species are observed in the area to minimize entanglement risk.
	All buoys must be properly labeled with owner and contact information.

Mitigation Measures for the Protection of NMFS Species During NOS Mapping and Surveying Activities

General Note: These requirements do not apply when (1) compliance would create an imminent threat to a person or vessel, or (2) to the extent that a vessel cannot comply because it is restricted in its ability to maneuver.

Triggering Event	Crew Response
A live or dead marine protected species becomes entangled in buoy lines	Immediately contact the applicable NMFS stranding coordinator using the reporting contact details (see Reporting Requirements section) and provide any on-water assistance requested.

Mitigation Measures for the Protection of USFWS Species During NOS Mapping and Surveying Activities

General Note: These requirements do not apply when (1) compliance would create an imminent threat to a person or vessel, or (2) to the extent that a vessel cannot comply because it is restricted in its ability to maneuver.

Triggering Event	Crew Response
Vessel Operation	
Operating vessels in polar bear habitat	Ensure that vessels maintain a 1.6-km (1-mi) separation distance from polar bears observed on ice, land, or water.
	Be alert to potential presence of polar bears, visually monitor the area and adjacent waters. Be especially vigilant for swimming bears. If a swimming bear(s) is encountered, allow it to continue unhindered. Never approach, herd, chase, or attempt to lure swimming bear(s). Reduce speed when visibility is low and avoid sudden changes in travel direction.
	Navigate slowly, steer around polar bears, and do not approach, circle, pursue or otherwise force bears to change direction when observed in the water.
	Avoid multiple changes in direction and speed and do not restrict bears' movements on land or sea.
	Do not conduct activities within 1 mile (1.6 km) of known or suspected polar bear dens.
Operating vessels in Pacific walrus habitat	Maintain an appropriate minimum distance from walrus haulouts on ice or land: Marine vessels less than 50 feet (15 m) in length – 0.5 nm (1 km); Marine vessels 50 feet or more but less than 100 feet (30 m) in length – 1 nm (1.8 km); and Marine vessels 100 feet (30 m) or more in length – 3 nm (5.5 km).
	Reduce noise levels near haulouts. Avoid abrupt maneuvers, sudden changes in engine noise, using loud speakers, loud deck equipment or other operations that produce noise when in the vicinity of walrus haulouts. Note that sound carries a long way across the water and often reverberates off of cliffs and bluffs adjacent to coastal walrus haulouts, amplifying noise. Do not operate the vessel in such a way as to separate members of a group of walrus haulouts from other members of the group.
	Reduce speed and maintain a minimum distance of 0.5 miles (0.8 km) from groups of walrus haulouts in the water.
	If walrus haulouts approach the vessel or are found to be in close proximity, place boat engines in neutral and allow the animals to pass. If vessel safety considerations prevent this, carefully steer around animals.

Mitigation Measures for the Protection of USFWS Species During NOS Mapping and Surveying Activities

General Note: These requirements do not apply when (1) compliance would create an imminent threat to a person or vessel, or (2) to the extent that a vessel cannot comply because it is restricted in its ability to maneuver.

Triggering Event	Crew Response
	When weather conditions require, such as when visibility drops, adjust speed accordingly to avoid the likelihood of injury to walrus.
Operating vessels in northern sea otter habitat	Do not operate vessels in such a way as to separate sea otters from other members of their group.
	If northern sea otters are observed in groups of fewer than 10 animals, do not approach within 100 m. If the group size is greater than 10, do not approach within 500 m.
Operating vessels in manatee habitat (U.S. Gulf coast and Atlantic Coast as far north as the Chesapeake Bay).	All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The permittee shall advise all personnel that there are civil and criminal penalties for harming, harassing, or killing manatees.
	All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
	All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.
	Any collision with or injury to a manatee shall be reported immediately to the Texas Marine Mammal Stranding Network (TMMSN) Hotline at 1-888-9-MAMMAL. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Houston (1-281-286-8282).
Aircraft/UAS Operation	
Flying aircraft above Alaska waters and shorelines	Maintain an altitude of at least 205m (1000 ft) when flying over northern sea otters.
	Maintain an altitude of at least 457 m (1500 ft) when flying within 805 m (0.5 mi) of polar bears.

Mitigation Measures for the Protection of USFWS Species During NOS Mapping and Surveying Activities

General Note: These requirements do not apply when (1) compliance would create an imminent threat to a person or vessel, or (2) to the extent that a vessel cannot comply because it is restricted in its ability to maneuver.

Triggering Event	Crew Response
Operating crewed aircraft in polar bear areas.	Unless taking off from or landing at an airport/airstrip, pilots should maintain a minimum of 1,500 feet (457 m) flight altitude and 0.5-mile (0.8 km) horizontal distance from polar bears in the water, and on ice or land. Avoid circling or turning aircraft near polar bears.
Operating aircraft near walrus haulout (Aircraft guidelines to reduce likelihood of walrus take)	Do not fly autonomous system devices or single engine fixed wing aircraft over or within 0.5 miles (0.8 km) of walrus hauled out on land or ice
	If weather or aircraft safety require flight operations within 0.5 miles (0.8 km) of a haulout site, maintain a 2,000 feet (610 m) minimum altitude.
	Do not fly helicopters over or within 1 mile (1.6 km) of walrus hauled out on land or ice.
	If weather or aircraft safety require crewed flight operations within 1 mile (1.6 km) of a haulout site, maintain a 3000 feet (915 m) minimum altitude.
	Landings, take-offs, and taxiing of autonomous system devices or single engine fixed wing aircraft should not occur within 0.5 miles (0.8 km) of hauled out walrus, or within 1 mile (1.6 km) for helicopters.
	Avoid circling or turning near walrus hauled out on land or ice.
Shore Party Activities	
Operating on land in polar bear areas.	Avoid polar bears on land, ice, and water. Conduct activities at the maximum distance possible from polar bears.
	Be prepared. Have a human-bear safety plan that includes information on how to avoid and respond to bear encounters. Carry deterrents, and practice/know how to use them.
	Avoid surprise encounters. Travel in groups, make noise, and be vigilant - especially on barrier islands, in river drainages, along bluff habitat or ice leads/polynyas, near whale or other marine mammal carcasses, or in the vicinity of fresh tracks.
	Minimize attractants. Avoid carrying strongly scented attractants such as meat or fish while away from camp, or place them in air-tight containers to minimize odor transmission.

Mitigation Measures for the Protection of USFWS Species During NOS Mapping and Surveying Activities

General Note: These requirements do not apply when (1) compliance would create an imminent threat to a person or vessel, or (2) to the extent that a vessel cannot comply because it is restricted in its ability to maneuver.

Triggering Event	Crew Response
	<p>Avoid disturbing denning bears. Between November and April, special care is needed to avoid disturbance of denning bears. If activities are to take place during that time period, USFWS should be contacted to determine if any additional mitigation is required. In general, activities are not permitted within one mile of known den sites.</p>
<p>If a polar bear is encountered</p>	<p>Prepare deterrent(s). Do not run from or approach polar bears. If the bear is unaware of you, allow it to continue what it was doing before you encountered it. Move to safe shelter (e.g., vehicle or building) if available, and wait until it is safe to proceed.</p> <p>Group up. If no safe shelter is available, group up with others and stand positioned to allow for safe deployment of deterrents (e.g., firearm, pistol launcher, bear pepper spray) – until the bear leaves.</p> <p>Observe bear behavior. Polar bears that stop what they are doing to turn their head or sniff the air in your direction have likely become aware of your presence. These animals may exhibit various behaviors: 1) Curious polar bears typically move slowly, stopping frequently to sniff the air, moving their heads around to catch a scent, or holding their heads high with ears forward. They may also stand up. 2) A threatened or agitated polar bear may huff, snap its jaws together, stare at you (or the object of threat) and lower its head to below shoulder level, pressing its ears back and swaying from side to side. 3) A predatory bear may sneak up on an object it considers prey. It may also approach in a straight line at constant speed without exhibiting curious or threatened behavior.</p>
<p>If a polar bear approaches</p>	<p>Defend your group. Any bear that approaches within range of your deterrents should be deterred. Stand your ground; do not run. Defend your group, increasing the intensity of your deterrence efforts as necessary. Be aware that lethal take of polar bears is permissible if such taking is imminently necessary in defense of human life. Defense of life kills must be reported to the USFWS within 48 hours.</p> <p>If a bear makes physical contact, fight back. If deterrence/lethal efforts have failed and a polar bear attacks (i.e., makes physical contact), do not “play dead”. Fight back using any deterrents available, aiming fists or objects at the bear’s nose and face.</p>

Mitigation Measures for the Protection of USFWS Species During NOS Mapping and Surveying Activities

General Note: These requirements do not apply when (1) compliance would create an imminent threat to a person or vessel, or (2) to the extent that a vessel cannot comply because it is restricted in its ability to maneuver.

Triggering Event	Crew Response
Construction Projects	
<p>Construction projects taking place along the shorelines in manatee habitat (U.S. Gulf coast and Atlantic Coast as far north as the Chesapeake Bay).</p>	<p>Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.</p>
	<p>All personnel associated with the project shall be instructed about the presence of manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees.</p>
	<p>All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.</p>
	<p>Any collision with or injury to a manatee shall be reported immediately to the Texas Marine Mammal Stranding Network (TMMSN) Hotline at 1-888-9-MAMMAL. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Houston (1-281-286-8282).</p>
	<p>Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads Caution: Boaters must be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities.</p>