



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
West Coast Region  
650 Capitol Mall Suite 5-100  
Sacramento, California 95814

August 3, 2022

**Refer to NMFS No: [WCRO-2022-01863]**

Genevieve Fisher  
Deputy Director  
NOAA Office of Ocean Exploration and Research  
Silver Spring, Maryland 20910

Re: Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat  
Response for Deep-Sea Exploration Activities Aboard NOAA Ship *Okeanos Explorer* in 2022-2024

Dear Ms. Fisher:

NOAA's National Marine Fisheries Service (NMFS) has reviewed the NOAA Office of Ocean Exploration and Research's (OER) letter dated July 1, 2022 requesting an abbreviated essential fish habitat (EFH) consultation for the field activities to be conducted aboard the NOAA Ship *Okeanos Explorer* in the West Coast and Alaska Regions in 2022-2024. Section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) and the Fish and Wildlife Coordination Act (FWCA) require federal agencies to consult with us on all actions that may adversely affect EFH and other aquatic resources. The EFH consultation process is guided by the requirements of our EFH regulations at 50 CFR 600 Subpart K, which mandates the preparation of EFH assessments and generally outlines each agency's obligations in this consultation process. In support of this consultation process, you provided a notice of the proposed action and your agency's conclusion regarding impacts on EFH. Your request references previously completed EFH consultations between NOAA Fisheries Greater Atlantic and Southeast Regions and OER and NOAA's National Centers of Coastal Ocean Science (NCCOS) for similar research activities conducted in U.S. federal waters of the Gulf of Mexico, South Atlantic Bight and Caribbean in 2018-2020 and activities in the Greater Atlantic Region and Southeast Atlantic from 2019 to 2021. After reviewing the above information, NMFS provides this response pursuant to section 305(b)(4)(A) of the MSA and the FWCA.

#### Proposed Action

NOAA Ship *Okeanos Explorer* expeditions in 2022 thru 2024 will contribute to the West Coast Expanding Pacific Research and Exploration of Submerged Systems (EXPRESS) campaign and the regional Seascape Alaska campaign. EXPRESS is the latest evolution of the multi-year, multi-ship campaign that will help develop mitigation measures for operations occurring in the region and continued support of marine protected areas. Other initiatives include the Nippon Foundation-GEBCO Seabed 2030 initiative and the National Strategy for Ocean Mapping, Exploring, and Characterizing the United States Exclusive Economic Zone (NOMECE), which looks to produce a bathymetric map of the world ocean floor by 2030.

Consistent with previous expeditions in the Gulf of Mexico, western Atlantic, and Pacific, OER will work with the scientific community and public to characterize unknown and poorly-known areas through telepresence-based exploration including deep water mapping systems. Mapping and remotely operated vehicle (ROV) operations generally occur in water depths of 200 meters (m) and greater. During OER operations, expedition teams would conduct: seafloor, sub-bottom and water column mapping using multibeam, split-beam, sub-bottom profiler and acoustic Doppler current profiler (ADCP) sonar systems; oceanographic data collection primarily using the vessel's CTD rosette and expendable bathythermographs (XBTs); and seafloor and water column data collection using an integrated, two-body ROV system and additional unmanned surface vehicles (USVs) and autonomous underwater



vehicle systems (AUVs). Using ROV and AUV systems during expeditions to visually investigate unknown and poorly known deep water habitats within and around priority areas will help to establish baseline habitat characterization and species inventories for scientists and managers.

## **Magnuson-Stevens Fishery Conservation and Management Act Comments**

### Action Area and Essential Fish Habitat Affected by the Project

The action areas covered by this request encompass the marine environment in the areas around the North Pacific Ocean, Eastern Pacific Ocean, the Gulf of Alaska (GOA) and the eastern Aleutian Chain, and the vessel transit areas between ports, including but not limited to ports of call located in North America and Pacific Islands. Separate EFH consultations will be submitted for operations located in the Pacific Island Region.

#### *U.S. West Coast*

OER anticipates spending the majority of the FY2022 and FY2024 field season along the U.S. Pacific Coast contributing to the EXPRESS campaign. This work will also address priorities identified from the 2020 Consortium for Ocean Leadership (COL) workshop. Mapping priorities include filling in the gaps in current mapping coverage deeper than 200 m with high-resolution data offshore of California, Oregon, and Washington, and providing baseline data for further exploration. ROV and AUV exploration priorities are to be determined depending on the needs of ocean resource managers and partners and the ocean science community, and are anticipated to include geological hazards, deep sea corals, seamounts, and critical minerals/seeps. Operations in the Pacific Ocean are expected to commence in October, 2022. The majority of these surveys will take place in the U.S. Exclusive Economic Zone (EEZ) but may deviate in track lines, locations, and timing for various reasons (e.g., crew safety, inclement weather, mechanical issues).

The proposed field activities off the West Coast occur within EFH for various federally managed fish species within the Pacific Coast Groundfish, Pacific Coast Salmon, Coastal Pelagic Species, and Highly Migratory Species Fishery Management Plans (FMPs). In addition, the project would occur within rocky reef and “areas of interest,” which are designated as habitat areas of particular concern (HAPC) for various federally managed fish species within the Pacific Coast Groundfish FMP. Although the proposed field activities would occur primarily in deeper waters, the proposed action could occur within the vicinity of other HAPCs identified in the Pacific Coast Groundfish and Pacific Coast Salmon FMPs, including canopy kelp, seagrasses, or estuaries, such as when leaving or returning to ports. HAPC are described in the regulations as subsets of EFH which are rare, particularly susceptible to human-induced degradation, especially ecologically important, or located in an environmentally stressed area. Designated HAPC are not afforded any additional regulatory protection under the MSA; however, federal projects with potential adverse impacts to HAPC will be more carefully scrutinized during the consultation process.

#### *Alaska*

NOAA OER’s operations in the region during FY2023 will focus on supporting the existing SeaScape Alaska effort. Mapping operation priorities include gaps in mapping coverage deeper than 200 m offshore of the GOA, and the eastern Aleutian chain. ROV and AUV exploration priorities include geological hazards, deep sea corals, seamounts, and critical minerals/seeps. OER plans to conduct operations in Alaskan waters with a concentrated effort in the GOA and the eastern Aleutian Chain. Weather conditions and transit times may impact operations causing exact start and end dates to vary by a few days or weeks expanding the duration of corresponding expeditions. The GOA can be accessible as early as April, and the Aleutians are best from June to September.

The North Pacific Fishery Management Council (NPFMC) has identified EFH for nearshore marine waters in the vicinity of the GOA and the eastern Aleutian Chain to include EFH for all five species of Pacific salmon. There are no anadromous rivers in the project area. The proposed project location is designated as EFH for groundfish and scallops. The proposed field activities off the coast of Alaska occur within EFH for various federally managed fish species within the Bering Sea and Aleutian Islands Groundfish, Gulf of Alaska Groundfish, Scallop, and Salmon FMPs. HAPCs within EFH are areas where fisheries management identifies a need to conserve sensitive, rare habitats from anthropogenic activities such as fishing practices or developmental stress. In order to protect HAPCs, certain habitat protection areas and habitat conservation zones have been designated. The following HAPCs have

been designated in the project area: Alaska Seamount Habitat Protection Areas, GOA Coral Habitat Areas of Particular Concern and Bowers Ridge Habitat Conservation Zone. As noted previously, there are no additional regulatory protections under the MSA for HAPCs; however, federal projects with potential adverse impacts to HAPC will be more carefully scrutinized during the consultation process.

### Effects of the Action

The NMFS West Coast and Alaska Regions have reviewed information provided on the proposed activities, as well as the conservation measures and best management practices incorporated into the action to address adverse effects to EFH. Adverse effects to EFH would include bottom disturbance, increased turbidity, impacts associated with sample collection, and increased sound. However, the proposed action includes measures to avoid, minimize, or otherwise offset those adverse effects to EFH. For instance, to the extent practicable, hard-bottom and other sensitive habitats (e.g., corals, seagrass) would be avoided when anchoring or operating equipment, machinery will maintain an appropriate altitude off the bottom, cameras and other technology will be used to detect and avoid collisions, and speed and the type of equipment used will be adjusted depending upon the environmental conditions. In addition, only portions of specimens will be collected whenever possible to avoid mortality and minimize adverse effects to associated habitats. Increased sound in the marine environment from vessel operation or sonar emissions would only be expected to result in temporary behavioral effects. Therefore, in our joint assessment of the overall activity including the experimental design, the nature of collection, and the scope of the proposed activities, we have no additional EFH conservation recommendations to provide pursuant to Section 305(b)(2) of the MSA.

### Supplemental Consultation

Pursuant to 50 CFR 600.920(l), OER must reinitiate EFH consultation with NMFS if the proposed action is substantially revised in a way that may adversely affect EFH, or if new information becomes available that affects the basis for NMFS' EFH conservation recommendations.

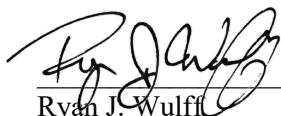
### **Fish and Wildlife Coordination Act Comments**

The purpose of the FWCA is to ensure that wildlife conservation receives equal consideration, and is coordinated with other aspects of water resources development [16 U.S.C. 661]. The FWCA establishes a consultation requirement for Federal departments and agencies that undertake any action that proposes to modify any stream or other body of water for any purpose, including navigation and drainage [16 U.S.C 662(a)]. Consistent with this consultation requirement, NMFS provides recommendations and comments to Federal action agencies for the purpose of conserving fish and wildlife resources. The FWCA allows the opportunity to offer recommendations for the conservation of species and habitats beyond those currently managed under the MSA.

As described in the EFH effects analysis, NMFS has determined that bottom habitat, potentially including biogenic and rocky reef habitats, will be negatively impacted by proposed project activities. Given the importance of this habitat to a variety of fish and wildlife species, the proposed conservation measures to avoid or minimize adverse effects to EFH are also considered necessary to address negative impacts to fish and wildlife resources managed under the FWCA.

Thank you for consulting with NMFS and considering our comments. If you have any questions regarding this response, please contact Eric Chavez via email at [Eric.Chavez@noaa.gov](mailto:Eric.Chavez@noaa.gov) or Charlene Felkley at [Charlene.Felkley@noaa.gov](mailto:Charlene.Felkley@noaa.gov) for questions related to the West Coast or Alaska, respectively.

Sincerely,



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Ryan J. Wulff  
Assistant Regional Administrator  
for Sustainable Fisheries  
West Coast Region

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Gretchen Harrington  
Assistant Regional Administrator  
for Habitat Conservation  
Alaska Region