

FINDING OF NO SIGNIFICANT IMPACT

Environmental Studies Funded by the Bureau of Ocean Energy Management

Introduction

In accordance with the National Environmental Policy Act (NEPA), 42 United States Code (USC) § 4261, *et seq.*; the Council on Environmental Quality (CEQ) regulations at 40 CFR § 1501, *et seq.*; Department of the Interior (DOI) regulations implementing NEPA at 43 CFR Part 46; and Bureau of Ocean Energy Management (BOEM) policy, BOEM prepared a Programmatic Environmental Assessment (PEA) of the potential effects of the development, funding, and management of environmental research studies (the Proposed Action) specifically to inform policy decisions on the development of energy and mineral resources on the Outer Continental Shelf (OCS). Mandated by Section 20 of the Outer Continental Shelf Lands Act (OCSLA), BOEM's Environmental Studies Program (ESP) supports the collection of scientific information to assess and manage the impacts of OCS activities on the human, marine, and coastal environments.

BOEM's environmental analysis focused on reasonably foreseeable environmental consequences of typical activities associated with environmental studies. Studies activities could occur in any of BOEM's four OCS regions (Alaska, Pacific, Gulf of Mexico, and Atlantic), state waters, and adjacent onshore areas. BOEM prepared the PEA to determine whether the Proposed Action (i.e., the development, funding, and management of environmental research studies through BOEM's ESP) and associated activities expected to take place during environmental studies may result in significant effects such that an environmental impact statement is required (40 CFR § 1501.3(a)).

Environmental Assessment

The purpose of the Proposed Action is to facilitate BOEM funding and support for environmental studies conducted by Federal agencies, academic organizations, non-profits, and commercial enterprises. BOEM-funded studies inform decision-making related to leasing and associated activities for energy development and marine mineral extraction on the OCS and the development of measures to mitigate potential impacts of these activities.

BOEM evaluated only the Proposed Action and no additional alternatives. DOI regulations, currently at 43 CFR § 46.310, state the following:

“when the Responsible Official determines that there are no unresolved conflicts about the proposed action with respect to alternative uses of available resources, the environmental assessment need only consider the proposed action and does not need to consider additional alternatives, including the no action alternative.”

BOEM found that there are no unresolved conflicts about alternative uses of available and potentially affected resources examined or sampled in BOEM-funded environmental studies. Therefore, no additional alternatives, including a No Action alternative, are required.

Proposed Action

Under the Proposed Action, BOEM would fund and support environmental studies for collection of scientific information to assess and manage the impacts of OCS activities on the human, marine, and coastal environments. Activities associated with most BOEM-funded studies meet the requirements for application of DOI's categorical exclusion (CE) at 43 CFR § 46.210(e), which covers "nondestructive data collection, inventory (including field, aerial, and satellite surveying and mapping), study, research, and monitoring activities." The PEA focuses on categories of studies that might not meet the requirements for CE, including the following:

- Geological and geophysical surveys;
- Fish and invertebrate capture studies;
- Tagging, capture, handling, and study of marine mammals, sea turtles, and birds; and
- Seafloor-disturbing activities.

Negligible to minor adverse effects to the environment from studies activities are expected to occur, depending on the specific environmental resource.

Anticipated Impacts of the Proposed Action and Environmental Studies Activities

Fish and Invertebrates

Impacts to pelagic fish and invertebrates are expected to range from **negligible to minor**, depending on specific study activities. In general, a small number of individuals may be affected over a small footprint and short period of time. Impacts may include disturbance from vessel traffic, noise from vessel operations and active acoustic sources, stress or mortality from capture or other study activities, and seafloor disturbance. Fish may avoid disturbances from vessels or seafloor activities but may be displaced from preferred habitat. Noise impacts are expected to differ among species, although unlikely to have measurable population-level effects. Stress or mortality are only expected for those individuals that are captured, which is usually a small number in comparison with the overall population size. Consultation with the National Marine Fisheries Service (NMFS) and/or U.S. Fish and Wildlife Service (USFWS) is required for studies that have the potential to impact species listed under the Endangered Species Act (ESA).

Marine Mammals and Sea Turtles

Impacts to marine mammals and sea turtles are expected to range from **negligible to minor**, depending on specific study activities. In general, a small number of individuals may be affected over a small footprint and short period of time, during which mitigation measures would be implemented to reduce risk of impacts. Impacts may include disturbance or strike from vessel traffic, noise from vessel operations and active acoustic sources, and stress or injury from study activities (i.e., tagging, capture, or handling). Vessels may disturb or displace individuals and, although the probability of occurrence is low, direct collisions with vessels may result in injury or death. In certain areas where highly vulnerable populations of marine mammals occur, regulations (50 CFR § 224) require speed limits to minimize mortalities. Vessel noise may result in acoustic masking (i.e., a reduction in acoustic communication space), but the likelihood of harm from noise is low because of the high-frequency, low-energy, and limited areal extent of studies that employ active acoustics. Additionally, mitigation measures and avoidance behavior

make it unlikely that individuals would be very close to noise sources. In general, turtles are less sensitive to sound than marine mammals, so they would be affected over smaller spatial scales.

Marine mammal and sea turtle studies are often non-invasive, involving collection of observational data (e.g., those that do not require capture of the animal) and necropsy of already-dead individuals. Capture studies typically release the individual after measurements and samples are taken and are not directly associated with mortality. An exception may be studies that collect information from individuals captured as part of subsistence activities. BOEM-funded studies that have the potential to “take” marine mammals, sea turtles, or ESA-listed species, require consultation with the NMFS and/or USFWS. A Marine Mammal Protection Act (MMPA) take authorization may be required as well.

Birds

Impacts to birds are expected to be **negligible to minor**. Like marine mammals and sea turtles, bird studies are often non-invasive and are not typically associated with negative impacts to the individuals being studied. In most cases, captured birds are released back into the environment. However, mortality is expected for those live birds that are collected for some specific research purposes, such as stomach content analysis, requiring whole-body dissection. The number of individuals would be small in comparison with the overall population. Active collection of birds requires a USFWS permit. Studies activities involving any ESA-listed species require consultation with NMFS and/or USFWS.

Marine Benthic Communities and Habitats

Impacts to marine benthic communities and habitats are expected to range from **negligible to minor**, depending on specific study activities. In general, studies activities may impact a small footprint over a short period of time, during which mitigation measures would be implemented to reduce risk of impacts. Impacts may include physical disturbance, removal of individuals or habitat, and resuspension of sediments. Physical seafloor disturbance may result in temporary or permanent habitat alteration, as well as the disturbance, displacement, injury, removal, or mortality of individuals on the seafloor. Biological sampling may also remove individuals. Seafloor-disturbing activities may result in sediment resuspension that can smother benthic organisms and/or release contaminants stored in the sediments. Some studies may also contribute to marine debris in the form of lost or sacrificial items, although every effort is made to recover all equipment.

Studies are typically designed with specific mitigation measures to minimize potential impacts (such as the avoidance of sensitive marine benthic ecosystems) and suspected historic and prehistoric sites. Studies that disturb the seafloor may require consultations under the ESA, MMPA, Magnuson-Stevens Fishery Conservation and Management Act, or National Historic Preservation Act, where appropriate to avoid, minimize, or mitigate impacts to the potentially affected resources.

Other Resources Analyzed

The PEA also analyzes the effects of environmental studies on air quality, water quality, geology, commercial and recreational fisheries, and archaeological and cultural resources. The effects of studies activities on these resources are expected to be **negligible**.

Effects of the Action

I have considered the following in my evaluation of the degree of the effects 40 CFR § 1501.3(b)(2)) from the funding and management of environmental studies through the BOEM ESP as mandated by Section 20 of OCSLA:

Short- and Long-term Effects

The PEA considered the Proposed Action's potential contribution to impacts when combined with other past, present, and reasonably foreseeable activities on the OCS. The PEA effects analyses indicate that studies activities expected to take place are not anticipated to produce significant impacts and are not anticipated to combine with the effects of other activities such that the incremental effects of the action result in significant impacts.

Beneficial and Adverse Effects

Potential adverse effects of environmental studies activities to fish, invertebrates, marine mammals, sea turtles, birds, and marine benthic communities and habitats are expected to occur at negligible to minor levels. Significant adverse effects are not anticipated for any resource. Therefore, the level of adverse and beneficial effects of environmental studies activities does not render the potential impacts significant.

Effects on Public Health and Safety

Within its environmental analysis, BOEM considered the potential impacts on air and water quality, which were found to be negligible. In the PEA, studies activities involving people (i.e., ethnographic and other cultural interviews, sociocultural and socioeconomic studies) are not considered in detail because they can typically be covered by the DOI CE. Due to the nature of the studies activities covered in the PEA, they are expected to have little to no effect on public health or safety. Therefore, the degree to which the environmental studies may affect public health or safety does not render the potential impacts significant.

Effects that Would Violate Federal, State, Tribal, or Local Law Protecting the Environment

Studies activities do not threaten violation of Federal, state, or local law or requirements imposed for the protection of the environment. No substantial disputes about the environmental consequences of such activities are evident from scientific literature, past analyses of similar activities on the OCS, or the present EA.

Conclusion

BOEM has thoroughly considered the consequences of the Proposed Action. BOEM prepared a PEA and finds that it complies with the relevant provisions of the CEQ regulations implementing

NEPA, DOI regulations implementing NEPA, and other BOEM requirements. Appropriate terms and conditions enforceable by BOEM will be incorporated into the studies to avoid, minimize, and/or mitigate any foreseeable adverse impacts. Based on the evaluation of potential impacts and mitigating measures discussed in the PEA, BOEM finds that conducting the proposed environmental studies does not constitute a major Federal action significantly affecting the quality of the human environment under NEPA Section 102(2)(c) and will not require preparation of an environmental impact statement.

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