

**U.S. DEPARTMENT OF ENERGY
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY
NEPA DETERMINATION**



RECIPIENT: Dr. Lisa T. Ballance/Marine Mammal Institute, Oregon State University

STATE: OR

PROJECT TITLE : Baseline Data Collection on Cetaceans and Seabirds in the Outer Continental Shelf and Slope of Northern California and Oregon to Inform Offshore Wind Energy Development

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-00002237	DE-EE0009800	GFO-0009800-001	

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Policy 451.1), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

**A9
Information gathering, analysis, and dissemination** Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)

**B3.3
Research related to conservation of fish, wildlife, and cultural resources** Field and laboratory research, inventory, and information collection activities that are directly related to the conservation of fish and wildlife resources or to the protection of cultural resources, provided that such activities would not have the potential to cause significant impacts on fish and wildlife habitat or populations or to cultural resources.

**B3.16
Research activities in aquatic environments** Small-scale, temporary surveying, site characterization, and research activities in aquatic environments, limited to: (a) Acquisition of rights-of-way, easements, and temporary use permits; (b) Installation, operation, and removal of passive scientific measurement devices, including, but not limited to, antennae, tide gauges, flow testing equipment for existing wells, weighted hydrophones, salinity measurement devices, and water quality measurement devices; (c) Natural resource inventories, data and sample collection, environmental monitoring, and basic and applied research, excluding (1) large-scale vibratory coring techniques and (2) seismic activities other than passive techniques; and (d) Surveying and mapping. These activities would be conducted in accordance with, where applicable, an approved spill prevention, control, and response plan and would incorporate appropriate control technologies and best management practices. None of the activities listed above would occur within the boundary of an established marine sanctuary or wildlife refuge, a governmentally proposed marine sanctuary or wildlife refuge, or a governmentally recognized area of high biological sensitivity, unless authorized by the agency responsible for such refuge, sanctuary, or area (or after consultation with the responsible agency, if no authorization is required). If the proposed activities would occur outside such refuge, sanctuary, or area and if the activities would have the potential to cause impacts within such refuge, sanctuary, or area, then the responsible agency shall be consulted in order to determine whether authorization is required and whether such activities would have the potential to cause significant impacts on such refuge, sanctuary, or area. Areas of high biological sensitivity include, but are not limited to, areas of known ecological importance, whale and marine mammal mating and calving/pupping areas, and fish and invertebrate spawning and nursery areas recognized as being limited or unique and vulnerable to perturbation; these areas can occur in bays, estuaries, near shore, and far offshore, and may vary seasonally. No permanent facilities or devices would be constructed or installed. Covered actions do not include drilling of resource exploration or extraction wells.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide funding to Oregon State University (OSU) to conduct research on cetaceans and seabirds along the U.S. West Coast. Data would be used to provide spatially and

temporally explicit species-specific distribution and density maps and models for cetaceans and seabirds in the shelf-slope waters of the northern California Current which would be used to inform siting of offshore wind platforms. Activities would be conducted from either an 84-foot research vessel (RV) or rigid-hulled inflatable boats (RHIBs). The project would be completed over one Budget Period (BP) and eight tasks. Field work is planned for two years followed by analysis, synthesis, and production of deliverables. This NEPA determination is applicable to all eight tasks.

OSU, Cascadia Research Collective, and Mantech International are participants on the project. Project activities conducted by Mantech International would only be computer-based. OSU and Cascadia Research Collective would conduct field work. They hold research permits issued by the National Marine Fisheries Service (NMFS) that authorize the type of work proposed (NMFS Permit No. 21585, valid August 2, 2020 through December 31, 2023; NMFS Permit No. 23092 valid November 19, 2019 through November 15, 2024; NMFS Permit No. 21678 valid February 5, 2021 through November 30, 2023; and OSU Institutional Animal Care and Use Committee (IACUC) Permit No. IACUC-2019-0045 valid 12/06/2019 through 12/05/2022). Permit holders would be responsible for abiding by conditions and precautionary measures included in permits and assuring that permits are renewed as required.

Field work would take place in the Continental Shelf and Slope waters of the North Pacific Ocean from Cape Mendocino, CA to the Oregon/Washington border and out to a bottom depth of approximately 3000 meters. Research activities would consist of visual surveys and behavioral observations, photo-identifications, deployment of bottom-mounted hydrophones for passive acoustic monitoring, skin and blubber biopsy sampling, and deployment of medium-duration archival tags.

Hydrophone deployments and visual surveys of marine mammals and seabirds would be conducted during six 10-day surveys on the RV. Biopsy sample collection would also be conducted from the RV if time and weather allow. Additional visual surveys would be conducted from a different RV used for a separate project conducted by the Northwest Fisheries Science Center (NWFSC). NWFSC is conducting a 60-day hake survey and would allow two researchers from OSU onboard to conduct research for this DOE project. All visual surveys would be conducted from research vessels. These activities would be conducted under NMFS permit 21585. Marine Mammal Institute would contribute data collected during separate survey efforts to inform model development. 10-day surveys would take place in August, October, and April. Photographs would be taken of whales to characterize site fidelity at the individual and population level and link whales to Distinct Population Segments (DPS). Passive acoustic monitoring (PAM) would be conducted through the use of bottom-mounted moorings (hydrophones and echolocation click detectors) to identify presence of all species detected. Hydrophones would be installed at three sites along the coast of northern California and Oregon at Cape Mendocino, Cape Blanco, and Columbia River mouth. This would include the setting of short lengths of anchor chain on the seafloor, each covering approximately 4 square feet. Hydrophones would be deployed midway between the coast and continental slope with varying distances based on the width of the continental shelf. Hydrophones would be deployed for two 12-month periods to document, daily, seasonal, and annual presence of vocalizing cetaceans. One dedicated 4-day cruise would take place on the RV in the summer of 2024 for final hydrophone recovery.

Photo-ID, biopsy sampling, and archival tag deployment tasks would be conducted from the RHIB. Twelve 3-day surveys by Cascadia Research Collective would be conducted to obtain photo-ID and biopsy samples of large whales. Biopsy samples would be taken using a dart fired from a 100-150 pound crossbow to take small samples of skin and blubber (40 mm x 60 mm) from whales. At the Cetacean Conservation and Genomics Laboratory at Oregon State University Marine Mammal Institute, Hatfield Science Center in Newport, OR, samples would be used for DNA extraction and mitochondrial DNA sequencing, microsatellite genotyping, sex identification, individual identification, and species and stock identification. DNA profiles of whales would provide supporting information on migratory fidelity and DPS. Up to 40 samples would be taken annually (total of 80 over 2 years) from primarily humpback, blue, fin, and gray whales at distances of 5 meters and closer. Only a subsample of each biopsy would be used for extraction of DNA and subsequent profiling, the remainder would be archived with MMI's existing collection for future analysis.

Blue and humpback whales would be tagged to characterize site fidelity, behavior, and call rates. Tags would be recoverable, medium-duration archival tags equipped with high-resolution accelerometers. These would be deployed on up to 6 blue whales to examine individual movements, dive behavior, and calling behavior. These activities would be conducted under NMFS permit 21678. Small boat work would take place during summer and fall months beginning in 2022 and ending in 2024.

Cetaceans found along the coast include many whale, dolphin, and porpoise species. These animals may

experience short-term behavioral disturbance due to close vessel approaches, biopsy sampling, and tagging. Research would be conducted in critical habitat, including the northeast Pacific for humpback whales, killer whales, green sturgeon, and leatherback turtles as well as in essential fish habitat and marine protected areas. The physical environment would not be impacted, alteration to seafloor due to hydrophone deployment would be minimal. The quality and/or quantity of essential fish habitat would not be reduced.

Project activities would involve hazards relating to work in the open ocean such as ocean swell, wind, waves, and fog, as well as potential hazards associated when operating small boats around whales. Any associated risks would be mitigated through adherence to all standard small boat safety protocols with the approval of the OSU Scientific Boating Small Boat Safety Program and boats would only be operated in low swell, low wind, and good visibility conditions with operators that are experienced in open ocean areas and in working closely with whales. The 84-foot survey vessel is designated as an oceanographic research vessel by the U.S. Coast Guard and operates under the Code of Federal Regulations 46 CFR Subchapter U, with the U.S. Coast Guard-licensed captain and crew. This vessel completes U.S. Coast Guard safety inspections annually and all personnel onboard are trained in the University-National Oceanographic Laboratory System Research Vessel Operators Committee Safety Training Manual. Genetic analyses in labs would involve the use and handling of hazardous chemicals. All such handling would occur in-lab and would follow approved OSU EHS regulations.

Total CO2 emissions over the course of the two-year field work activities would be approximately 199,584 kg which is below the CEQ CO2 threshold. During the ten-day visual surveys, gray and blackwater would be discharged into the ocean from the research vessel following approved U.S. Coast Guard protocols at distances greater than 3 nautical miles from shore. All waste products would be disposed of by licensed waste management service providers. OSU and its project partners would observe all applicable Federal, state, and local health, safety, and environmental regulations.

NEPA PROVISION

DOE has made a final NEPA determination.

Include the following condition in the financial assistance agreement:

Permit holders would be responsible for abiding by conditions and precautionary measures included in permits and assuring that permits are renewed as required.

Notes:

Wind Energy Technologies Office

This NEPA determination requires legal review of the tailored NEPA provision.

Review completed by Shaina Aguilar on 4/8/22.

FOR CATEGORICAL EXCLUSION DETERMINATIONS

The proposed action (or the part of the proposal defined in the Rationale above) fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D. To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.

There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects of the proposal.

The proposed action has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

The proposed action is categorically excluded from further NEPA review.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:  **Electronically Signed By: Kristin Kerwin** _____ Date: 4/8/2022
NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

- Field Office Manager review not required
- Field Office Manager review required

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____
Field Office Manager