

Environmental Studies Program: Ongoing Study

Study Area(s): Southern California, Central California, Northern California, Washington-Oregon, Hawaii

Administered By: Pacific OCS Region

Title: Pacific Marine Assessment Partnership for Protected Species (PacMAPPS) (NSL #PC-17-04)

BOEM Information Need(s) to be Addressed: BOEM Pacific Region continues to assess environmental effects of existing oil and gas development activities and proposed renewable energy facilities using the best available information. For marine mammals, we often rely on stock assessment reports prepared annually by the National Marine Fisheries Service (NMFS). Although these reports are prepared annually, the underlying data supporting these reports may be several years old and NMFS science center cruise schedules in the Pacific (Southwest, Northwest, and Pacific Islands Fisheries Science Centers) are not necessarily coordinated across species distributions. Likewise, there is limited information on offshore distribution and use of the outer continental shelf by other protected species including seabirds and sea turtles. This study supports a Pacific-wide strategic plan for coordinated protected species assessment surveys and derived site-specific analyses relevant to BOEM areas of interest.

Total BOEM Cost: \$1,340,000

Period of Performance: FY 2017–2020

Conducting Organization(s): National Oceanic and Atmospheric Administration, National Marine Fisheries Service

Principal Investigator(s): [Dr. Jeffrey Moore](#) (Southwest Fisheries Science Center) and [Dr. Erin Oleson](#) (Pacific Islands Fisheries Science Center)

BOEM Contact(s): [Greg Sanders](#)

Description:

Background: In 2011, BOEM and NMFS entered into a memorandum of understanding whereby both agencies agreed to cooperate and coordinate environmental studies and analyses. Collection and analysis of protected species (marine mammals, seabirds, and sea turtles) data are fundamental needs for both agencies. In 2013, the Marine Mammal Commission recommended that BOEM Pacific Region partner with other state and federal resource agencies, academic institutions, and private researchers to support broad-scale, multi-year, seasonal wildlife surveys. BOEM met with NMFS, U.S. Navy (Navy), and U.S. Fish and Wildlife (FWS) representatives from West Coast and Pacific Islands Science Centers and regional offices on March 18, 2016. The objective was to develop a multi-year strategic plan for protected species assessment surveys across the Pacific that would address each agency's information needs. BOEM, Navy, FWS, and NMFS all agreed that the U.S. West Coast (California Current ecosystem) and Hawaiian Archipelago were high priority areas for protected species survey effort. The ultimate goal is to develop a partnership between our agencies and regions that will allow for

better and more consistent data collection across the Pacific. BOEM's contribution will help fill spatial and temporal gaps in current survey efforts.

Objectives: The purpose of this study is to provide up-to-date assessments, including spatial and temporal distribution, of protected species in areas of the Pacific that are of special interest to BOEM. Essentially, we will address the questions of where do marine mammals live in the Pacific? Why do they live there? And what factors do we look at to predict future distribution? Specific objectives include:

1. Identify oceanographic conditions that influence protected species distribution.
2. Describe how protected species distribution in the Pacific may shift with changing environmental conditions.
3. Identify geographic features that are associated or interact with key life history elements (e.g., feeding, migration, breeding, and birthing).
4. Evaluate the relative importance of protected species habitat on a scale useful for the evaluation of offshore energy projects in the Pacific.
5. Archive survey data in a system that will allow current data to be compared with past and future efforts.

Collection of data across the range of species' distribution provides context for environmental review of offshore projects. A clear understanding of what drives species' use of marine habitats allows us to describe the relative intensity of interactions between protected species and offshore human activities. Both context and intensity are critical components of National Environmental Policy Act (NEPA) reviews.

Methods: National Oceanic and Atmospheric Administration (NOAA) vessels conducted long-range visual and acoustic line-transect surveys for protected species and collected oceanographic data in the Hawaiian Archipelago ecosystem in CY 2017. Another survey effort in the California Current ecosystem (Washington through California) is scheduled for CY 2018. The resulting data will be used to support up-to-date stock assessments and derived protected species use and distribution products for areas of interest to BOEM (currently portions of Oregon, central and southern California, and the Main Hawaiian Islands).

Current Status: Two interagency agreements (IAs) with NMFS were awarded in June 2017: an IA with the Pacific Islands Fisheries Science Center (for work in the Hawaiian Archipelago) and an IA with the Southwest Fisheries Science Center (for work in the California Current). The Hawaiian Archipelago ecosystem cruise began on July 6, 2017 and was completed in December 2017. The California Ecosystem cruise began on June 26, 2018 and is scheduled to be completed on December 7, 2018.

Final Report Due: Hawaiian Archipelago: September 2019
California Current: June 2020

Publications Completed: None

Affiliated WWW Sites:

<https://marinecadastre.gov/epis/#/search/study/100179>

<https://www.boem.gov/Notes-From-The-Field/>

<https://www.pifsc.noaa.gov/hiceas/>

<https://swfsc.noaa.gov/textblock.aspx?Division=PRD&ParentMenuId=259&id=23092>

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