

Environmental Studies Program: Ongoing Study

Study Area(s): Southern California

Administered By: Pacific OCS Region

Title: Pacific Regional Investigation Survey and Monitoring (PRISM) (NSL #PC-17-05)

BOEM Information Need(s) to be Addressed: BOEM Pacific Region staff manage multiple cooperative agreements that require substantial government involvement. This study will be used to continue to monitor effects of OCS oil and gas operations, including those from accidental oil spills, on the nearby shoreline habitats. This study will support staff in additional subjects, not only shoreline related work, to investigate mission-related effects that are related to cooperative agreement studies or to test new study ideas or equipment on a small scale.

Total BOEM Cost: \$100,000

Period of Performance: FY 2017–2020

Conducting Organization(s): BOEM Pacific Region (in-house study)

Principal Investigator(s): [Lisa Gilbane](#)

BOEM Contact(s): [Lisa Gilbane](#)

Description:

Background: The OCS Lands Act states in 43 U.S.C 1345 Section 20 (3)b that “Subsequent to the leasing and developing of any area or region, the Secretary shall....monitor the human, marine, and coastal environments of such area or region in a manner designed to provide time-series and data trend information which can be used for comparison with any previously collected data for the purpose of identifying any significant changes in the quality and productivity of such environments, for establishing trends in the areas studied and monitored...”.

Achieving this goal in a cost-effective manner often requires research and small-scale trials. This is particularly true for offshore renewable energy planning, because there are currently no commercial operations in the U.S.

The BOEM PRISM team (formerly the MMS Intertidal Team or MINT) is a group of Pacific Region scientists that began monitoring rocky intertidal shores in 1991 as one of twelve teams that comprise the Multi-Agency Rocky Intertidal Network (MARINE). BOEM currently supports MARINE through a cooperative agreement (BOEM-MARINE) with the University of California, Santa Cruz. The PRISM team provides substantial government involvement to this agreement by collecting data at the 32 sites established in each of four counties bordering oil and gas platforms. Individual staff members average completion of 2-15 sites over 2-10 field days each year. However, in addition to the biannual monitoring of established rocky intertidal sites (support of MARINE), PRISM staff design and implement individual studies of associated resources to answer

questions identified in the field during this monitoring and to support the overall BOEM mission. These small-scale field studies have led to reports and publications, additional skills, and the development of large-scale successful studies. PRISM presence in the field has the added benefit of providing opportunities for BOEM scientists to interact with the public during monitoring and provides BOEM with the opportunity to visibly demonstrate our commitment to the environment.

Objectives: We want to expand the use of these funds beyond rocky intertidal shorelines and improve our understanding of the effects of OCS activities through the direct investigation by BOEM staff in field. This study will support our commitment for substantial government involvement in other Pacific Region cooperative agreements, in addition to the BOEM-MARINE agreement.

- 1) Support time for Pacific Region scientists to be in the field conducting science, collecting data, or communicating with the public or other stakeholders.
- 2) Provide the tools necessary to conduct field work and analyze data. This can include purchasing or renting field equipment and or software.

Methods: Specific tasks will be decided at the beginning of each fiscal year and reviewed by BOEM Pacific Region and Headquarters management in an Annual Study Plan. The first task will continue to be biannual rocky shore monitoring and remains the same throughout the five-year period. The second task will be to continue deployment and maintenance of a network of pH sensors in the Santa Barbara Channel with the University of California and the National Park Service. Additional tasks are either special short-term studies designed by staff to answer specific questions or efforts which support the monitoring task. Examples of the range of topics pursued by the PRISM team in the past include testing new protocols, developing archiving protocols, analyzing data from special studies, devising new field mapping efforts, and developing rapid shoreline field response protocols. Future tasks could include diving or socioeconomic or cultural topics. The PRISM team has also begun to investigate how our existing field efforts can inform environmental analyses of future lease sales for renewable energy projects. Offshore commercial-scale wave energy devices are predicted to alter the physical environment, specifically wave energy and sediment transport, which could in turn affect biological communities. Detecting changes from energy devices requires ongoing monitoring before devices are in place and so at least one additional task will be dedicated to improving our analyses of renewable energy projects.

Current Status: Year 1 (FY 2017) funds were transferred from BOEM Headquarters (Environmental Studies Program) to BOEM Pacific Region in November 2016. Field work to monitor 10 sites was conducted and completed in fall 2016. A Presidential Management Fellow on detail to BOEM assisted the PRISM team in spring 2017 to improve MARINE's website presence and citizen science program.

Final Report Due: September 2020 (Mid-year and annual reports are due each year on March 31 and September 30, respectively.) Prior five-year reports were given to HQ to make available online.

Publications Completed: None

Affiliated WWW Sites: <https://marinecadastre.gov/epis/#/search/study/100174>

Revised Date: July 13, 2018