

Environmental Studies Program

Applied Science for Informed Decisions on Ocean Energy

The Bureau of Ocean Energy Management (BOEM) manages the responsible exploration and development of energy and mineral resources on the Outer Continental Shelf (OCS). The bureau promotes energy independence, environmental protection and economic development through responsible management of these resources based on the best available science. To support this work and inform bureau policy decisions, BOEM's **Environmental Studies Program** (ESP) plans, conducts and oversees world-class scientific research.



These environmental studies cover a broad range of disciplines,

including physical oceanography, atmospheric sciences, biology, protected species, social sciences, economics, submerged cultural resources and the environmental impacts of energy development. BOEM incorporates findings from the studies program into its environmental reviews and National Environmental Policy Act (NEPA) documents, which are used to determine steps to avoid, mitigate, or monitor the impact of energy and mineral resource development on the OCS.

Through the ESP, BOEM is a leading contributor to the growing body of scientific knowledge about the marine and coastal environment. The bureau has funded nearly \$1 billion in research since the beginning of its studies program in 1973. Completed studies are available to the public through the Environmental Studies Program Information System (ESPIS). This system includes more than 1,100 technical summaries of BOEM-sponsored environmental research projects, and over 3,300 research reports. To learn more about BOEM's ongoing environmental studies work, go to: <u>http://www.boem.gov/studies</u>.

BOEM oversees scientific research conducted through contracts, cooperative agreements with state institutions or universities, and interagency agreements. These arrangements enable the bureau to leverage resources, meet national priorities and satisfy common needs for robust scientific information. The ESP also regularly conducts studies with partners under the umbrella of the National Oceanographic Partnership Program, including several award-winning studies. The *Studies Development Plan* for 2013-2015 summarizes research priorities and potential new studies for the next three years, subject to the availability of funds.

Input is provided into the ESP by the **OCS Scientific Committee**, which was established to advise the Secretary of the Interior, through the BOEM Director, on the feasibility, appropriateness, and scientific value of the program. Members of the committee are appointed by the Secretary of the Interior based on their scientific competence, reputation within their field of expertise, and ability to evaluate important elements of BOEM's research and science information efforts. For more information about the OCS Scientific Committee, go to: <u>http://www.boem.gov/About-BOEM/Public-Engagement/Federal-Advisory-Committees/OCS-Scientific-Committee/Index.aspx</u>.

Additionally, the Department of the Interior established a **Scientific Integrity Policy** in 2011 to ensure and maintain the integrity of scientific and scholarly activities used in Departmental decision making. BOEM has fully adopted the policy and is committed to securing independent, peer-reviewed environmental research, which is considered during every stage of the decision-making process. The Department of the Interior Scientific Integrity Policy is available at: http://www.doi.gov/scientificintegrity/index.cfm.

Ongoing Environmental Studies by Region & Program

Alaska Studies

Ongoing studies in Alaska focus on protected and endangered species; physical oceanography; wildlife biology; subsistence and traditional knowledge; and economic modeling. Given the current interest in oil and gas development in the Beaufort and Chukchi Seas, many studies are focused on understanding Arctic resources. The ESP is actively seeking opportunities to collaborate with other federally and privately funded Arctic science programs.



Gulf of Mexico Studies



Ongoing studies in the Gulf of Mexico focus on impacts of the Deepwater Horizon oil spill, archeological and biological research, chemosynthetic communities, deepwater corals and the Loop Current. The ESP has pioneered social and economic research on the complex network of interrelationships among the energy industry and the GOM region. The cooperative relationship with Louisiana State University in the Coastal Marine Institute program celebrated its 20th anniversary in 2012.

Pacific Studies

The ESP has pioneered ocean research along the entire Pacific Coast of the United States. The current program includes platform biology studies, a long-standing highly acclaimed multi-agency intertidal monitoring program and recently initiated studies to support renewable energy development. In many cases, the results of the ESP represent the only research of that type ever conducted in the ocean along the coast.



Atlantic Studies



In support of the Energy Policy Act of 2005, ESP is collecting information to be used in assessing the environment in support of renewable energy development. This includes a suite of studies that are addressing the distribution of birds and bats on the Outer Continental Shelf. The socioeconomic consequences of offshore wind development are also being evaluated, with studies covering space use conflicts, visual impacts, and associated economic effects.

National Studies

The National Studies Program works across the Bureau to develop, manage and disseminate the scientific information needs of BOEM. Studies managed by the National Studies Program include archiving of OCS invertebrates by the Smithsonian, renewable energy space-use conflicts, marine mammal research, and support of the Oil Spill Modeling Program.

