BOEM PACIFIC REGION: Ongoing Study

Region: Pacific

Planning Area(s): Southern California, Washington-Oregon, Hawaii

Title: Synopsis of Research Programs that can Provide Baseline and Monitoring Information for Offshore Energy Activities in the Pacific Region (PR-14-DMI)

BOEM Information Need(s) to be Addressed: BOEM requires both baseline and monitoring data for marine ecosystems, habitats, and species-of-interest. Baseline data describe existing conditions and define a starting point to monitor trends of impacted resources. Monitoring data are used to assess effects of industry activities, and to determine effectiveness of mitigation measures contained within offshore energy lease stipulations and conditions of permit approval. A number of other entities have established research programs that collect environmental data within areas of ongoing or prospective energy development. BOEM seeks to understand if these ongoing or completed datasets can also be used to satisfy BOEM's information needs and thereby provide timely and cost-effective information to decision-makers regarding the offshore and coastal environment.

Total BOEM Cost: $200,000 **Period of Performance:** FY 2014-2017

Conducting Organization: U.S. Geological Survey

Principal Investigator: Dr. Kevin Lafferty

BOEM Contact: Donna Schroeder

Description:

Background: BOEM requires both baseline and monitoring data for marine ecosystems, habitats, and species-of-interest. Baseline data describe existing conditions and define a starting point to monitor trends of impacted resources. Monitoring data are used to assess effects of industry activities, and to determine effectiveness of mitigation measures contained within offshore energy lease stipulations and conditions of permit approval. A number of other entities have established research programs that collect environmental data within areas of ongoing or prospective energy development. BOEM seeks to understand if these ongoing or completed datasets can also be used to satisfy BOEM's information needs and thereby provide timely and cost-effective information to decision-makers regarding the offshore and coastal environment.

Objectives: The overall goal of this study is to evaluate for BOEM the information needed to support environmental risk assessments, Environmental Impact Statements, and other decision documents related to ongoing and foreseeable offshore energy projects in the Pacific Region.

Specific objectives to be addressed include:

(1) Identify ongoing or completed research programs that contain information on species and

habitats sensitive to offshore energy activities; and
(2) Review the capability of these programs to provide baseline and monitoring data to understand and mitigate potential impacts of offshore energy development in the Pacific Region.

Methods:

Planning Areas within the Pacific Region
In the Pacific OCS Region, there are three areas with ongoing or prospective development of offshore energy projects: Southern California Planning Area, Washington-Oregon Planning Area, and the Hawaiian OCS.

Program Evaluation Strategy
The overall strategy is to review ongoing or completed efforts that can be used as baseline or monitoring data for:
(1) Ongoing conventional energy projects within the Southern California Planning Area;
(2) Prospective renewable energy projects within the Southern California Planning Area;
(3) Prospective renewable energy projects within the Washington-Oregon Planning Area;
(4) Prospective renewable energy projects on the Hawaiian OCS.

Research programs of particular interest for this study include those that have one or more of the following components:

- Managed by another Bureau within Department of the Interior (e.g. USGS; National Park Service; U.S. Fish and Wildlife Service's National Wildlife Refuges; Bureau of Land Management's National Monuments, etc.);
- Assessed the distribution and abundance of seabirds or shorebirds;
- Assessed the distribution and abundance of protected species under the Endangered Species Act or the Marine Mammal Protection Act;
- Collected information used to generate ecological indices that describe salient features of sensitive or pristine habitats and ecosystems with the Planning Areas of interest.

Evaluation of research programs and datasets will review the strengths and weaknesses of each effort according to BOEM's information needs, define the temporal and spatial scope of the work, and identify the ecosystem components, habitats and species of interest pertinent to either ongoing conventional energy or prospective renewable energy.

Metadata associated with the discrete datasets that may be used to address BOEM information needs shall be reviewed to ascertain conformity with two standards: (1) Content Standards for Digital Geospatial Metadata (FGDC-STD-001-1998) as published on May 1, 2000, by the Federal Geographic Data Committee (FGDC) or to any format that supersedes it as determined by the FGDC (http://www.fgdc.gov/metadata/csdgm//), and (2) the Ecological Metadata Language (https://knb.ecoinformatics.org/#external//emlparser/docs/index.html).

Current Status: Data collection is ongoing; over 70 datasets have been identified.

Final Report Due: February 26, 2017

Publications Completed: Two abstracts presented at relevant symposia.

Affiliated WWW Sites: None

Revised Date: July 27, 2016