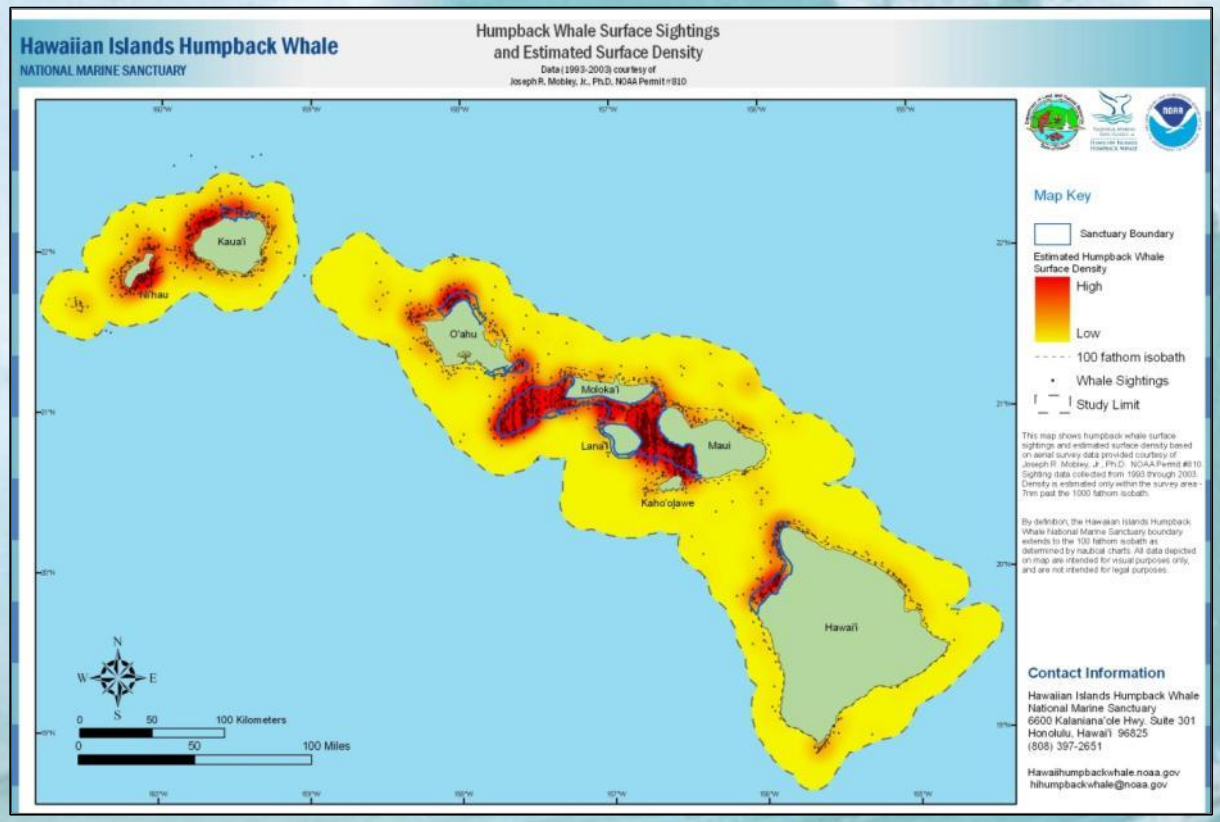
Supporting Hawaiian Renewable Energy - 2013

Discipline	Title	Rank
IM	A Biogeographic Assessment of the Main Hawaiian Islands	7
Needed now to establish baseline for Hawaii		



BOEM Pacific Region

BOEM Information Need:

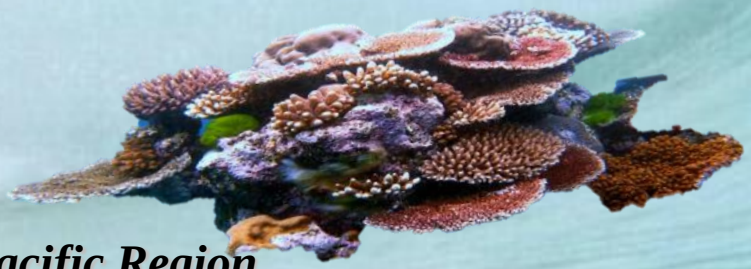
Collection of baseline physical and biological data will support environmental analyses and informed decision making for review of offshore renewable energy projects proposed in Hawaii and help identify important data gaps.

Relationship to Previous BOEM-Supported Research:

This study parallels studies conducted in other Regions for compilation and synthesis of existing information with a greater emphasis on assimilation into usable Geographic and Information System (GIS) formats.

OBJECTIVES - Questions to be addressed in this study include:

- How are trophic groups, families and species distributed spatially and temporally?
- Where are ecologically unique and productive habitats located?
- How are ecologically important areas being used by living marine resources?
- Where can offshore renewable energy projects be located to maximize energy production and minimize potential impacts to the marine environment?
- What significant gaps exist in our knowledge of the physical, biological and ecological characteristics of the main Hawaiian Islands?



METHODS

1) Identify and acquire existing physical, biological and ecological datasets;
2) Organize data into a common spatial framework within GIS;
3) Synthesize GIS data and develop maps depicting spatial distribution of physical, biological and ecological data;
4) Conduct a biogeographic analysis of available data to identify ecologically significant areas;
5) Prepare a report summarizing methods and key findings.

Data used for this assessment will be standardized into a common spatial projection within GIS. The extent and quality of the data will be assessed and important data gaps will be identified.