

**BOEMRE Oregon  
OCS Renewable Energy Task Force**

**Highlights of Environmental Studies for  
Renewable Energy in the Pacific Region**

**Portland, Oregon  
March 31, 2011**

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Chief, Environmental Studies Section**

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**Environmental Studies for  
Renewable Energy**



- 2 Completed Studies at ~\$ .75M
- 10 Ongoing Studies at ~\$ 6.3M
- 4 Planned for FY 2011 ~\$ 1.5M
- 5 Proposed for FY 2012-2014

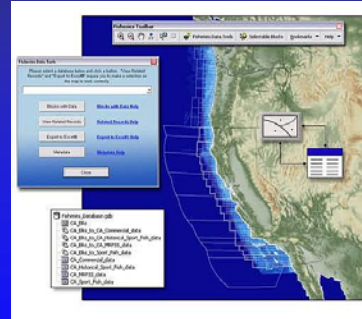
[http://www.boemre.gov/omm/pacific/enviro/enviro\\_studies.htm](http://www.boemre.gov/omm/pacific/enviro/enviro_studies.htm)

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# Completed Studies



**BOEMRE 2010-014**  
Updated Summary of Knowledge:  
Selected Areas of The Pacific Coast



**BOEMRE 2010-023**  
Pacific Coast Fisheries GIS  
Resource Database

<http://www.boemre.gov/omm/pacific/enviro/Enviro-Studies/completed-environmental-studies.htm>

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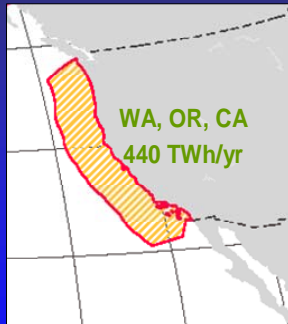
# Ongoing Environmental Studies for Renewable Energy



- Expand our area of study to encompass the Pacific coast for siting renewable energy projects
- Increase information on existing resources and habitats
- Help to discover potential impacts from installation of renewable energy structures

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# Pacific Region Study for Planning and Siting



Partnership with DOE & NOAA to develop a robust, quantifiable analysis system to assist decision makers in accurately siting future ocean renewable energy projects

Bayesian Integration for Marine Spatial Planning and Renewable Energy Siting

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# Pacific Region Study of Environmental Resources




Aerial surveys of seabirds and marine mammals





Partnership with USGS and FWS to investigate resources within areas of interest for renewable energy installation

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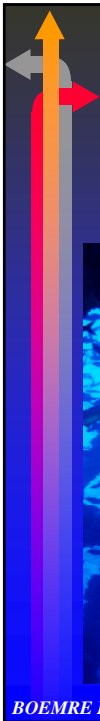
# Pacific Region Study of Environmental Resources

Survey of Benthic Communities near Potential Renewable Energy Sites Offshore the Pacific Northwest




Partnership with OSU and WSU through NW CESU to investigate resources within areas of interest for renewable energy installation

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# Pacific Region Study of Environmental Resources

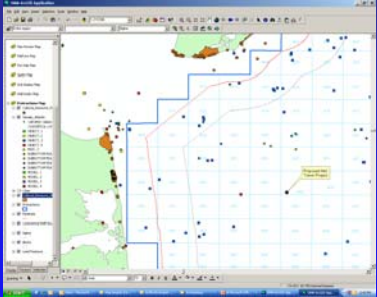

Protocols for Baseline Studies and Monitoring For Ocean Renewable Energy



Partnership with DOE and NOAA to recommend protocols for pre-installation sampling and post-installation monitoring

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**Pacific Region Study of Environmental Resources**



Inventory and Analysis of Coastal and Submerged Archaeological Site Occurrence on the Pacific OCS

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**Pacific Region Investigation of Potential Impacts**

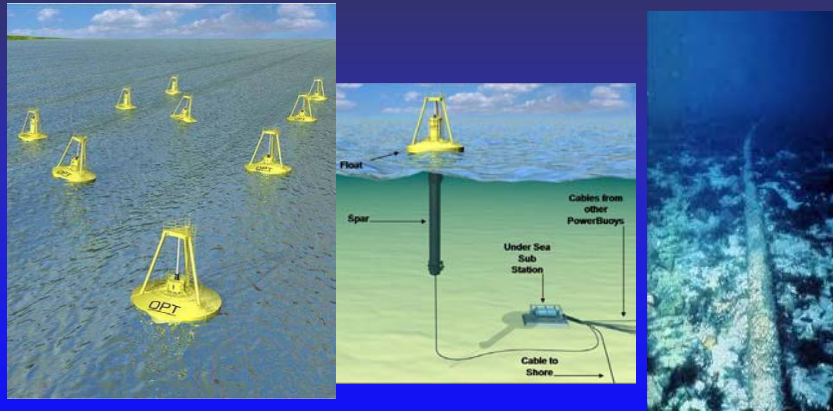


Partnership with DOE and NOAA to investigate viewshed and visual effects

Renewable Energy Visual Evaluations

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## Pacific Region Investigation of Potential Impacts



Effects of Electromagnetic Fields from Transmission Lines on Elasmobranchs and Other Marine Species

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## Pacific Region

### On the Horizon for Renewable Energy Studies



- Continue and expand partnerships
- Complete ongoing siting and spatial planning studies
- Continue study of environmental resources and potential impacts
- Initiate and maintain monitoring studies
- Integrate information into ecosystem understanding

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## Additional Information on Studies in Support of Renewable Energy

Environmental Studies Program  
<http://www.boemre.gov/eppd/sciences/esp/RenewableEnergyResearch.htm>

Technology Assessment & Research Program  
<http://www.boemre.gov/tarprojectcategories/RenewableEnergy.htm>

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U.S. Department of the Interior

Bureau of Ocean Energy Management, Regulation and Enforcement

<http://boemre.gov/>

[http://www.boemre.gov/omm/pacific/enviro/enviro\\_studies.htm](http://www.boemre.gov/omm/pacific/enviro/enviro_studies.htm)

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