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OCS Scientific Committee Meeting
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Presenter:

Donna Schroeder

Marine Ecologist

Pacific Region

donna.schroeder@boem.gov

805-389-7805

Contact:

Mark Eckenrode

Physical Scientist

Pacific Region

mark.eckenrode@boem.gov

805-389-7827

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Proposed FY 2014 Studies – Pacific Region

Page	Discipline	Title	Rank
23	PO	Expansion of West Coast Oceanographic Modeling Capability	1
25	IN (HE/SE)	Potential Impacts of Submarine Power Cables on Crab Harvest	2
27	MM	Data Synthesis and High-resolution Predictive Modeling of Marine Bird Spatial Distributions on the Pacific OCS	3
29	IN (HE/SE)	Archaeological and Biological Assessment of Submerged Landforms off the Pacific Coast	4
31	IM	West Coast Information Transfer Meeting	5
33	FE	Predicting and Detecting the Effects of Climate Change and Ocean Acidification Using Long-term Ecological Data	6
35	**FE**	**Understanding and Mitigating the Effects of Marine Renewable Energy Technologies on the Coastal and Marine Environment in the Pacific OCS Region**	**7**
37	HE	Collecting and Archiving Invertebrates from MARINe Sites for Deposition in the Smithsonian Institution with Local Replicate	8
39	HE	Year-round and Diel Patterns in Habitat-use of Seabirds off Oregon	9
41	HE	Strategic Resampling of Biodiversity Surveys at MARINe Sites: Completion of the Decadal Assessment	10

FE = Fates & Effects
HE = Habitat & Ecology
IM = Information Management
IN = Interdisciplinary
MM = Marine Mammals & Protected Species
PO = Physical Oceanography
SE = Social & Economic Sciences

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Proposed FY 2014 Study Supporting Renewable Energy

Discipline	Title	Rank
FE	Understanding and Mitigating the Effects of Marine Renewable Energy Technologies on the Coastal and Marine Environment in the Pacific OCS Region	7
Needed now to assess potential effects and mitigation to avoid or reduce impacts of future Pacific Region renewable energy projects		

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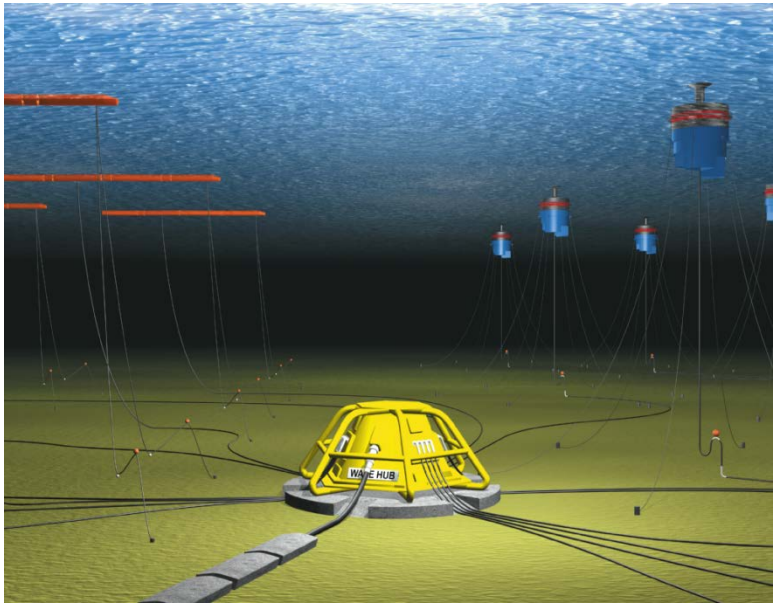
Understanding and Mitigating the Effects of Marine Renewable Energy Technologies on the Coastal and Marine Environment in the Pacific OCS Region

BOEM Information Need:

Research and monitor the effects of marine renewable technologies on the marine and coastal environment and develop mitigation to reduce or avoid potential impacts to support NEPA analyses and ensure safe and environmentally sound renewable projects.



Relationship to Previous BOEM-Supported Research:

Builds on the 17-year Environmental Mitigation Effectiveness Study initially awarded in 1997 with extensions in 2002 and 2007. These successful studies resulted in12 separate Task Orders designed to evaluate, through field monitoring and observations, environmental mitigation effectiveness of measures and project conditions required of post-lease Pacific OCS oil and gas operations. Examples of previous Task Orders included multiple disciplines involving marine and coastal birds, marine mammals, H_2S dispersion zones, produced water studies, physical and chemical profiling of Pacific OCS shell mounds, and abandoned well-head surveys.

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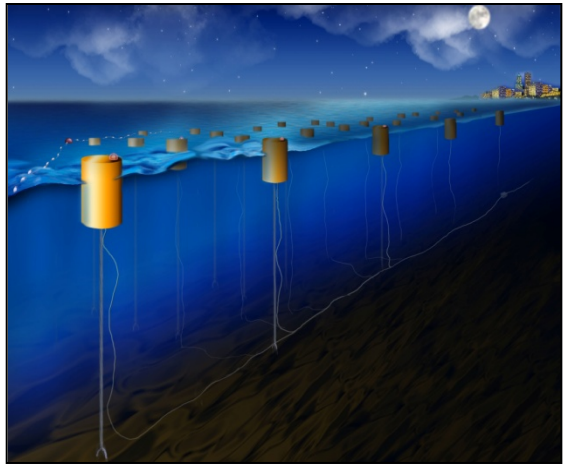
Understanding and Mitigating the Effects of Marine Renewable Energy Technologies on the Coastal and Marine Environment in the Pacific OCS Region

BOEM Objectives:

1) Research, observe, sample, and/or monitor offshore renewable energy applications and technologies in the Pacific Region.

2) Determine potential environmental effects on the coastal and marine environment from offshore renewable energy applications and technologies.

3) Evaluation of renewable energy technologies and commensurate impacts to develop technology-specific mitigation measures, best management practices, and project conditions to ensure safe and environmentally sound renewable energy applications.



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Understanding and Mitigating the Effects of Marine Renewable Energy Technologies on the Coastal and Marine Environment in the Pacific OCS Region

Study Methods:

1) Actual site monitoring to determine the environmental effects of various renewable energy device technologies and applications.

2) Initial focus of site and project monitoring to initially utilize wind and MHK renewable projects approved and proposed offshore Oregon.

3) Development of field monitoring protocol to support effective analysis, mitigation, and management of offshore renewable energy sources.

4) Additional research may include literature surveys, oceanographic and sediment modeling, and summary of knowledge reviews.