

OCS Scientific Committee Meeting May 2013



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# Proposed FY 2014 Studies – Pacific Region

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27	ММ	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
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FE = Fates & Effects

IN = Interdisciplinary

HE = Habitat & Ecology

MM = Marine Mammals & Protected Species

IM = Information Management

PO = Physical Oceanography SE = Social & Economic Sciences





## Proposed FY 2014 Study Supporting Conventional and Renewable Energy

Discipline	Title	Rank		
IN (HE/SE)	Archaeological and Biological Assessment of Submerged Landforms off the Pacific Coast	4		
Needed now to assess potential impacts to submerged landforms and associated biological habitat				





#### Archaeological and Biological Assessment of Submerged Landforms off the Pacific Coast

# **BOEM Information Need:**

- Assess survey guidelines that ID potential submerged landform features
- Expand knowledge-base for potential OCS prehistoric sites
- Identify sensitive habitats

## **<u>Relationship to Previous and Ongoing</u>** <u>**BOEM-Supported Research:**</u>

- Seafloor and seeps mapping
- Archaeological inventories
- Benthic habitat studies
- Similar efforts in GOM and offshore Rhode Island









# **BOEM Objectives:**

- 1) Conduct field investigations of areas that have been identified as having a high potential to be associated with paleocultural landforms
- 2) Field test a geospatial model that will aid in the identification and classification of potential paleocultural landforms from existing remote sensing data and seafloor maps in areas along the Pacific Coast
- 3) Identify paleolandform features that may indicate sensitive habitat areas







#### **Study Methods:**

- 1) Evaluate existing remote sensing data and review current theories on sea level rise during the Last Glacial Maximum (LGM) to identify high probability areas for further testing.
- 2) Conduct fine-scale survey and ground-truth at least four submerged landform features.
- 3) Analyze new data for possible indicators of prehistoric human activity and biological resources associated with paleolandforms.
- 4) Develop and refine a model that can be used to interpret remote sensing data and seafloor maps in other areas along the Pacific Coast.







