



PRESENTER & CONTACT:

Mary Elaine Helix

BIOLOGIST

Pacific Region

maryelaine.helix@boem.gov

415-296-3353



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



Discipline	Title	Rank
HE	Collecting and Archiving Invertebrates from MARINE Sites for Deposition at the Smithsonian Institution with Local Replicate	8
Needed now to validate and archive species identified through MARINE long-term monitoring program along the coast		



BOEM Information Need:

Archival and reliable curation of invertebrate specimens are essential elements of biological quality assurance for BOEM long-term monitoring programs, in this case, for MARINE. It provides the scientific credibility needed to support decisions using these data.

Relationship to Previous BOEM-Supported Research:

This study is directly related to two BOEM efforts: the Smithsonian support contract and BOEM-MARINE. Following the collection and initial placement of specimens described in this proposal, long-term storage of specimens will be funded through the over-arching BOEM Smithsonian contract. Future collections of specimens will be included in future funding of MARINE by BOEM.



BOEM Objectives:

- 1) Authentic documentation of species identified in MARINE field studies and reports
- 2) Consistency in archival methods and repository within MARINE and BOEM
- 3) Quality assurance for biological data generated through the BOEM ESP and the credibility of offshore energy resources decisionmaking
- 4) Preservation of federally funded biological samples and providing for their availability for scientific study into the future



Study Methods:

- 1) The lead field taxonomist would consult Smithsonian curators and California Academy of Sciences to ensure coordination with the collection and labeling procedures of each facility.
- 2) A subset of sites representative of important biogeographic areas along the coast would be visited and vouchers collected.
- 3) Specimens of different age classes, morphologies, and size ranges would be targeted.
- 4) Photos showing the animals in the wild, locational information, tissues, and other data will be collected.
- 5) Specimens will be verified in the lab, labeled, and shipped according to Smithsonian instructions. A duplicate set would be sent to the CAS Research, Invertebrate Zoology and Geology Department.

