Biological and Ecology

Data and Information Synthesis

- Synthesis studies and data integration should cast as wide of a net as possible beyond BOEM
- Long-term studies such as MARINe and Flower
 Garden Banks, should be considered for independent
 external program review and synthesis
- We support all BOEM data should being available from a common portal

Consolidate Study Efforts

- BOEM should look at the efficiencies and consistencies of having similar studies in different regions managed in one location
- Examples:
 - Avian Modeling Studies
 - EMF
 - Marine Mammals

Climate Change

 With a rapidly changing climate and concomitant ecological change there is a need to establish permanent reference sites for comparison to allow assessment of impacts

Where is the Benthos?

 Proposed studies focus on higher trophic levels such as Birds and Mammals



Alaska Region

 Make efforts to ensure regional priorities are cross-walked with IARPC



Data Interface Tools to Support Environmental Analyses: Interpretation of Existing Marine Mammal Data

 Concern that the data set is being too restrictive; should include non-BOEM data



Genomics of Arctic Cod: A Sentinel Species in a Changing Environment

- This is a valuable study and has been needed for a long time, consider higher ranking
- Include archiving of tissue material from current collections for genetic and other future analyses



Ecological Processes in Lower Cook Inlet and Kachemak Bay: A Partnership

Good collaboration with existing studies



Benthic Invertebrate Habitats in Cook Inlet

- Project seems overpriced for only epifauna and megafauna
- Need to consider the entire benthic system (e.g. infauna)



Polar Bear Habitat Use, Ecology

- Perhaps should be ranked higher
- Price seems appropriate



Baleen Whale Distribution, Abundance, and Ecology in Cook Inlet and Shelikof Strait

Ranking is appropriate



Pacific OCS Region

- Consider an explicit strategic planning process to develop a more comprehensive vision (e.g. Atlantic Strategy), additional funding may be needed
- Coordinate among regions to develop consistent analytical approaches for leasing decisions, e.g., avian predictive modeling
- Build partnerships with existing oceanographic infrastructure along the coast (OOI, glider programs, C-CAN, CALCOFI)



Data Synthesis and High-resolution Predictive Modeling of Marine Bird Spatial Distribution on the Pacific OCS

- Important to do in context of future renewable energy development – cold spot identification a valid conceptual approach
- Work with other regions for consistent analytical approaches



Predicting and Detecting the Effects of Climate Change and Ocean Acidification Using Long-term Ecological Data

- We ranked this project lower given questions about relevance to BOEM needs
- Being cognizant of climate change on effects analysis is important and a clearer statement of how this study's relevance could help us support a higher ranking



Collecting and Archiving Invertebrates from MARINe Sites for Deposition in the Smithsonian Institute with Local Replicate

- Make sure that tissues are collected for future genetic analysis
- We agree with its relative ranking



Year-round and Diel Patterns in Habitat Use of Seabirds off Oregon

- If leasing is imminent consider making this a higher priority
- Merge with "Data synthesis and predictive modeling"



Strategic Resampling of Biodiversity Surveys at MARINe Sites: Completion of the Decadal Assessment

We agree with the ranking of this project.

Gulf of Mexico

- Challenging time to plan studies
- Explore leveraging other sources of funding for all Gulf projects



Investigation of Pre-Riser Discharge from Wells within Proximity to Deepwater Benthic Communities for Plans with "Zero Discharge" Mitigation

 Understanding buffer zones is an important issue, however, we're not convinced that this study will address the issue



Long-Term Monitoring at the East and West Flower Garden Banks:2014-2017

 Continued monitoring is important, and a program review and synthesis would provide recommendations on future sampling frequency



Long-Term Ecosystem Monitoring of the Deep Gulf of Mexico, Phase 1: Deep

- This is an important study; BOEM funds used for this study should avoid connections to the NRDA process
- To be an effective study, control sites are needed
- Is this appropriate for RESTORE Act funding?



Comprehensive Nearshore and Offshore Avian Surveys in the Gulf of Mexico (FY2015)

 Use comparable survey methodology, coordinating with Atlantic efforts

Atlantic OCS Region

- Applaud the well-coordinated collaborative efforts
- Coordinate renewable energy efforts with other regions, as mentioned for other regions



Atlantic Marine Assessment Program for Protected Species

- Important, well-coordinated effort
- Well-leveraged with other Partners
- Good coordination with other study in region
- Directly supports renewable energy development assessment collecting important data on birds, turtles, and mammals



Trawl Surveys in the Mid-Atlantic

- Consider archiving specimens/tissue for reference and assessment of future impacts
- Consider adding a pathology assessment
- Recognize that there may be additional cost
- Question arose about presence of shipwrecks in sample area



Determining Offshore Use by Marine Mammals and Ambient Noise Levels Using Passive Acoustic Monitoring

- Particularly important for activity assessment when visual detection is difficult, e.g., winter
- Can also detect other sources ambient noise
- Recommend leveraging financial support from state partners as appropriate



EMF (Electromagnetic Field) Impacts on Elasmobranchs and American Lobster Movement and Migration

- Suggest coordinate with similar Pacific study in project design recognizing differences (species/electrical current)
- Suggest eliminating lab studies
- Consider adding a "cognitive anthropological component"



Movement Ecology of Terns in New England

- Low-cost test proof of concept; good partnering
- Hopefully, get migration route information perhaps most useful data
- Explore technologies that provide accurate/precise flight height information for local movements
- Programming battery life to maximize useful data