THANK YOU FOR EXCELLENT PRESENTATIONS, GREAT RESPONSES TO QUESTIONS DURING THE PRESENTATIONS AND AFTER, AND FOR INDULGING OUR PERSONAL OBSESSIONS.

THE PRESENTATIONS WERE FUN AND INFORMATIVE, CLEARLY THE RESULTS OF HARD WORK.

WE APPRECIATE THE BOEM EFFORTS TO MAKE THIS EASY FOR US.

Lack of social science in interdisciplinary. Example: crab study partly based on crabbers' perceptions. Should figure out why they have these perceptions initially, why the changed or not after the study.

In each section there were studies that seemed to asking for feedback on a tool of use to BOEM (information or data needs), not science. Maybe separate these out into a different session, separate from proposals for which we can provide science advice and guidance.

Limit number of proposals to full committee, no time to discuss them.

#### Interdisciplinary Studies - Listed as presented

#### National

### Topical and Functional Expansion of Eco Spatial Information Database - Mike Rasser

ESID Expansion of the data base: Geographic expansion, now its mainly Atlantic, and to allow targeted subject matter expansion. Also to improve for compatibility with new technology.

- May be a response to OCS committee requests?
- May be of interest to BOEM internally, but why are we asked to review it? Not science, expensive, seems the "customer" is people writing NEPA reports who want to populate a bibliography. That's different than knowing papers of relevance by reading them. Minor improvement over current access to publications.

## Evaluating the effectiveness of BOEM-imposed adaptive management of biological mitigation and monitoring requirements – Brad Blythe

What are the currently required measures for mitigation and how can we make them more effective.

- BOEM should be doing this internally! BOEM needs to figure out how to assess if mitigation worked, needs to determine the assessment tools, and then use them to see if they worked.
- look at past work to see if anything has worked.
- A future study should consider the same question for cultural resources.
- Consider how this proposed evaluation of mitigation requirements might become an ongoing process.

## Environmental Effects and Cost Comparison of Single Beam, Swath, and Mutlibean Bathymetric Surveys Before and After Dredging – Mike Minor

Not science, seems we will use multi-beam at some point in the future, so why not just start? Technology has moved beyond this question. Multibeam data is orders of magnitude better than single beam. Maybe the question could be about the impacts of multibeam.

### Monitoring Dredging Intensity Using Variable Grid Analysis of Dredge Quality Management Data - Mike Minor

Opportunity to leverage with USACE.

What does USACE know already? Seems they might have done much of this? Combine with the ridge and swale recovery effort?

This seems to be only examining sand borrow. It would be more sensible to add recovery from trawl as a comparison. We realize that BOEM does not regulate fisheries, however trawl is the most common bottom disturbance (2-3 orders of magnitude more area affected yearly), so sand borrow, cable lay, and other benthic disturbances should be measured against trawl.

# Variability in Ecosystem Service, Resiliency and Post-Dredging Recovery of Ridge-Swale Habitat and Biological Communities in the Mid and South Atlantic Bight

Ridge-swale features along east coast are dredged for sand. What are effects of dredging on the habitat and ecology? Do pre and post field surveys.

Form the basis for a longer-term study.

There has been a lot of work on this. Research Planning Corp. report just released. Ok use of Sandy money (BOEM already spent money on this).

- A low cost addition would be archaeological monitoring of data and samples for evidence of human habitation. Substantial value added for minimal cost.
- different fish and crustaceans at night than during day, must consider this.

## Developing BOEM's Access to Protected Species Occurrence Data for Impact Analysis and Rule Making -Jim Price

BOEM needs ready access to info on marine protected species for marine spatial planning and other needs.

- One person said "high ranking." Good partners. (Similar to Alaska effort on page 45.)
- Seems a little like database management. Might be useful for some folks at BOEM, but seems these data should be used already? What are you not able to do now that this will facilitate?

# Support for the Development of an Improved Bio Statistical Method to Analyze and Interpret Observations from Marine Mammal Behavioral Response Studies – Jim Price

Pay for a p-doc in Australia to do some acoustic-effects-on-mammal studies, expand the MOCHA database.

- Science based. Why Australia? What has NOAA done? Maybe similar work? Need a more efficient way to do this.

- NO

#### **Pacific Region**

#### Potential Impacts of Submarine Power Cables on Crab Harvest -Bull

Will build upon other studies on EMF, industry standard cables in place both energized and non-energized. Want to use the commercial fisherman for study.

- Brilliant study, good science, testable hypothesis. Well liked.
- Suggested to do some lab studies, a "blind" test by not telling fishermen if cable is energized or not, suggested to have scientists doing same as fishermen, both sides have biases, so try to remove them by having both fishermen and scientist observers. If that costs more, worth it.
- Seasonality (changes water chemistry)? other species? (sounds like more money, but worth it?)
- opportunity that for a little extra money could do a cool social science study as discussed on page 1.

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

Do ground truth to try to get a model of sorts to relate remote sensing signatures to areas of interest (cultural, habitat).

- Good study, paleo-landscape studies are complex. Identifying prehistoric sites underwater is difficult.
  - Good example of an archaeological / biological interdisciplinary study.
  - Fulfills an important information need.
  - Ensure tribal input and consultation
  - how affective are the current guidelines for surveying of these features?

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

What are effects of projects?

- No specific plan, no site selected, fairly unfocussed at this stage, so
- Send to renewable subcommittee for feedback.

## TK Implementation Establishing Arctic Community Panels of Subject Matter Experts – Williams

Social science will discuss this.

### Integrated Seabed Surveys in the Arctic Ocean: Bathymetry, Archeological Resources, and Ice Gouge Magnitude and Recurrence Rates - Heather

Going to survey the sea floor in Arctic, ice gouge depths, bathymetry.

Expensive, but necessary. Hopefully partners will share costs.

- combine with benthic study (simultaneous, saves money)
- In the archaeological context, there should be a clear association between survey methodology and projected site detection (ie. will the lane spacing, instrumentation and resolution detect the kind of sites being sought?)
- Is this a complete survey, statistical survey, or stratified sample survey?

#### Renewable Energy Program - Atlantic

#### **RODEO - Mary Boatman**

Real time observation of effects of wind turbines. Make measurements as turbines are constructed.

- Mary asked for suggestions (never ask a room full of scientists for suggestions!)
- High ranking. Have the Renewable Energy subcommittee provide a list of suggested questions/topics, but get started soon so you do not miss initial construction.
- Subcommittee will help with being more explicit about what will be monitored and which development. The list of impacts in the study profile is speculative--both the Cape Wind EIS and the Nysted study during- and post-construction monitoring and report should be used to create a focused list of potential impacts.
- -The goal seems to be a more open-ended documentation as well. This could serve an educational purpose, for example, time lapse video of the construction practice.

#### Evaluation of Beneficial Impacts from Offshore Renewable Energy Development - Brandi Carrier

What are beneficial effects of projects?

- Important study.
- Good response to committee recommendations. Thank you.
- Include ocean health as well as human health.
- The current study profile justifies it well for NEPA, and also it could be useful for state decision-making.
- Important to quantify impacts as much as possible, so they can be compared with other financial costs or damages.
- May want to scope this to define what is included and what are the limits of the study. Easily could be expanded greatly. Good first step.

#### **Gulf of Mexico Region**

#### Texas Coastal Land Loss from 1992 to 2010 - Bruce Baird

Use landsat images to document land loss.

- There is a need. Study is well thought out, recommended.
- Would RESTORE pay for this?
- Should these guys talk with the Louisiana coastal loss study? May not be useful, but worth a conversation over coffee.