

QUESTIONS FROM PARTICIPANTS ABOUT MARINE PROTECTED AREAS AND MARINE RESERVES

Responses to the Pre-Meeting Questionnaire

MARINE RESERVE SCIENCE (QUESTIONS RELATED TO SESSION I)

General

- An update on scientific research contributing to the important decisions of selecting appropriate areas for marine reserved designation
- What is the optimal size of the reserves?
- What is the minimum size for a marine reserve to be effective?
- How marine reserves could be coupled with estuarine and terrestrial conservation efforts?
- Could structural features (e.g., artificial reefs) be incorporated into the design of the reserve?
- Who else is doing research that may be applicable to marine reserve design?

Natural Science

- MPAs and Reserves as a fisheries management tool
- What life history factors in marine fishes affect reserve design?
- How has fishing affected size of maturity for heavily fished species?
- What are the best approaches to identification and prioritization of habitats for protection?
- How we might best move forward with habitat based surveys of biota inside and outside reserves?
- How does ocean circulation relate to marine reserve selection sites?
- Will marine reserves be large enough or frequent enough to allow migratory species full protection during different life stages?
- Spill over impacts on recreational and commercial fisheries

Social Science/Economics

- How do we reconcile scientific and social/economic factors in MPA design?
- What are the potential benefits and costs?
- What community impact (socio-economic) information should be gathered before deciding where reserves should be established?
- Economic impacts

Monitoring/Evaluation

- What monitoring and research should be required to measure success?
- How will marine protected areas and marine reserves be monitored?
- Research design for evaluating reserve effectiveness
- If a multiple area design is chosen are corridors or a buffer area necessary to prevent fishers from "riding the fence" of the reserve?
- What are the long-term effects of isolated, patch-size reserves on ecology of reserves and surrounding areas?
- I am interested in learning how conservation goals can be evaluated

THE OREGON OCEAN (QUESTIONS RELATED TO SESSION II)

General

- Existing data and research needs for siting reserves
- What geospatial and other data exists, what is being collected, by whom, what format, purpose, etc.?
- What is the range of research in Oregon addressing MPAs?
- What research has or is being done in Oregon on marine reserves and marine protected areas and what information is still needed in order to determine how many reserves and protected areas are needed and where, and who has, is or should be doing the research?
- What specific types of research are most critical for ensuring successful implementation of marine reserves in Oregon?
- Studies of Reserves and MPAs in ecosystems similar to Oregon's

Natural Science

- What is the current status of information on biological communities at regional scale which could inform the process of establishing marine protected areas or reserves?
- What is the level of understanding about their level of functioning as intact ecosystems and what is their linkage to each other, the coastal ocean, and adjacent watersheds?
- What is the projected impact of urbanization and population growth on these systems?
- What are the largest, most long-term studies being done locally (north California to Puget Sound) in regard to the effects of MPAs on fishes?

Economics

- How will MPAs impact Oregon coastal communities' economic well-being?
- Will scientists work to improve fishing opportunities outside the marine reserve because they understand and are committed to Oregon's commercial fishing industry or is spillage and recruitment moving out of a reserve for fishing opportunity simply an unintended consequence?

OPAC'S MARINE RESERVE PROCESS

- What is the current situation regarding the establishment of protected areas and reserves off Oregon?
- What are the plans, strategies, and designs for a system of MPAs in Oregon?
- What are the current policy objectives of the OR state govt. and other relevant regulatory authorities on the West Coast (e.g. PFMC, CDF&G, etc.)?
- What is the basic inventory of marine protected areas in Oregon (size, location, status)
- What kind of protection do they have (created under what enabling legislation and who manages them?)?
- What is the current degree of public support for establishing marine reserves off Oregon?
- What are the primary hurdles for establishing marine reserves off Oregon?
- Is the goal of the reserve to improve commercial valuable species or is it to provide refuge for species?
- My biggest concern with the OPAC recommendations was that no weighting was given to the factors that would be considered in planning marine reserves. Statements like, "Decisions about marine reserve placement will consider social, economic and ecosystem effects using the best and most current biologic, economic and social science information." (p. 15, OPAC Recommendation) need to be fleshed out. How will this be done? The process will ultimately be a political decision.
- How can pre- and post-establishment scientific research be coordinated to maximize the information obtained as a result of Oregon's marine reserve efforts?
- What time frame (2 years, 5 years, 25 years) is to be used in evaluating "long-term benefits" from having marine reserves with regard to living marine resources, as mentioned in the OPAC recommendation?
- How can we politically get rid of the designation if the community chooses to?
- What is the current status of outreach and policy related to establishing marine reserves?
- How will all stakeholders be educated about these potential tools (and others)?
- How will these stakeholders be involved in the decisions to use these tools?
- How will these stakeholders be involved in the implementation of these tools?
- How will these stakeholders and the public be informed of this process as it evolves over time?
- If reserves are established off Oregon, what are the implications regarding scientific observations and sampling?
- Will the Coast Guard be responsible for enforcement?

THE ROLE OF SCIENCE TO INFORM DECISION-MAKING

- What opportunities will there be to integrate sound scientific knowledge into the reserve design process?
- What do the assembled scientists think they can bring to the reserve design process in OR?
- How can we, as Oregonians and scientists, convince policy makers and legislators that marine reserves are important?
- How can scientists portray data, which inevitably contain a certain degree of uncertainty, in a way that doesn't make legislators and the general public consider the findings to be invalid?
- What are the available data compilations (e.g. databases, atlases, etc.)?
- Are there efforts to merge policy objectives and data compilations?
- Are merged policy objectives and data compilations conducive to spatial analysis? (Are they compatible with GIS?)
- How can collaborative research and improved communication benefit decision-making?
- What tools / framework will facilitate their participation in the OPAC / PFMC / other processes?
- I want to get the ball rolling on a list of experts for OPAC; that is, who to call for information about a particular topic.
- I want this meeting to initiate a synthesis of existing information relevant to the 'biogeographic assessment' that OPAC is about to embark upon.
- What kinds of training, public involvement and outreach can South Slough NERR provide, assuming the goal of helping citizens and decision makers recognize the need for MPAs, understand the related issues, and ultimately, visualize the impacts that establishing MPAs might have over the long term?
- How do we alleviate the political pressure to "reopen" closed marine reserves to exploitation after conditions improve in the short term? This occurred in the Georges Bank scallop fishery. After a closure of only a few years, there was pressure to harvest the "recovering", but not "recovered" resources, and the fishery was reopened.
- Is there a 'rating system' in place that would assign priorities for protection of these MPAs and MRs in the event of an oil spill? Is there a plan in effect that provides direction for first responders at these areas after an oil spill? Is there any prepositioned spill response equipment at strategic locations near each of these areas? Who's in charge of these areas in the event of a spill?
- I am interested in knowing how scientists can approach the public with an objective assessment of what we can expect to use MPAs for

GENERAL

- I'm interested in an overview of current research in this field, meeting the players and would like to share our research currently in progress working with stock structure in four rockfish species
- I would like to update myself on local and regional research relevant to placement and efficacy of reserves along the Oregon coast.
- My main questions that I hope to answer at the meeting are what the current state of scientific and political debate are regarding marine protected areas and marine reserves, whether there is sufficient scientific knowledge and consensus regarding the virtues of these approaches to warrant pushing for their adoption, and, if so, what are the political obstacles to their adoption and what are strategies that might work to help overcome those obstacles over the medium term.