

**California Marine Life Protection Act Initiative
Master Plan Science Advisory Team (SAT)
January 8, 2008 Meeting Summary
(revised March 31, 2008)**

**Aviation Library and Museum
International Terminal
San Francisco International Airport
9:30 a.m. - 6:30 p.m.**

Note: Audio and video recordings of this meeting are available on the Internet at <http://www.dfg.ca.gov/mlpa/>. Please contact AGP Video Services at (805) 772-2715 to obtain DVD copies of these recordings.

SAT members attending: Sarah Allen, Eric Bjorkstedt, Mark Carr, Chris Costello, Steve Gaines, Dominic Gregorio, John Largier, Gerry McChesney, Steve Morgan, Karina Nielsen, Astrid Scholz, and Ray Hilborn (by teleconference).

SAT members absent: Caroline Hermans, Carl Walters

MLPA staff present: Allison Arnold, Susan Ashcraft, Amy Brookes, Darci Connor, Matt Erickson, Delbra Gibbs, Mary Gleason, Seth Miller, Melissa Miller-Henson, Rebecca Studebaker, Lynn Takata, Jason Vasques, Ken Wiseman.

Other meeting contributors: Dr. Loo Botsford, Mike Mertens

Meeting Objectives

- *Receive report from work group on parallel approaches to evaluating marine protected area (MPA) proposals and potentially approve parallel approach(es) for use in the MLPA North Central Coast Study Region*
- *Review, discuss, and potentially approve draft evaluation methods for MPA proposals*
- *Review, discuss, and potentially approve responses to science questions*

The meeting agenda can be found on the MLPA website at:
http://www.dfg.ca.gov/mlpa/meeting_010808.asp

Meeting Summary

The meeting was brought to order at 9:30 a.m.

1. Welcome, introductions, and review of agenda

Meeting was brought to order. Agenda was revised to move Costello's presentation before Ecotrust's (Mike Merten), due to a plane delay. Also, public comments may be taken after Agenda Item 5.

2. Updates

Mary Gleason provided an update on the status of draft MPA proposals, of which there are now five arrays.

3. Parallel processes workgroup report and discussion (Attachment 3 and Handouts A, J-M)

- A. Equilibrium Optimization Model - Presentation by Chris Costello
- B. Population Sustainability and Yield Model – Presentation by Dr. Loo Botsford (University of California, Davis)
- C. *MARXAN*: Optimized solver for selection/modification of MPA networks – Presentation by Mike Mertens (EcoTrust)

Mike Mertens recommended that *MARXAN* not be used for evaluating proposals.

- D. Discuss and potentially approve parallel approach(es) for use in the MLPA North Central Coast Study Region

The SAT provided the following suggestions for the parallel processes workgroup:

- Include larval movement from north/south instead of assuming a closed system.
- Incorporate more data on larval dispersal and adult home ranges.
- Incorporate species hitherto not considered by the models: non-fished species, especially those subject to anthropogenic impact, and species with short larval dispersal distances or small adult home ranges.
- Consider ecological interactions in modeling; focus on ecologically important species and foundation species.
- Include aspects of water quality.
- Reach consensus on parameters used in models.
- Use *MARXAN* fleet data to help parameterize the biological models.
- Ensure models incorporate varying levels of protection for MPAs.
- Account for differences in land ownership and meteorological patterns.
- Perform comparisons among the different modeling approaches.
- Determine which goals and objectives each model can help evaluate.
- Discuss future directions to be taken by the modeling effort, especially given the prospect of budget reductions.

The SAT made a general suggestion to consider submitting a request to the Fish and Game Commission to change the Master Plan, by replacing the size and spacing

guidelines with an appropriate model. For now, models may be complementary to the size and spacing guidelines, but cannot replace them.

4. Public comment (added to agenda)

More than twenty members of the public provided commentary. Most of the commentary was focused on the issue of potential revisions in the levels of protection for salmon trolling. Many members of the public provided anecdotal evidence and explanations of discrepancies in logbook data, suggesting that salmon trolling does not result in significant rockfish bycatch. Others questioned the quality of data currently being used for assessing the impact of salmon trolling. The lack of data on private boats was highlighted. Some recommended focusing on the actual number of rockfish taken as opposed to the percentage relative to salmon take, for the sake of addressing ecosystem functioning.

The use of models provoked much discussion as well. Many supported the use of models, but to a limited extent, expressing concern that models were going to replace stakeholder collaboration, local knowledge, or even scientific advising.

5. Evaluation methods and process for draft MPA proposals (Attachment 4 and Handouts B-F and H-I)

A. Review, discuss and potentially approve *Draft MLPA Evaluation Methods for MPA Proposals*

- a. Informative evaluations to support core evaluations (informational)
- b. Linear versus area calculations (new)
- c. Bird/mammal foraging, breeding and rearing areas (new)
- d. Size and spacing for estuaries (new)
 - Overall estuarine area must be at least 0.12 sq mi to be considered, and any habitat in that must be 0.4 sq mi. The eelgrass feature is a subtidal habitat and thus includes channels.
- e. Application of replication guidelines (informational)
- f. Application of size guidelines (informational)
- g. Levels of protection (potential revisions)

After lengthy discussion, the SAT agreed to vote on one of three alternatives, given the current status of salmon trolling. Salmon trolling currently has a high level of protection in depths greater than 50m, and has a moderate-high level in waters less than 50m, regardless of bottom type.

The alternatives:

- Salmon trolling level of protection is high regardless of depth and habitat type.

- The level of protection in less than 50m would differ with respect to habitat type, with sand having a high level, and rock having moderate-high level. In this case, it would be necessary to identify how much rock habitat is rock-dominated and how much sand habitat is sand-dominated.
- No change.

B. Evaluation timeline and presentations to the MLPA North Central Coast Regional Stakeholder Group and Blue Ribbon Task Force

6. Science questions (Attachment 5 and Handout G)

- A. Report on new questions and drafts of responses
- B. Review and potentially approve responses to outstanding science questions

7. Wrap up and next steps

The SAT postponed voting on salmon trolling until the next SAT meeting, as several key members had left the meeting and would not be able to contribute. It was requested that the SAT consider all the evaluation and levels of protection topics prior to the next meeting so that these may be reviewed quickly.

The SAT voted on bird and mammal evaluation methods, with 10 in favor and no dissents. The SAT also voted in favor of linear vs. area calculations, size and spacing for estuaries, and changing the wording for replication guidelines to Blue Ribbon Task Force.

The SAT formed a subgroup to help modelers with incorporating the suggestions outlined above, and to converge on a set of parameters to be used in the models. The subgroup includes Mark Carr, Steve Gaines, Dominic Gregorio, and John Largier.

Next SAT meeting:

January 23, 2008
Best Western Lighthouse Hotel, Pacifica
Analysis of draft MPA proposals for the north central coast

8. Adjourn

The meeting adjourned at 6:25 p.m.

Documents provided at January 7, 2008 meeting

- A. Parallel processes fact sheet: *Draft Layperson's Guide to Interpreting EDOM Model*
- B. *Methods Used to Evaluate Draft MPA Proposals in the North Central Coast Study Region (January 7, 2008 revised draft)*

- C. *Draft Data Summary: Proportion of Recreational and Commercial Salmon Fishing Grounds by Depth Strata*
- D. *Further analysis of salmon associated catch*
- E. *Potential Impacts of Sex- and Size-Selective Harvesting in Crab Populations*
- F. *Potential Impacts of Mariculture Activities in the MLPA North Central Coast Study Region*
- G. *Draft Responses to Question #9 Posed at the October 16-17, 2007 Meeting of the North Central Coast Regional Stakeholder Group (January 6, 2008)*
- H. *PowerPoint slides: An analysis of rockfish landings associated with commercial salmon troll fishery off California (Eric Bjorkstedt, MLPA Master Plan Science Advisory Team, Parallel Approaches Work Group)*
- I. *PowerPoint slides: Impact of associated catch from salmon trolling (Ray Hilborn, MLPA Master Plan Science Advisory Team, Parallel Approaches Work Group)*