

**CALIFORNIA MARINE LIFE PROTECTION ACT INITIATIVE
MASTER PLAN SCIENCE ADVISORY TEAM
THURSDAY, AUGUST 16, 2007 MEETING SUMMARY
Aviation Library and Museum, International Terminal
San Francisco International Airport
Burlingame, California
*Revised September 10, 2007***

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.

Welcome, Introductions, and Review of Agenda

SAT members attending: Sarah Allen, Mark Carr, Chris Costello, Steve Gaines, Dominic Gregorio, Caroline Hermans, Ray Hilborn, Gerry McChesney, Steven Morgan, Pete Raimondi, Astrid Scholz, John Ugoretz, Carl Walters

SAT members absent: Eric Bjorkstedt, John Largier, Karina Nielsen

MLPA staff present: Dr. Mary Gleason, Seth Miller, Melissa Miller-Henson, Paulo Serpa, Rebecca Studebaker, Jason Vasques, Ken Wiseman

Meeting objectives:

- *Consider measurability of regional goals and objectives (request from MLPA North Central Coast Regional Stakeholder Group, NCCRSG)*
- *Identify process for responding to NCCRSG science questions*
- *Review existing science guidelines and evaluation framework for MPA proposals in context of north central coast*
- *Receive presentations of potential parallel approaches for evaluating MPA proposals*
- *Create sub-team to develop draft list of north central coast species likely to benefit from MPAs*
- *Provide input to draft north central coast regional profile*

North Central Coast Regional Goals and Objectives

MLPA staff presented draft NCCSR provisional regional goals and objectives for SAT review as requested by the NCCRSG members at their July 10-11, 2007 meeting. The NCCRSG requested the SAT to consider three key issues; 1) the measurability of all objectives, 2) the selection of a measurable indicator in Goal 3, objective 2, and 3) identify unique habitats in the NCCSR. It was requested that each sub-team produce responses on behalf of the SAT, in time for the NCCRSG meeting August 22-23, 2007. These responses would be considered "provisional" until the entire SAT could review them at its next meeting.

SAT sub-groups were formed to review and provide responses to the proposed changes made by NCCRSG members:

Goal 1: "To protect the natural diversity and abundance's of marine life, and the structure, function, and integrity of marine ecosystems." (Sub-team: Mark Carr, Steve Gaines, Sarah Allen)

Goal 2: "To help sustain, conserve, and protect marine life populations, including those of economic value, and rebuild those that are depleted." (Sub-team: Steven Morgan, John Largier, Loo Bostford to assist sub-team)

Goal 3: "To improve recreational, educational, and study opportunities provided by marine ecosystems that are subject to minimal human disturbances, and to manage these uses in a manner consistent with protecting biodiversity." (Sub-team: Caroline Hermans, Chris Costello, Astrid Scholz, Gerry McChesney)

Goal 4: "To protect marine natural heritage, including protection of representative and unique marine life habitats in north central California waters, for their intrinsic value." (Sub-team: Mary Gleason, Pete Raimondi, Domonic Gregorio)

Science Questions from the NCCRS

SAT Co-Chair Mark Carr outlined a process for handling questions from the NCCRS. The SAT voted in agreement that the co-chairs and MLPA staff will determine the appropriateness of questions prior to SAT review. It was decided that provisional responses will be created by SAT support staff or sub-groups of the SAT and may then be passed on to the NCCRS as provisional pending full SAT review. Responses will become final only after they are agreed upon by the full SAT. Questions presented to the SAT and some of the discussions included:

1. Determine the measurability of draft north central coast provisional regional goals and objectives and review the language content of these goals and objectives (addressed above in section II, 1 goals and objectives).
2. What are the key and unique habitats in the north central coast study region?
 - i. The San Francisco Bay tidal plume and the Farallon Islands were identified as potential candidates as "unique habitats". A sub-team was formed to create a clear statement of what is meant by unique and to identify habitats or features that should be included in this list (sub-team: Mary Gleason, Pete Raimondi, and Dominic Gregorio).
3. Review the list of species most likely to benefit from MPAs and revise as appropriate to the NCCRS (sub-team: Pete Raimondi, Gerry McChesney, John Ugoretz, and Mark Carr).
4. Do existing depth zones need to be split up or revised?
 - i. (Currently the SAT guidelines include three major depth strata: 0-30 m, 30-100 m, 100 - 200 m and >200m) A sub-team was tasked to address whether it is necessary to increase the resolution within the 30-100 m depth zone (the NCCRS has limited depth strata over 100 m). An additional question to be answered is: are there certain species ranges that include only a certain portion of a depth stratum (sub-team: Mark Carr, Pete Raimondi, and John Ugoretz)?

5. What is the influence of offshore habitats, such as Bodega Canyon and Cordell Bank, upon state waters? More specifically, do these offshore habitats affect species assemblages and communities within state waters?
 - i. Cordell Bank was discussed as an area to consider and National Marine Sanctuaries was identified as a source of information on this topic. A sub-team was tasked to address these questions. (sub-team: Mark Carr, Dominic Gregorio, Sarah Allen)
6. What is the proper spacing and seasonal buffers to prevent disturbance of marine mammals and nesting sea bird colonies (sub-team: Sarah Allen, Gerry McChesney)?
7. Can the SAT review and comment on the list of important features found within the draft north central coast regional profile? It was requested that members of the SAT review the list of important features in the north central study region (section 3.3 of the draft regional profile), and send comments to Mary Gleason who will include comments into the draft profile and formulate a response to address this question.
 - i. Are there biological breaks in species distribution within the NCCSR? More specifically; what are the latitude and longitudinal discontinuity of species structure within the NCCSR?
8. Discussion of this question raised three major regions of biotic breaks along the coastline; north and south of Point Reyes headlands and the Farallon Islands. (sub-team: Pete Raimondi, Steve Gaines, Mark Carr)

Draft Regional Profile for the North Central Coast Study Region

MLPA staff presented an overview of the draft regional profile for the north central coast. The SAT was asked to review the document and send comments to the MLPA comments address (MLPAComments@resources.ca.gov) or directly to Dr. Mary Gleason.

Guidelines and Framework for Evaluating MPA Proposals

MLPA staff presented three sources of guidance to the regional stakeholders in developing alternative MPA proposals: 1) the Marine Life Protection Act, 2) science guidelines in the draft *California Master Plan for Marine Protected Areas*, and 3) DFG feasibility criteria. It was stated that the guidelines provided in the feasibility criteria are not rules, but rather criteria DFG will take into consideration when analyzing alternative MPA proposals.

Dr. Mark Carr and Dr. Steve Gaines presented the guidelines and rationale for the guidelines that were used in the first phase of the MLPA Initiative (and applied to the central coast).

Evaluation of Existing MPAs in the NCCSR

MLPA staff presented the *Preliminary Evaluation of Existing North Central Coast MPAs* as created by staff based upon existing SAT guidelines and DFG feasibility criteria. The SAT was asked to review this document and provide further analysis if needed. This document provides

important information to assist the NCCRSG in its task of evaluating existing MPAs as part of the process of developing alternative MPA proposals.

Potential Parallel Approaches for MPA Proposal Evaluation

Five models were presented to the SAT for possible use in evaluating alternative MPA proposals in the NCCSR. The model presentations and associated presenters were:

- *Marxan/Marzone and its Application to California's Marine Life Protection Act* – Astrid Scholz
- *Status of Central California Marine Populations and Potential Effects of MPAs on their Sustainability* - Loo Botsford
- *A model to evaluate MPA alternatives and size and spacing criteria* - Ray Hilborn
- *Ecospace models for evaluation of multispecies and ecosystem impacts of alternative MPA proposals* - Carl Walters
- *Spatial flow, fish, and fishing and their consequences for reserves* - Chris Costello

A sub-team was formed and tasked with evaluating these models to provide two pieces of information: 1) whether, any common themes exist among the models presented that could refine the existing SAT guidelines, and 2) a description of how some or all of the models could be applied as a parallel approach to evaluating MPA proposals. Members of the sub-team are Chris Costello, Steve Gaines, Ray Hilborn, Astrid Scholz, Sara Allen, Caroline Hermans, Eric Bjorkstedt, and John Largier. Loo Botsford will assist the group as an outside advisor.

List of Species Likely to Benefit from MPAs

MLPA staff presented the mandate and background for the list of species likely to benefit from MPAs. The SAT agreed that a sub-team could review the list from the central coast and provide revisions as they apply to the NCCSR, along with rationale for revisions. A sub-team was created for this task: Pete Raimondi, Gerry McChesney, John Ugoretz, and Mark Carr.

Summary of Public Comments

Public comments addressed issues such as the uniqueness of the Farallon Islands and the area between Saunder's Landing and Stewart's Point, eelgrass in Tomales Bay, and concern about the use of models in the process. Additional comments included concern about socioeconomics, fisheries management measures in regard to MPA implementation and a request to provide more opportunity for public comment during SAT meetings. Also, members of the NCCRSG stressed the need for clear and specific guidance from the SAT to assist them in developing a single proposal.

Next Steps

Upcoming meetings are:

- September 17, 2007 (via conference call - conference line information will be posted with meeting agenda)
- October 1, 2007 – Aviation Library and Museum, San Francisco International Airport

Briefing Documents Provided Before or at the August 16, 2007 SAT Meeting

1. Provisional Draft Regional Goals and Objectives
2. Memo to NCCRSG regarding guidelines for developing marine protected area proposals (June 25, 2007)
3. Draft Preliminary Evaluation of Existing State Marine Protected Areas in the MLPA North Central Coast Study Region (July 3, 2007)
4. Some Key Species Likely to Benefit from Marine Protected Areas in the Central Coast Study Region (November 2005)
5. Key Species Likely to Benefit from MPAs (November 2005)
6. Monitoring Framework from the MLPA Baseline Science-Management Panel for Central Coast MPA Objectives