

California MLPA Master Plan Science Advisory Team
Summary of the February 11, 2010 Meeting
Revised February 17, 2010

Meeting Date, Time and Place

Thursday, February 11, 2010
9:30 a.m.

Via teleconference and webinar

Public onsite access with MLPA staff was provided at the following locations:

C.V. Starr Community Center*
300 South Lincoln Street
Fort Bragg, CA

Resources Building *
1416 Ninth Street, Room 1320
Sacramento, CA 95814

Humboldt Bay Aquatic Center*
921 Waterfront Drive, Room 211
Eureka, CA

California Department of Fish and Game *
4665 Lampson Avenue, Suite C
Los Alamitos, CA 90720

Hampton Inn & Suites*
Redwood Room, Third Floor
100 A Street
Crescent City, CA

UCSB Marine Science Institute
Marine Science Research Building*
Room 3322
Santa Barbara, CA 93106-6150

SAT members attending: Larry Allen, Eric Bjorkstedt, Mark Carr, Chris Costello, Kevin Fleming, Steve Gaines, Dawn Goley, Dominic Gregorio, David Hankin, Ron LeValley, Phillip Levin, Steven Morgan, Steve Murray, Karina Nielsen, Pete Raimondi, Steven Rumrill, Astrid Scholz, Craig Strong, Steve Wertz, and Will White.

SAT members absent: John Largier.

Meeting Objectives

- *Receive MLPA Initiative process updates*
- *Review and potentially adopt marine protected area (MPA) evaluation methods for the MLPA North Coast Study Region*
- *Review and potentially adopt draft responses to science questions from the public and external array proponents*

Both audio and video recordings of this meeting are available on the MLPA website at http://www.dfg.ca.gov/mlpa/meetings_n.asp.

Executive Summary

On February 11, 2010, the fourth meeting of the Marine Life Protection Act (MLPA) Master Plan Science Advisory Team (SAT) for the MLPA North Coast Study Region (NCSR) was held via teleconference and webinar. Members of the public were invited to join MLPA staff at various locations throughout the study region and California to hear and view the meeting. During the meeting, SAT members approved a number of briefing documents and evaluation methods. Initially decisions to approve many of these documents and evaluation methods were scheduled for the January 20-21 SAT meeting, and were discussed at length at that time; due to inclement weather preventing some in-person participation, action on the items was held over to the February 11 meeting to allow more time for public comment and SAT discussion.

Members approved all SAT evaluation methods presented during the meeting, including those for habitat representation, habitat replication, bioeconomic modeling, benefits to marine birds and mammals, marine protected area (MPA) size, MPA spacing, potential commercial and recreational fishery impacts, and water and sediment quality. SAT members also approved the inclusion of information about three specific habitat types (offshore rocks and sea stacks, dynamic river mouths, and drowned river canyons) under existing key habitats (see Agenda Item A); voted to recommend the inclusion of at least one replicate of each habitat type in each bioregion (see Agenda Item B); approved the continued development of the supplemental connectivity metric by the modeling work group (see Agenda Item C); and approved the methods used for assigning levels of protection and six newly proposed levels of protection (see Agenda Item G).

The SAT approved Briefing Documents A.2, C.2, E.2, F.2, G.2, H.1, H.2, and J.1.

Meeting Summary

Welcome, Introductions and Review of Agenda

On February 11, 2010, the fourth meeting of the MLPA Master Plan Science Advisory Team (SAT) for the MLPA North Coast Study Region (NCSR) was held via teleconference and webinar. Members of the public were invited to join MLPA staff members at locations throughout the study region and California to hear and view the meeting.

I. Updates

Ken Wiseman gave an update on the MLPA North Coast Regional Stakeholder Group (NCRSG). The NCRSG had an excellent start this week at its first meeting in Eureka on February 8-9, 2010.

Evan Fox gave an update on marine protected area (MPA) arrays that were submitted by external array proponents on February 1. Eight arrays were submitted, and include from ten to sixteen MPAs each. Staff is currently preparing the arrays for the SAT and public viewing, and the arrays should be available the week of February 15. SAT members and staff then will

conduct evaluations and present the evaluation results at the March 16-17 SAT meeting in Eureka.

Satie Airamé gave an update on the SAT tribal work group. The work group met with tribal representatives on January 20 in Eureka and had a follow-up conference call to address additional topics. The work group anticipates one additional conference call before the March 16-17 SAT meeting and will provide another update during that meeting.

II. MPA Design Guidelines and Evaluation Methods for the MLPA North Coast Study Region

A. Review and potentially approve SAT evaluation methods for habitat representation

Mark Carr presented information on key and unique habitats and evaluation methods for habitat representation. The work group recommended that the proposed unique habitats in the NCSR (offshore rocks and sea stacks, dynamic river mouths, and drowned river canyons) should be mentioned as interesting sub-types of existing key habitats, rather than identifying them as unique habitats. To create the habitat representation evaluation, SAT members consider the availability of habitats; calculate the percent of each habitat in MPAs at each level of protection; and finally note where representation of a habitat is not possible in a given bioregion due to the scarcity of that habitat. The SAT voted to approve the evaluation methods for habitat representation, the supporting document (Briefing Document A.2) describing the evaluation methods, and the inclusion of those newly identified habitats as part of the key habitats.

B. Review and potentially approve SAT evaluation methods for habitat replication

Pete Raimondi presented the SAT evaluation methods for habitat replication. The habitat replication work group determined the amount of habitat necessary to count as a replicate for all habitats except estuaries. The work group created species/area curves for each habitat type and determined the amount of habitat necessary to capture 90% of the available species. The SAT voted to approve the recommendation to have at least one replicate of each key habitat in each bioregion, and the habitat replication evaluation methods.

C. Review and potentially approve evaluation methods for bioeconomic modeling

Chris Costello and Will White presented the evaluation methods for bioeconomic modeling and the supplemental connectivity metric. The modeling effort calculates what populations of model species will look like in the future given a range of different assumptions about future fishery management. The species to be used in the NCSR will include black rockfish, brown rockfish, cabezon, redbelt surfperch, Dungeness crab, red abalone, and red sea urchin; these species will be added to the model as information becomes available. The modeling work group also has continued to develop a supplemental connectivity metric, which provides information about the genetic connectivity among MPAs. The SAT voted to approve the bioeconomic modeling evaluation methods and the supporting text for those methods (Briefing Document C.2), and agreed that the work group should continue developing the supplemental connectivity metric.

D. Review and potentially approve the SAT evaluation methods for benefits to marine birds and mammals

Craig Strong presented the evaluation methods for benefits to marine birds and mammals. The birds and mammals work group will evaluate how well each proposed MPA array captures five types of areas that may provide direct and indirect benefits to marine birds and mammals: breeding sites, roost/haulout sites, nearshore foraging areas, neritic foraging “hot spots,” and estuarine and coastal habitat (particularly Humboldt Bay). The SAT voted to approve the evaluation methods, though the SAT will review and look to approve the supporting document at a future meeting.

E. Review and potentially approve SAT evaluation methods for MPA size

Steve Gaines presented the SAT evaluation methods for MPA size. The evaluation methods include measuring individual MPA areas, considering the levels of protection, combining into clusters any contiguous MPAs that have levels of protection at least moderate-high or above, and then tabulating MPA cluster areas relative to minimum and preferred size guidelines. SAT members approved the evaluation methods and the supporting document (Briefing Document E.2).

F. Review and potentially approve SAT evaluation methods for MPA spacing

Steve Gaines presented the SAT evaluation methods for MPA spacing. The spacing evaluation team will measure the gaps between adjacent MPA clusters that include each type of habitat at levels of protection that are moderate-high or above. The SAT voted to approve the evaluation methods and the supporting document (Briefing Document F.2).

G. Review and potentially approve levels of protection and supporting text

Mark Carr presented newly proposed levels of protection (LOPs) and the supporting text for both those and previously approved LOPs. New LOPs include coastal pelagic finfish by round-haul net and dip net (high); surf and night smelts by dip net, a-frame net, and cast net (moderate-high); salmon by hook and line in waters <50m (moderate); any surfperch from shore by hook and line (moderate); sea urchin by hand (moderate-low); and surfperch by hook and line if not specifying shorefishing only (moderate-low). SAT members had a robust discussion on the new proposed LOPs, particularly surfperch from shore. SAT members voted to approve the LOP decision tree and the assumptions under which the LOP decisions are made, as well as the newly proposed levels of protection and the supporting document (Briefing Document G.2).

H. Review and potentially approve the SAT evaluation methods used to estimate potential commercial and recreational fishery impacts

Astrid Scholz presented the SAT evaluation methods for potential commercial and recreational fishery impacts. These methods had been presented at several previous meetings, so there

was little discussion by SAT members. The SAT voted to approve the evaluation methods and the supporting text (Briefing Documents H.1 and H.2).

I. Review and potentially approve the SAT evaluation methods for water quality

Dominic Gregorio presented the SAT water quality evaluation methods. The evaluation is a scoring system that divides MPAs into two groups (coastal MPAs and MPAs in estuaries/embayments) and assigns a score to each MPA based on its co-location with areas of water quality concern or areas of water quality opportunity. These methods are unchanged from those presented at the January 20-21, 2010 SAT meeting. The work group highlighted that this evaluation should be considered secondary to the other evaluations. The SAT voted to approve the evaluation methods but will review and look to approve the supporting guidance document at its next meeting.

III. Science Guidance Questions from the Public and External Array Proponents

J. Review and discuss SAT responses to science questions received at the December 16-17, 2009 SAT meeting

Satie Airamé presented the draft responses to the science questions received at the December 16-17, 2009 SAT meeting. SAT members discussed adding information to the answer to Question 6, which addresses the issue of how a few large MPAs might be considered by the SAT. SAT members voted to approve the responses to science questions (Briefing Document J.1), with the caveat that a new work group will be formed (consisting of the modeling work group with the addition of Phil Levin and Chris Costello) to present more information about how a few large MPAs might be considered by the SAT.

K. New science questions to be addressed

Satie Airamé notified the SAT that more questions had been submitted to the SAT and staff and co-chairs will distribute those questions to the appropriate work groups and staff members. The answers should be available for review at the next SAT meeting.

Wrap-up and Next Steps

L. Other items

Mike Prall reviewed the timeline for the proposal evaluations and noted that Satie Airamé will be contacting SAT members and staff leads for each evaluation. SAT members were given a list of upcoming MLPA meetings; the SAT's next meeting will be March 16-17 in Eureka.

Public Comments

Members of the public provided extensive comments during the meeting both over the phone and through participation at the staffed locations. Comments focused on the various evaluation methods that were presented, but members of the public also commented on the availability of data on source and sink populations in the NCSR, the importance of marine resources to the

coastal communities in the NCSR, and how the NCSR is unique in California due to its relatively low fishing effort and remoteness.

Briefing Documents

- A.1: PowerPoint Presentation: Habitat Representation Evaluation Methods for the North Coast Study Region
- A.2: Methods Used to Evaluate MPA Proposals in the North Coast Study Region (DRAFT): Chapter 4 – Habitat Representation Analyses (Goals 1 and 4) (revised February 8, 2010)
- B.1: PowerPoint Presentation: Habitat Replication Evaluation Methods for the North Coast Study Region
- C.1: PowerPoint Presentation: Spatial Bioeconomic Model Evaluation Method for the North Coast Study Region
- C.2: Methods Used to Evaluate MPA Proposals in the North Coast Study Region (DRAFT): Chapter 8 and Appendix B – Bioeconomic Modeling (revised February 4, 2010)
- D.1: PowerPoint Presentation: Marine Birds and Mammal Evaluation Methods
- E.1: PowerPoint Presentation: MPA Size Evaluation Methods for the North Coast Study Region
- E.2: Methods Used to Evaluate MPA Proposals in the North Coast Study Region (DRAFT): Chapter 6 – MPA Size (revised February 4, 2010)
- F.1: PowerPoint Presentation: MPA Spacing Evaluation Methods for the MLPA North Coast Study Region
- F.2: Methods Used to Evaluate MPA Proposals in the North Coast Study Region (DRAFT): Chapter 7 – MPA Spacing (revised February 4, 2010)
- G.1: New and or Revised LOPs – Handout Placeholder
- G.2: Methods Used to Evaluate MPA Proposals in the North Coast Study Region (DRAFT) Chapter 3 and Appendix A – Protection Levels (Goals 1, 2, 4 and 6) (revised February 10, 2010)
- H.1: Methods Used to Evaluate MPA Proposals in the North Coast Study Region (DRAFT) Chapter 12 – Commercial and Recreational Fishery Impacts (revised January 29, 2010)
- H.2: Methods Used to Evaluate MPA Proposals in the North Coast Study Region (DRAFT): Appendix C – Evaluation of Potential Impacts to Commercial and Recreational Fisheries (revised January 13, 2010)
- H.3: PowerPoint Presentation: Potential Impacts to Commercial and Recreational Fishing Evaluation Methods
- I.1: PowerPoint Presentation: Water Quality Evaluation Methods in the MLPA North Coast Study Region
- I.2: Methods Used to Evaluate MPA Proposals in the North Coast Study Region (DRAFT): Chapter 10 – Water and Sediment Quality (February 8, 2010)
- J.1: Draft Responses to Science Questions Posed at the December 16-17, 2009 Meeting of the MLPA Master Plan Science Advisory Team (revised January 20, 2010)
- L.1: Members of the North Coast Regional Stakeholder Group (revised February 8, 2010)
- L.2: Calendar of Upcoming Dates for the North Coast Study Region (revised February 9, 2010)