

**California Marine Life Protection Act Initiative
External Marine Protected Area Array Support Workshops for the
MLPA North Coast Study Region
Draft Workshop Agenda**

Monday, January 11
6:30 – 8:30 p.m.

Fort Bragg
CV Starr Community Center*
300 S. Lincoln Street

Tuesday, January 12
6:30 – 8:30 p.m.

Eureka
Humboldt Bay Aquatic Center*
921 Waterfront Drive

Wednesday, January 13
6:30 – 8:30 p.m.

Crescent City
Hampton Inn and Suites*
100 A Street

Workshop Objective: MLPA Initiative staff will conduct a series of in-person workshops in the north coast that are designed to support community groups developing draft external marine protected (MPA) arrays.

Public Participation: Members of the public are invited to attend in person to observe the workshop.

Workshop Materials: Workshop materials will be posted to the MLPA website as soon as they are available. This agenda may be found at http://www.dfg.ca.gov/mlpa/meetings_nc.asp.

RSVP: Refreshments will be served for participants; please RSVP to Delbra Gibbs (916.424.8897 or dga_mlpa@sbcglobal.net). For more information about the workshops, please contact Darci Connor at 503.440.4737 or darciconnor@gmail.com.

Workshop Agenda – January 11-13, 2010

I. Welcome and Overview

- A. MLPA Initiative Staff to Provide a Welcome, Introduction, Updates, and Summary of How to Submit a Draft External MPA Array**

II. External Array Presentations

- B. Community Groups Will Have the Opportunity to Share Draft External MPA Array Ideas**

III. Question and Answer Session

- C. Community Groups will Have the Opportunity to Ask Any Outstanding Questions Related to Developing a Draft External MPA Array**

** This facility is accessible to persons with disabilities. To request reasonable accommodations for a disability, please contact California Relay Service (at least two days prior to the meeting) at 800.735.2929 (TTY) or 800.735.2922 (voice), or contact the California Marine Life Protection Act Initiative at 916.654.1885.*

Marine Life Protection Act Initiative



External Marine Protected Area Array Process Update and Guideline Review

North Coast External MPA Array Workshops
January 11-13, 2010 • Fort Bragg, Eureka. and Crescent City, California

Evan Fox, Principal Planner • California MLPA Initiative

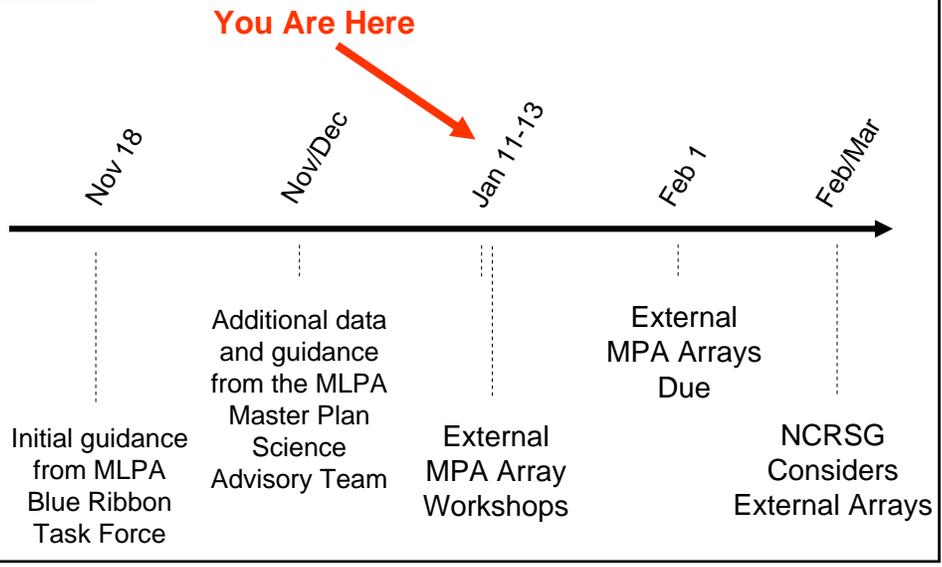
Iterative MPA Planning Process



- Round 1:** External Proposed MPA Arrays
Developed by Community Groups
- Round 2:** Draft MPA Proposals Developed by the
North Coast Regional Stakeholder
Group (NCRSG)
- Round 3:** Final MPA Proposals Developed by the
North Coast Regional Stakeholder
Group (NCRSG)



External MPA Array Timeline



Components of an External MPA Array

- One-page cover sheet (proposal name, contributors, contact information)
- One to two page narrative
- Information for each MPA within the proposal
 - Boundaries
 - Designation
 - Proposed allowed uses
 - Site-specific rationale
 - Design considerations and other information
- One page document outlining the proposed fate of existing MPAs



Available Resources

- Previous MLPA Blue Ribbon Task Force guidance
- Science and feasibility guidelines
- Draft north coast regional profile
- MarineMap and associated data layers
- Feedback from December MLPA Master Plan Science Advisory Team meeting



Reference Websites

- Guide to Developing External Arrays
<http://www.dfg.ca.gov/mlpa/guide.asp>
- MarineMap
<http://northcoast.marinemap.org/marinemap/>
- North Coast Meetings
http://www.dfg.ca.gov/mlpa/meetings_n.asp
- Draft Regional Profile
http://www.dfg.ca.gov/mlpa/regionalprofile_nc.asp



Key Updates

- Data Updates:
 - Ecotrust data (including seaweed harvesters data)
 - Substrate data (including reporting in some locations)
 - Coastal access points
- Levels of protection/allowed uses dropdown menus in MarineMap
- Sharing to both all external array authors and all MarineMap accounts available



MLPA Initiative Evaluations

- Science Advisory Team
 - Habitat representation and habitat replication
 - MPA size and MPA spacing
 - Bioeconomic modeling
 - Birds and mammals
 - Water quality
 - Potential impacts to fisheries
- California Department of Fish and Game feasibility evaluation
- California State Parks evaluation
- MLPA Blue Ribbon Task Force and the public will also review and provide feedback

Summary of guidelines: http://www.dfg.ca.gov/mlpa/pdfs/guide_summary.pdf



Some Guideline Highlights

- DFG Feasibility
 - Use straight lines based on landmarks and major latitude/longitude coordinates
 - Use simple regulations
 - Avoid complex arrangements
 - Avoid using distance from shore and depths for boundaries and avoid intertidal MPAs

*A more complete summary of guidelines can be found at
http://www.dfg.ca.gov/mlpa/pdfs/guide_summary.pdf*



Some Guideline Highlights

- Science
 - MPA size: 9 square mile minimum/18 square mile preferred
 - MPA spacing: 31-62 miles between protected habitats
 - MPAs should extend from intertidal to deeper waters
 - Levels of protection (see slide 11)
 - Key habitats and protected habitat size (see slide 12)

*A more complete summary of guidelines can be found at
http://www.dfg.ca.gov/mlpa/pdfs/guide_summary.pdf*

Levels of Protection

Level of Protection	MPA Types	Activities associated with this protection level
Very high	SMR	No take
High	SMCA SMP	Salmon (H&L or troll in waters >50m depth); coastal pelagic finfish ¹ (H&L);
Mod-high	SMCA SMP	Dungeness crab (trap, hoop-net, diving); salmon (troll in water <50m depth);
Moderate	SMCA SMP	smelts (H&L); redbait surfperch (H&L from shore); California halibut (H&L); coonstripe shrimp and spot prawn (trap); clams (intertidal hand harvest); turf algae ² (intertidal hand harvest);
Mod-low	SMCA SMP	Pacific halibut (H&L); lingcod, cabezon, and rockfishes, and greenlings (H&L, spearfishing); red abalone (free-diving);
Low	SMCA SMP	Rock scallop (diving); mussels (hand harvest); bull kelp (hand harvest); ghost shrimp (hand harvest); sea palm (intertidal hand harvest); canopy-forming algae ³ (intertidal hand harvest)

Key Habitat Thresholds

Habitat	Representation needed to encompass 90% of biodiversity
Rocky Intertidal	~0.55 linear miles
Shallow Rocky Reefs/Kelp Forests (0-30 M)	~1.1 linear miles
Deep Rocky Reefs (30-100 M)	~0.13 square miles
Deep Rocky Reefs (>100 M)	~0.13 square miles
Sandy Habitat from sandy beaches to sandy habitat >100 M (where >100 M is available).	10 square miles including at least 1.1 linear miles of sandy beach habitat
Estuarine Habitats	0.12 square miles (77 acres) ²

Note: these have not yet been approved by the MLPA Master Plan Science Advisory Team

SAMPLE HANDOUT FROM EXTERNAL ARRAY WORKSHOP

California MLPA Initiative North Coast Study Region

Summary of MLPA Guidelines and MPA Array Evaluation Approaches

Revised November 15, 2009

Summary of Guidelines for Creating Marine Protected Areas

These guidelines have been summarized from several documents provided to Marine Life Protection Act (MLPA) Initiative regional stakeholder group members in past study regions. Note that key guidelines most relevant to marine protected area (MPA) planning are summarized; these guidelines may be adjusted for the specific conditions and habitats in the MLPA North Coast Study Region as the process moves forward. This is not intended to be a detailed synthesis of the documents referenced; please refer to the original documents, which can be found online, for a more complete explanation of the guidance.

Please note: While many of these documents refer to "proposals," the information is still applicable and relevant to the development of "arrays".

Key MLPA Documents

- California Marine Life Protection Act (http://www.dfg.ca.gov/mlpa/mlpa_language.pdf)
- *California Marine Life Protection Act Master Plan for Marine Protected Areas* (January 2008 revised draft) (<http://www.dfg.ca.gov/mlpa/masterplan.asp>)
- *Draft Methods Used to Evaluate Marine Protected Area Proposals* (note that the MLPA Master Plan Science Advisory Team is currently considering methods for the north coast)
 - MLPA South Coast Study Region (October 6, 2009 draft):
http://www.dfg.ca.gov/mlpa/pdfs/agenda_102009b1.pdf
 - MLPA North Central Coast Study Region (January 17, 2008 draft):
http://www.dfg.ca.gov/mlpa/meeting_012308.asp#attachments
- Regional profile (the north coast regional profile is expected to be release in late November, 2009). A message will be sent to the MLPA listserv and a copy for review will be posted on the website.
 - MLPA North Central Coast Study Region: <http://www.dfg.ca.gov/mlpa/nccprofile.asp>
 - MLPA South Coast Study Region: http://www.dfg.ca.gov/mlpa/regionalprofile_sc.asp
- California Department of Fish and Game Feasibility Criteria and Evaluation Components for Marine Protected Area Proposals (staff memorandum revised November 12, 2008):
http://www.dfg.ca.gov/mlpa/pdfs/agenda_111808n.pdf
- California State Parks Guidelines for Creating Marine Managed Areas (staff memorandum revised November 18, 2008): http://www.dfg.ca.gov/mlpa/pdfs/agenda_012909b9.pdf

California Marine Life Protection Act Guidelines

- Use designations for MPAs as defined in the Marine Managed Areas Improvement Act (state marine reserve, state marine park, state marine conservation area):
<http://www.dfg.ca.gov/mlpa/pdfs/revisedmp0108b.pdf>
- Address MLPA goals within the statewide network of MPAs and have "specific identified objectives" for each MPA

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California MLPA Initiative South Coast Project
Summary of MLPA Guidelines and MPA Array Evaluation Approaches
Revised November 15, 2009

- Consider existing MPAs
- Replicate habitats within marine reserves in each biogeographic region, to the extent possible

Science Guidance from the Master Plan for MPAs (January 2008 draft) and Methods Used to Evaluate MPA Arrays and Proposals (May 4, 2009 draft)

- MPAs should extend from intertidal to offshore areas
- Minimum alongshore span should be 5-10 kilometers (3-6 miles or 2.5-5.4 nautical miles)
- Preferred alongshore span should be 10-20 kilometers (6-12.5 miles or 5.4-11 nautical miles)
- Given guidance for offshore extent and alongshore span, MPAs should be a minimum of 9 square statute miles, and preferably 18 square statute miles, to meet the ecological goals of the MLPA
- Maximum spacing between habitats is 50-100 kilometers (31-62 miles or 27-54 nautical miles)
- Replicate key marine habitats in multiple MPAs
- Include 3-5 MPAs for each habitat type in each biogeographic region (the MLPA North Coast Study Region is part of the biogeographic region that extends from Point Conception to the Oregon border) and at least 1 replicate of each key habitat in each bioregion (distinct regions within each biogeographic region, to be determined by the SAT for the north coast)

Previous Guidance from the MLPA Blue Ribbon Task Force

- Place great weight on MLPA Master Plan Science Advisory Team (SAT) evaluations
- Strong emphasis will be placed on MPAs that fall within the SAT preferred size and spacing range; MPA arrays should include MPAs with "very high" or "high" levels of protection; state marine reserves should be the "backbone" of any array; and may include MPAs with at least a "moderate-high" level of protection or greater.
- Cross-interest support for MPA arrays and cross-interest involvement in their development is important and will be given great weight.
- External MPA proponents should strive for convergence in geographies and regulations, where possible.
- Strong consideration should be given to California Department of Fish and Game (DFG) feasibility criteria. MPA arrays should provide specific rationale for any deviations from the recommendations in the feasibility analysis conducted by DFG.

California Department of Fish and Game Feasibility Criteria

- MPAs should be designed to be enforceable, readily understood by the public, and meet the goals of the MLPA
- MPA boundaries should be clear and simple
 - Use straight lines (due north/south or east/west)

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California MLPA Initiative South Coast Project
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Revised November 15, 2009

- Use easily recognizable, permanent landmarks, or use major lines of latitude/longitude
- MPA clusters oriented in an alongshore fashion (stacked north/south) are preferred compared to an inshore/offshore (east/west) orientation
- Whole minutes are preferred, then half minutes, then tenths of minutes
- Use simple regulations
- Consider accessibility
- Avoid unnecessarily complex arrangements of adjacent marine reserves, marine conservation areas and marine parks (e.g. no "doughnut zones" with different fishing regulations; no "L-shaped designs")
- Avoid depth contour boundaries
- Avoid "distance from shore" boundaries
- Avoid intertidal MPAs that do not have an offshore component
- MPA names should reflect the area designated

California Department of Parks and Recreation Guidelines

- Consider areas offshore of terrestrial state parks as to their appropriateness and suitability for MPAs
- Consider especially areas offshore of state parks when they provide opportunities for public visitation, help protect representative habitats and species, provide special protection for intertidal species and habitats, provide venues for marine interpretation and education, and facilitate law enforcement
- When designing MPAs offshore of terrestrial parks, consider the state park's general plan as well as existing public use patterns

Summary of MPA Array Evaluation Approaches

The SAT, DFG, California State Parks, and MLPA Initiative staff evaluate MPA arrays for the study region relative to the identified guidelines. Evaluations include:

- **MPA size, MPA spacing, habitat replication and habitat representation:** The SAT evaluates MPA arrays in relation to goals 1, 2, 4 and 6 of the MLPA and the science guidelines in the master plan for MPAs. For this analysis, each MPA is assigned a level of protection based on allowed activities within the MPA, which are also considered in other analyses. Levels of protection include low, moderate-low, moderate, moderate-high, high and very high.
- **Bioeconomic modeling:** The SAT uses spatially-explicit bioeconomic models to assess MPA arrays in relation to goals 2 and 6 of the MLPA related to the effects on populations of marine species and connectivity between MPAs. This analysis calculates the biomass of populations of a suite of fished species within proposed MPAs and how the proposed MPAs will affect fishery yield and profit.

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- **Marine birds and mammals:** The SAT evaluates MPA arrays based on the protection of breeding, foraging, resting and rearing areas of marine birds and mammals.
- **Socioeconomic impacts:** The SAT, through a contractor, evaluates maximum potential negative impact of MPA arrays to commercial and recreational fisheries.
- **Water quality analysis:** Considered secondary to other SAT evaluations, the SAT evaluates water and sediment quality concerns within proposed MPAs.
- **MLPA Goal 3 analysis:** MLPA Initiative staff evaluates MPA arrays based on access to recreational, educational and study opportunities.
- **DFG feasibility analysis:** DFG conducts an analysis of MPAs relative to department-identified feasibility criteria; it provides guidance on MPA design to help ensure MPA boundaries and regulations are readily enforceable and understood by the public. DFG also evaluates the likelihood of MPAs to meet the goals of the MLPA.
- **State Parks evaluation:** State Parks conducts an evaluation of how different MPA arrays address the State Parks MPA design guidelines.
- **Staff evaluations:** Staff provides basic information and statistics for MPA arrays, including breakdowns by MPA designations, level of protection, and individual MPAs.

Key Resources

MLPA website: www.dfg.ca.gov/mlpa/northcoast.asp

Informational workshop presentations: www.dfg.ca.gov/mlpa/meeting_092909.asp

- Introduction to the MLPA and MLPA Initiative
- Science guidelines
- DFG guidelines
- Introduction to MarineMap
- To view an archived webcast of this workshop, visit <http://www.cal-span.org/cgi-bin/media.pl?folder=MLPA-NCRS>

MarineMap: <http://northcoast.marinemap.org/marinemap>

- MarineMap is an online mapping tool that allows you to view data layers, design MPAs (and MPA arrays), share ideas, and submit draft MPA arrays for consideration. You should know how to:
 - Log on
 - View data layers (turn data layers on and off)
 - View existing MPAs
 - Zoom in and zoom out
 - Draw an MPA
 - Assign MPA attribute information
 - Design an MPA array
 - Submit the array to staff for consideration

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- Send an email to help@marinemap.org to set up a MarineMap account
- View MarineMap for past study regions: <http://marinemap.org/marinemap>

MPA arrays and proposals developed in previous study regions:

- Central coast: http://www.dfg.ca.gov/mlpa/centralcoast_mpa.asp
- North central coast: <http://www.dfg.ca.gov/mlpa/nccrsg-proposals0308.asp>
- South coast: <http://www.dfg.ca.gov/mlpa/scrsg-dprops-r3.asp>

Example evaluations from the MLPA South Coast Study Region: <http://www.dfg.ca.gov/mlpa/scrsg-r3-evaluations.asp>

MLPA North Coast Regional Stakeholder Group (NCRSG) nomination form:
<http://www.dfg.ca.gov/mlpa/ncproject.asp>

Become familiar with commonly used terms and acronyms: <http://www.dfg.ca.gov/mlpa/defs.asp>