California MLPA North Coast Study Region
Summary of MLPA Guidance, Guidelines and Evaluation Approaches
Revised March 11, 2010

Summary of Guidelines for Creating Marine Protected Areas

The key guidance and guidelines most relevant to marine protected area (MPA) planning are summarized in this document. The information comes from several documents, as well as guidance and guidelines provided by the MLPA Blue Ribbon Task Force (BRTF), MLPA Master Plan Science Advisory Team (SAT), California Department of Fish and Game (DFG), California Department of Parks and Recreation (State Parks), MLPA Initiative staff, and California Fish and Game Commission to the MLPA North Coast Regional Stakeholder Group (NCRSG). The NCRSG should draw on this guidance to develop MPA proposals. This is not intended to be a detailed synthesis of the documents referenced below; please refer to the original documents for a more complete explanation of the guidance.

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

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 the six MLPA goals within the statewide network of MPAs and have "specific identified objectives" for each MPA
- Consider existing MPAs (http://www.dfg.ca.gov/mlpa/pdfs/northcoastproposals/proposal0.pdf)
- Replicate habitats within marine reserves in each biogeographic region, to the extent possible

Science Guidance from the California Master Plan for MPAs (January 2008 draft) and Methods Used to Evaluate MPA Arrays and Proposals (March 16, 2010 draft)

- MPAs should extend from intertidal to offshore areas
- Minimum alongshore span should be 5-10 kilometers (3-6 statute miles or 2.5-5.4 nautical miles)
- Preferred alongshore span should be 10-20 kilometers (6-12.5 statute miles or 5.4-11 nautical miles)
- Given guidance for offshore extent and alongshore span, MPAs should be a minimum of 9 to 18 square statute miles, and preferably 18 to 36 square statute miles, to meet the ecological goals of the MLPA
- Maximum spacing between habitats is 50-100 kilometers (31-62 statute 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)

Policy Guidance from the MLPA Blue Ribbon Task Force

- Place great weight on the results of the SAT evaluations of MPA arrays and proposals
- Place strong emphasis on MPAs that meet the science guidelines for preferred size and spacing range; MPA arrays and proposals should include a "backbone" of MPAs with "very high" or "high" levels of protection.
- Cross-interest support for MPA arrays and proposals and cross-interest involvement in their development is important and will be given great weight; strive for convergence where possible.
- Give strong consideration to DFG feasibility criteria. MPA arrays and proposals should provide specific justifications for deviations from the recommendations in the feasibility guidelines provided by DFG.
- Utilize the best readily available science and information as directed by the MLPA.

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)
    - 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, half minutes less desirable, and tenths of minutes least preferred
    - Offshore corners should be at 90° angles and follow the readily determined lines of latitude and longitude guidelines described above.
- Use simple regulations
- Consider accessibility
- Avoid unnecessarily complex arrangements of adjacent state marine reserves, state marine conservation areas and state 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
- Goals and regional objectives should correspond with the MPA design and allowed take for that MPA.
- Site-specific rationale should be clear, concise and reflect the intent of the MPA.

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 and Proposal Evaluation Approaches

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

- ***Habitat representation, habitat replication, MPA size and MPA spacing:*** 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: very high, high, moderate-high, moderate, moderate-low and low. In addition, there are two distinct bioregions that characterize the MLPA North Coast Study Region, which are: the north bioregion (extends north from the mouth of the Mattole River to the Oregon border) and the south bioregion (extends south from the mouth of the Mattole River to Alder Creek in Mendocino County). Bioregions are taken into consideration as part of the habitat replication evaluation. Arrays should include at least 1 replicate of each key habitat in each bioregion.
- ***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 of those species 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 under varying management scenarios.
- ***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 and proportion of the marine bird and mammal populations being protected in those areas.
- ***Socioeconomic impacts:*** The SAT, through a contractor, evaluates maximum potential negative impact of MPA arrays to commercial and recreational fisheries (including commercial passenger fishing vessels).
- ***Water quality analysis:*** Considered secondary to other SAT evaluations, the SAT evaluates water and sediment quality concerns within proposed MPAs, as well as collocation with areas that are managed to improve water quality.
- ***MLPA Goal 3 analysis:*** MLPA Initiative staff provides guidance on MPA proposals 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 and proposals address the State Parks MPA design guidelines.
- ***Staff evaluations:*** Staff provides basic information and statistics for MPA arrays and proposals, including summaries by MPA designations and level of protection, and individual MPA statistics.

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 SAT Evaluation Methods Used to Evaluation Marine Protected Area Proposals for the MLPA North Coast Study Region* (March 16, 2010 draft): http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentVersionID=31524
- California Department of Fish and Game Feasibility Criteria and Evaluation Components for Marine Protected Area Proposals
- California State Parks Guidelines for Creating Marine Managed Areas

Other Key Resources and Informational Sources

- MLPA website: www.dfg.ca.gov/mlpa/northcoast.asp
- Regional Profile of the North Coast Study Region (revised February 19, 2010): http://www.dfg.ca.gov/mlpa/ncprofile.asp
- MarineMap and the GIS data layers available on that mapping tool: http://northcoast.marinemap.org/
- For help with MarineMap, send an e-mail to: help@marinemap.org
- View north coast MPA arrays and proposals and associated evaluations: http://www.dfg.ca.gov/mlpa/mpaproposals_nc.asp
- Informational presentations given as part of the joint fact-finding process
- www.dfg.ca.gov/mlpa/meeting_092909.asp
- SAT responses to science questions raised during NCRSG meetings
- NCRSG members' local knowledge
- Public input, including ideas shared by north coast community groups
- Commonly used terms and acronyms: http://www.dfg.ca.gov/mlpa/defs.asp