

California MLPA South Coast Project
Revised Draft Regional Goals and Objectives and Design and
Implementation Considerations for Review and Potential Adoption by the
MLPA South Coast Regional Stakeholder Group
Revised December 30, 2008

Note: The text below reflects revisions included in the synthesis document provided for MLPA South Coast Regional Stakeholder Group review and discussion at its January 2009 meeting.

Introduction

The members of the South Coast Regional Stakeholder Group (SCRSG) agree that regional goals, objectives, and design and implementation considerations are all very important in the development of an effective system of marine protected areas (MPAs) that have stakeholder support and meet the Marine Life Protection Act (MLPA) goals. MLPA goals are broad statements of what the regional MPAs are ultimately trying to achieve (Pomeroy et al. 2004)¹ and are provided in the MLPA. Regional objectives are more specific measurable statements of what MPAs may accomplish to attain a related goal (Pomeroy et al. 2004). The SCRSG recognizes that MPAs are one among a suite of tools to manage marine resources.

Design considerations are additional factors that may help fulfill provisions of the MLPA related to facilitating enforcement, encouraging public involvement, and incorporating socio-economic considerations, while meeting the MLPA's goals and guidelines. Design considerations will be applied as the location, classification (reserve, park or conservation area), size and other characteristics of potential MPAs are being developed. Design considerations are cross-cutting (they apply to all MPAs) and are not necessarily measurable. MPA alternatives developed by the SCRSG should include analysis of how the proposal addresses the MLPA goals and regional objectives and design and implementation considerations.²

¹ Pomeroy R.S., J.E. Parks, and L.M. Watson. 2004. How is your MPA doing? A Guidebook of Natural and Social Indicators for Evaluating Marine Protected Area Management Effectiveness. IUCN, Gland, Switzerland and Cambridge, UK. xvi + 216 p. (Accessed 17 January 2004).
<http://effectivempa.noaa.gov/guidebook/guidebook.html>.

² John Kirlin Memo, August 22, 2005.

Regional Goals and Objectives

The marine protected area (MPA) design process begins with setting regional goals and objectives that are consistent with the MLPA, then identifying site-specific rationales for individual MPAs. Once set, regional goals and objectives influence crucial decisions regarding MPA size, location and boundaries, as well as management measures and the focus of monitoring and evaluation programs.

Goal 1. To protect the natural diversity and abundance³ of marine life, and the structure, function, and integrity of marine ecosystems.

1. Protect and maintain species diversity and abundance consistent with natural fluctuations, including areas of high native species diversity and representative habitats.
2. Protect areas with diverse habitat types in close proximity to each other.
3. Protect natural size and age structure and genetic diversity of populations in representative habitats.
4. Protect biodiversity, natural trophic structure and food webs in representative habitats.
5. Promote recovery of natural communities from disturbances, both natural and human induced.

Goal 2. To help sustain, conserve, and protect marine life populations, including those of economic value, and rebuild those that are depleted.

1. Help protect or rebuild populations of rare, threatened, endangered, depressed, depleted, or overfished species, and the habitats and ecosystem functions upon which they rely.⁴
2. Sustain or increase reproduction by species likely to benefit from MPAs and promote retention of large, mature individuals⁵.

³ *Natural diversity* is the species richness of a community or area when protected from, or not subjected to, human-induced change (drawn from Allaby 1998 and Kelleher 1992). *Natural abundance* is the total number of individuals in a population protected from, or not subjected to, human-induced change (adapted from Department 2004 and Kelleher 1992).

⁴ The terms "rare," "threatened," "endangered," "depressed," "depleted," and "overfished" referenced here are designations in state and federal legislation, regulations, and fishery management plans (FMPs) - e.g., California Fish and Game Code, Marine Mammal Protection Act, Magnuson Stevens Fishery Conservation and Management Act (MSA), California Nearshore FMP, Federal Groundfish FMP). Rare, *endangered*, and *threatened* are designations under the California Endangered Species Act. *Depleted* is a designation under the federal Marine Mammal Protection Act. *Depressed* means the condition of a marine fishery that exhibits declining fish population abundance levels below those consistent with maximum sustainable yield (California Fish and Game Code, Section 90.7). *Overfished* means a population that does not produce maximum sustainable yield on a continuing basis (MSA) and in the California Nearshore FMP and federal Groundfish FMP also means a population that falls below the threshold of 30% or 25%, successively, of the estimated unfished biomass

3. Sustain or increase reproduction by species likely to benefit from MPAs through protection of breeding, spawning, foraging, rearing or nursery areas or other areas where species congregate.
4. Protect selected species and the habitats on which they depend while allowing the commercial and/or recreational harvest of migratory, highly mobile, or other species.

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.

1. Sustain or enhance cultural, recreational, and educational experiences and uses (for example, by improving catch rates, maintaining high scenic value, lowering congestion, increasing size or abundance of species, and protection of submerged sites).
2. Provide opportunities for scientifically valid studies, including studies on MPA effectiveness and other research that benefits from areas with minimal or restricted human disturbance.
3. Provide opportunities for collaborative scientific monitoring and research projects that evaluate MPAs that promote adaptive management and link with fisheries management, seabird and mammals information needs, classroom science curricula, cooperative fisheries research and volunteer efforts, and identifies participants.

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.

1. Include within MPAs key and unique habitats identified by the MLPA Master Plan Science Advisory Team for this study region.
2. Include and replicate to the extent possible [practicable], representatives of all marine habitats identified in the MLPA or the *California Marine Life Protection Act Master Plan for Marine Protected Areas* across a range of depths.

Goal 5. To ensure that north central California's MPAs have clearly defined objectives, effective management measures, and adequate enforcement, and are based on sound scientific guidelines.

1. Minimize negative socio-economic impacts and optimize positive socio-economic impacts for all users including coastal dependent entities, communities and interests, to the extent possible, and if consistent with the Marine Life Protection Act and its goals and guidelines.

⁵ An increase in lifetime egg production will be an important quantitative measure of an improvement of reproduction.

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2. Provide opportunities for interested parties to help develop objectives, a long-term monitoring plan that includes standardized biological and socioeconomic monitoring protocols, a long-term education and outreach plan, and a strategy for MPA evaluation.
3. Effectively use scientific guidelines in the *California Marine Life Protection Act Master Plan for Marine Protected Areas*.
4. Ensure public understanding of MPA boundaries and regulations.
5. Include simple, clear, and focused site-specific objectives/rationales for each MPA and ensure that site-level rationales for each MPA are linked to one or more regional objectives.

Goal 6. To ensure that the north central coast's MPAs are designed and managed, to the extent possible, as a component of a statewide network.

1. Provide opportunities to promote a process that informs adaptive management and includes stakeholder involvement for regional review and evaluation of management effectiveness to determine if regional MPAs are an effective component of a statewide network.
2. Provide opportunities to coordinate with future MLPA regional stakeholder groups in other regions to ensure that the statewide MPA network meets the goals of the MLPA.
3. Ensure ecological connectivity within and between regional components of the statewide network.

Regional Design and Implementation Considerations

Design Considerations

The SCRSG recognizes several issues that should be considered in the design and evaluation of MPAs. Like the “Considerations in the Design of MPAs” that appears in the *California MLPA Master Plan for Marine Protected Areas*, these considerations may apply to all MPAs and MPA proposals regardless of the specific regional goals and objectives for that MPA and may contribute to the site-level rationales for individual MPA design and placement.

The design considerations will be incorporated with the goals and objectives and transmitted to the MLPA Blue Ribbon Task Force for adoption and then to the California Fish and Game Commission as part of the suite of recommendations for the study region. Design considerations with long-term monitoring components will be used in developing monitoring plans and to inform the adaptive management process. Design considerations include:

1. In evaluating the siting of MPAs, considerations shall include the needs and interests of all users.
2. When designing or modifying MPAs, consider leveraging relevant portions of existing management activities and area-based restrictions, including state and federal fishery management areas and regulations (such as Rockfish Conservation Areas and trawl fishery closures, or other restricted access zones).
3. Site MPAs to prevent fishing effort shifts that would result in serial depletion.
4. When crafting MPA proposals, include considerations for design found in state fishery management plans such as the Nearshore Fishery Management Plan⁶ and the Abalone Recovery and Management Plan.⁷

⁶Design considerations from the Nearshore Fishery Management Plan:

1. Restrict take in any MPA [intended to meet the NFMP goals] so that the directed fishing or significant bycatch of the 19 NFMP species is prohibited.
2. Include some areas that have been productive fishing grounds for the 19 NFMP species in the past but are no longer heavily used by the fishery.
3. Include some areas known to enhance distribution or retain larvae of NFMP species
4. Consist of an area large enough to address biological characteristics such as movement patterns and home range. There is an expectation that some portion of NFMP stocks will spend the majority of their life cycle within the boundaries of the MPA.
5. Consist of areas that replicate various habitat types within each region including areas that exhibit representative productivity.

⁷Design considerations from the Abalone Recovery and Management Plan:

Proposed MPA sites should satisfy at least four of the following criteria.

1. Include within MPAs suitable rocky habitat containing abundant kelp and/or foliose algae
2. Insure presence of sufficient populations to facilitate reproduction.
3. Include within MPAs suitable nursery areas, in particular crustose coralline rock habitats in shallow waters that include microhabitats of moveable rock, rock crevices, urchin spine canopy, and kelp holdfasts.
4. Include within MPAs the protected lee of major headlands that may act as collection points for water and larvae.
5. Include MPAs large enough to include large numbers of abalone and for research regarding population dynamics.
6. Include MPAs that are accessible to researchers, enforcement personnel, and others with a legitimate interest in resource protection.

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5. In developing MPA proposals, consider how existing state, local and federal programs address the goals and objectives of the MLPA and the south coast region as well as how these proposals may coordinate with other programs.
6. Site MPAs adjacent to terrestrial federal, state, county, or city parks, marine laboratories, or other "eyes on the water" to facilitate management, enforcement, monitoring, education and outreach.
7. Site MPAs to facilitate use of volunteers to assist in monitoring and management.
8. Site MPAs to take advantage of existing long-term monitoring studies.
9. Design MPA boundaries that facilitate ease of public recognition and ease of enforcement.
10. Consider existing public coastal access points when designing MPAs.
11. MPA design should consider the benefits and drawbacks of siting MPAs near to or remote from public access.
12. Consider the potential impacts of climate change, community alteration, and distributional shifts in marine species when designing MPAs.
13. Preserve the diversity of recreational, educational, commercial, and cultural uses.
14. Optimize the design of the MPA network to facilitate monitoring and research that answers resource management questions; an example is including MPAs of different protection levels in similar habitats and depths, adjacent or in otherwise comparable locations, to state marine reserves, to evaluate the effectiveness of different protection levels in meeting regional and statewide goals.
15. Ensure some MPAs are close to population centers, coastal access points, and/or research and education institutions and include areas of educational, recreational, and cultural use.

Implementation Considerations

Implementation considerations arise after the design of MPAs, when the California Department of Fish and Game and any other responsible agencies implement decisions of the California Fish and Game Commission and, if appropriate, the California Park and Recreation Commission, with funding from the Legislature or other sources.

The implementation considerations will be incorporated with the regional goals and objectives and design considerations and transmitted to the MLPA Blue Ribbon Task Force for adoption and, then to the California Fish and Game Commission as part of the suite of recommendations for the study region. The MLPA South Coast Regional Stakeholder Group recommends the following implementation and management activities, as appropriate, also be included in the Regional MPA Management Plans required under the Master Plan for MPAS (section 4.0) for designated MPAs.

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1. Improve public outreach related to MPAs through the use of docents, improved signage, and production of an educational brochure for south coast MPAs.
2. When appropriate, phase the implementation of south coast MPAs to ensure their effective management, monitoring, and enforcement.
3. Ensure adequate funding for monitoring, management, outreach and enforcement is available for implementing new MPAs.
4. Develop coordinated regional management and enforcement plans in coordination with state, local, and federal entities, including cooperative enforcement agreements, adaptive management, and jurisdictional maps, which can be effectively used, adopted statewide, and periodically reviewed.
5. Incorporate volunteer monitoring and/or cooperative research, where appropriate.