California Marine Life Protection Act Initiative
MLPA Goals and Regional Objectives Adopted for the North Central Coast Study Region with Draft Proposed Revisions for the South Coast Study Region

November 14, 2008 draft revisions proposed by MLPA staff

Note to MLPA South Coast Regional Stakeholder Group Members

This document contains Marine Life Protection Act (MLPA) goals and regional objectives adopted for the MLPA North Central Coast Study Region, embedded with comments and suggested revisions made by MLPA staff. The comments and suggestions are provided to strengthen the regional objectives for the south coast planning process and to make the objectives more region-specific. The MLPA South Coast Regional Stakeholder Group may use this document as a starting point to discuss and ultimately adopt goals and regional objectives for the MLPA South Coast Study Region.

Introduction

The members of the South Coast Regional Stakeholder Group (SCRSG) agree that regional objectives, design, and implementation considerations are all very important in the development of an effective network 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, c<u>lassification</u>~~ategory~~ (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 guidelines [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.

MLPA Goals and Regional Objectives

Goal 1. To protect the natural diversity and abundance[3] of marine life, and the structure, function, and integrity of marine ecosystems.

1. Protect ~~species diversity and abundance consistent with natural fluctuations by including and maintaining~~ areas of high native species diversity and representative habitats.
2. Include 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 natural trophic structure and food webs in representative habitats.
5. ~~Protect ecosystem structure, function, integrity and ecological processes to facilitate~~Increase 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, where identified, and the habitats and ecosystem functions upon which they rely[4].
2. Sustain or increase reproduction by species most likely to benefit from MPAs ~~through retention of large, mature individuals~~[5].
3. ~~Sustain or increase reproduction by species most likely to benefit from MPAs through protection of breeding, foraging, rearing or nursery areas~~.

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[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, e*ndangered,* 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

[5] This goal can be achieved by retaining large, mature individuals; ~~A~~an increase in lifetime egg production would~~ill~~ be an important quantitative measure of an improvement of reproduction. This objective could also be achieved by protecting breeding, foraging, rearing or nursery areas

4. POSSIBLE NEW OBJECTIVE: *Protect areas that are critical or essential to particular life history stages (such as breeding, rearing, nursery grounds, or other areas where species congregate).* [Comment: This could replace Objective 3]
5. 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 ~~where appropriate through the use of state marine conservation areas and state marine parks~~. [Comment: The second half identifies the specific way to achieve the objectives.]

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. 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.
2. Sustain or enhance cultural, recreational, and educational experiences ~~by improving catch rates, high scenic value, lower congestion, or increased size or abundance of species~~. [Comment: The second half identifies specific ways to achieve various objectives.]
3. ~~To e~~Enhance the likelihood of scientifically valid studies~~, replicate appropriate MPA designations, habitats or control areas (including areas open to fishing) to the extent possible~~. [Comment: The second half of the objective identifies how to achieve the goal; there are additional actions that can be taken to accomplish this objective.]
4. Develop collaborative scientific monitoring and research projects evaluating MPAs that link with fisheries management information needs, classroom science curricula, volunteer dive programs, and fishermen, and identify participants.

Goal 4. To protect marine natural heritage, including protection of representative and unique marine life habitats in [south coast] California waters, for their intrinsic value.

1. Include within MPAs the following habitat types: estuaries, the intertidal zone at the Farallon Islands, and subtidal waters (including the water column and benthic habitats) around the Farallon Islands. [Comment: The SAT will recommended unique habitats for the study region.]
2. Include and replicate to the extent possible [practicable], representatives of all marine habitats identified in the MLPA or the *California MLPA Master Plan for Marine Protected Areas* across a range of depths.

Goal 5. To ensure that California's [south coast] 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, to the extent possible, and if consistent with the Marine Life Protection Act and its goals and guidelines. [Comment: This is more of a design consideration. Perhaps this should be moved to the "Design Considerations" section.]
2. For all MPAs in the region involve interested parties to help develop objectives, a long-term monitoring plan that includes standardized biological and socioeconomic monitoring protocols, and a strategy for MPA evaluation, and ensure that each MPA objective is linked to one or more regional objectives. [Comment: This is more of an implementation consideration. Perhaps this should be moved to the "Implementation Considerations" section.]
3. To the extent possible, ~~effectively~~ use scientific guidelines in the *California MLPA Master Plan for Marine Protected Areas*.
4. POSSIBLE NEW OBJECTIVE: *Minimize unintentional infractions.*
5. POSSIBLE NEW OBJECTIVE: *Include simple, clear and focused site-specific objectives/rationale for each MPA.*

Goal 6. To ensure that the [south coast] MPAs are designed and managed, to the extent possible, as a network.

1. Develop a process to inform adaptive management that includes stakeholder involvement for regional review and evaluation of management effectiveness to determine if regional MPAs are an effective component of a statewide network. [Comment: This appears to be a request by stakeholders to be involved in the process after MLPA implementation. Perhaps this should be moved to the "Implementation Considerations" section.]
2. Develop a mechanism to coordinate with future MLPA regional stakeholder groups in other regions to ensure that the statewide MPA network meets the goals of the MLPA. [Comment: This appears to be a request by stakeholders to be involved in the process after MLPA implementation. Perhaps this should be moved to the "Implementation Considerations" section.]
3. POSSIBLE NEW OBJECTIVE: *Replicate representative marine habitats throughout the statewide system.*
4. POSSIBLE NEW OBJECTIVE: *Increase the persistence of important bottom-dwelling fish and invertebrate groups throughout the statewide system.*
5. POSSIBLE NEW OBJECTIVE: *Increase the ability of larvae from species likely to benefit from MPAs to be transported between MPAs.*

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 goals and objectives for that MPA. The design considerations below will be incorporated with the goals and objectives and provided to the MLPA Master Plan Science Advisory Team, MLPA Blue Ribbon Task Force, and California Fish and Game Commission. 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. Recognize relevant portions of existing state and federal fishery management areas and regulations, to the extent possible, when designing new MPAs or modifying existing ones.
3. To the extent possible, site MPAs to prevent fishing effort shifts that would result in serial depletion.
4. When crafting MPA proposals, include considerations for design found in the Nearshore Fishery Management Plan[6] and the draft Abalone Recovery and Management Plan.[7]

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[6] Design considerations from 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.

[7] Design considerations from 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.

5. In developing MPA proposals, consider how existing state 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. To the extent possible, site MPAs adjacent to terrestrial federal, state, county, or city parks, marine laboratories, or other "eyes on the water" to facilitate management, enforcement, and monitoring.
7. To the extent possible, site MPAs to facilitate use of volunteers to assist in monitoring and management.
8. To the extent possible, site MPAs to take advantage of existing long-term monitoring studies.
9. To the extent possible, 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. To the extent possible, preserve the diversity of recreational, educational, commercial, and cultural uses.
14. To the extent possible, 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. *Minimize negative socio-economic impacts and optimize positive socio-economic impacts for all users, to the extent possible, and if consistent with the Marine Life Protection Act and its goals and guidelines.*

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.

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, and enforcement is available for implementing new MPAs.
4. Develop regional management and enforcement measures, 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.
6. *For all MPAs in the region involve interested parties to help develop objectives, a long-term monitoring plan that includes standardized biological and socioeconomic monitoring protocols, and a strategy for MPA evaluation, and ensure that each MPA objective is linked to one or more regional objectives.*
7. *Develop a process to inform adaptive management that includes stakeholder involvement for regional review and evaluation of management effectiveness to determine if regional MPAs are an effective component of a statewide network.*
8. *Develop a mechanism to coordinate with future MLPA regional stakeholder groups in other regions to ensure that the statewide MPA network meets the goals of the MLPA.*