

California MLPA North Coast Project
Draft Goals, Regional Objectives, Stakeholder Priorities, and
Design and Implementation Considerations for the
MLPA North Coast Study Region
March 24, 2010 Draft

Introduction

The members of the MLPA North Coast Regional Stakeholder Group (NCRSG) have committed to fulfilling their charge, which includes developing “alternative proposals for marine protected areas within the north coast study region that meet the requirements [and goals] of the MLPA”.¹ This document provides the Marine Life Protection Act (MLPA) goals along with regional objectives to help fulfill those goals within the north coast study region. Regional objectives, stakeholder priorities, and design and implementation considerations are all very important in developing an effective system of marine protected areas (MPAs) that has cross interest stakeholder support and meets the goals of the MLPA.²

Goals are statements of what the regional MPAs are ultimately to achieve (Pomeroy et al. 2004)³. The north coast goals are taken verbatim from the MLPA itself. Regional objectives are more specific statements of what MPAs may accomplish to attain a related goal (Pomeroy et al. 2004); regional objectives should reflect the related goal.

In addition to north coast MLPA goals and regional objectives, this document outlines three other categories of factors that need to be considered in the design and implementation of north coast MPAs: regional stakeholder priorities, design considerations, and implementation considerations.

Stakeholder Priorities and Objectives

Stakeholder priorities and objectives are a set of key social and/or local values and priorities that stakeholders desire to incorporate into MPA design in the north coast, but that do not necessarily and specifically contribute to meeting the six goals of the MLPA. This category of objectives is a new addition to the MLPA planning process. However, the concepts are not new - in previous study regions, regional stakeholder group members built these strongly-valued local priorities directly into regional objectives. Examples include minimizing socioeconomic impact to the region and individual harbors, stronger consideration of water quality, and consideration of submerged sites. While the objectives on their own were valid reflections of stakeholder purpose, they were inappropriately ascribed to MLPA goals. For the north coast planning process, a category that reflects these local stakeholder objectives is included to supplement the goals and regional objectives. Stakeholder priorities and objectives may not supersede meeting the MLPA goals and regional objectives, but may work congruently with them to ensure regional concerns are addressed while meeting the MLPA goals.

¹ California Marine Life Protection Act Initiative Charter of the North Coast Regional Stakeholder Group, February 1, 2010.

² The North Coast Regional Stakeholder Group should recognize that MPAs are one among a suite of tools for managing marine resources.

³ 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>.

Design Considerations

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 goals and guidelines. The design considerations are contemplated in the master plan for increasing the quality and effectiveness of MPA network design. Design considerations should be considered as the location, classification (reserve, park or conservation area), size, and other characteristics of potential MPAs are developed. Design considerations may apply to individual MPAs or the network as a whole and help inform the process for developing MPAs.

Implementation Considerations

Once implemented, a regional MPA network component will require effective management, strong public outreach, and a sound monitoring plan. Implementation considerations serve an important role in providing recommendations to the California Fish and Game Commission and to managing agencies to ensure the success of the newly established MPAs; implementation considerations are discussed in the master plan. Recommended implementation considerations should be based on local knowledge and have the regional MPA network component in mind.

NCRSG members will be asked to select at least one goal and regional objective from the list below for every proposed MPA. Specific stakeholder priorities and objectives that play a particular role in MPA design should be identified within written descriptions for the MPAs as described below. Additionally, specific design considerations and implementation considerations will not be selected by stakeholders for proposed MPAs in this fashion, though these factors should be considered in the MPA design and may be referenced in written descriptions for MPAs.

There are two places where NCRSG members can further describe, in their own words, key information about their proposed MPAs: "site-specific rationale" and "other design considerations". "Site-specific rationales" should be written by NCRSG members for every proposed MPA and should describe the primary purpose or intent of an MPA. The site-specific rationale is the key place for providing additional detail regarding the primary purpose or intent of the design and placement of an MPA, including unique features or qualities of the ecosystem or habitats. This site-specific rationale will be used in conjunction with identified goal(s), regional objective(s), and stakeholder priorities and objectives to understand the core thinking behind MPA design. "Other design considerations" may also be written by stakeholders for proposed MPAs, and may reference socioeconomic, feasibility, or other specific considerations that were taken into account. Key aspects of the design considerations and implementation considerations, described below, may be included as part of the "other design considerations" written by NCRSG members.

The draft goals and regional objectives, stakeholder priorities and objectives, and design and implementation considerations identified in the next section stem from several sources; they have been developed from the goals, regional objectives, and design and implementation considerations that were developed for previous MLPA Initiative study regions, and also customized for the north coast to incorporate lessons learned in implementing MPAs in the central and north central coast study regions.

The north coast goals and regional objectives, stakeholder priorities and objectives, and design and implementation considerations will be 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.

MLPA Goals and Regional Objectives

The MPA design process includes setting goals and regional objectives that are consistent with the MLPA, then identifying the intent for a particular site and identifying objectives and site-specific rationales for individual MPAs. Once set, goals and regional objectives influence crucial decisions regarding MPA size, location and boundaries, management measures, and inform monitoring and evaluation programs. Regional objectives should reflect the MLPA goals and be reasonably measurable and achievable.

Goal 1. To protect the natural diversity and abundance⁴ 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 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.⁵

⁴ *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).

⁵ 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,

2. Sustain or increase reproduction by species likely to benefit from MPAs and promote retention of large, mature individuals.
3. Sustain or increase reproduction by species likely to benefit from MPAs through protection of breeding, 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 where appropriate through the use of state marine conservation areas and state marine parks.

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 increasing size or abundance of species, maintaining high scenic value, lowering congestion, or improving catch rates, and protection of submerged cultural sites).
2. Provide opportunities for scientifically valid studies, including studies on MPA effectiveness and other research benefiting from areas with minimal or restricted human disturbance.
3. Provide opportunities for collaborative scientific monitoring and research projects that evaluate MPAs while promoting adaptive management and links with fisheries management, seabird and mammals information needs, classroom science curricula, cooperative fisheries research and volunteer efforts, and identify participants.

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

1. Include within MPAs key and unique habitats identified by the MLPA Master Plan Science Advisory Team for the north coast 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 MPAs have clearly defined objectives, effective management measures, and adequate enforcement, and are based on sound scientific guidelines.

Marine Mammal Protection Act, Magnuson Stevens Fishery Conservation and Management Act, 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.

1. Provide opportunities for interested parties to help develop objectives and ensure that each MPA is linked to one or more regional objectives.
2. To the extent possible, effectively use scientific guidelines in the *California MLPA Master Plan for Marine Protected Areas*.
3. Ensure public understanding of, compliance with, and stakeholder support for MPA boundaries and regulations.
4. Include simple, clear, and focused site-specific objectives/rationales for each MPA and ensure that site-specific rationales for each MPA reflect one or more goals and regional objectives.
5. 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.

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

1. Ensure ecological connectivity within and between regional components of the statewide network.
2. Provide for protection and connectivity of habitat for those species that utilize different habitats over their lifetime.

Stakeholder Priorities and Objectives

Stakeholder priorities and objectives are local priorities that should be considered in conjunction with the goals and regional objectives; these priorities and objectives reflect the interest of the NCRSG to create MPAs that best meet the needs of their communities, while meeting the goals of the MLPA. Stakeholder priorities and objectives should help guide the NCRSG during the development of MPAs and can assist agencies and organizations with managing and monitoring once MPAs are implemented on the north coast. Stakeholder priorities and objectives should act as one of the cornerstones to the MPA planning process, provided that the goals of the act are being met. For example, the first stakeholder priority and objective identified below is intended to ensure that MPAs are designed in a way that can meet the goals of the MLPA, while also minimizing socioeconomic impacts to local communities and user groups.

While regional objectives are specific to meeting the goals of the MLPA, stakeholder priorities and objectives may be used to gauge the effectiveness of the planning process in meeting the needs and desires of stakeholders. Stakeholder priorities and objectives should be considered in all MPAs developed while considering how to meet the goals of the MLPA through regional objectives; the NCRSG will be given the opportunity to choose which priorities best suit each MPA.

1. Minimize negative socio-economic impacts and optimize positive socio-economic effects for all users, to the extent possible, while maintaining consistency with the Marine Life Protection Act and its goals and guidelines. [Formerly Goal 5, Objective 1, NCCSR]
2. Preserve opportunities for traditional and customary collection of natural resources by tribes and tribal communities when contemplating siting of MPAs and allowed uses. [New for NCSR]
3. Consider the health and vitality of coastal communities, ports and harbors, when designing MPAs. [New for NCSR]
4. 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. [Formerly part of Design Considerations, NCCSR]
5. Preserve the diversity of recreational, educational, commercial, and cultural uses, to the extent possible. [Formerly part of Design Considerations, NCCSR]

Regional Design and Implementation Considerations

Design Considerations

There are other issues that should be considered in the design and evaluation of marine protected areas. Like the "Considerations in the Design of MPAs" that appears in the *California Marine Life Protection Act Master Plan for Marine Protected Areas*, these considerations may apply to all MPAs and MPA proposals regardless of the specific goals, objectives or stakeholder priorities and objectives for that MPA. Design considerations with long-term monitoring components will be used for informing the development of monitoring plans and to inform the adaptive management process. Finally, design considerations guide the overall development of the network and each MPA is not required to list which considerations are being applied at the MPA level.

The NCRSG should recognize that this list is not exclusive and that there may be other factors involved that will shape MPA design and siting. The NCRSG will have the opportunity to describe, in more detail, justifications for MPA design and siting during its work sessions and under the "other design considerations" field in MarineMap.

1. Consider the needs and interests of all users in evaluating the siting of MPAs.
2. To the extent possible, site MPAs in such a way as to prevent fishing effort shifts which could result in serial depletion.
3. When crafting MPA proposals, utilize to the extent appropriate MPA design considerations described in the Nearshore Fishery Management Plan⁶ and the draft Abalone Recovery and Management Plan.⁷

⁶Design considerations from Nearshore Fishery Management Plan:

4. In developing MPA proposals, consider how existing state and federal programs address the goals and objectives of the MLPA and the north coast region as well as how these proposals may coordinate with other programs.
5. To the extent possible, site MPAs to facilitate use of volunteers to assist in monitoring and management.
6. To the extent possible, design MPA boundaries that facilitate ease of public recognition and ease of enforcement.
7. Consider existing public coastal access points when designing MPAs.
8. MPA design should consider the benefits and drawbacks of siting MPAs that are either remote or near public access.
9. Consider the potential impacts of climate change, community alteration, and distributional shifts in marine species when designing MPAs.

Implementation Considerations

Implementation considerations are important factors to address as managing agencies implement the adopted network of MPAs. Implementation considerations and management activities, as appropriate, should be included in the regional MPA management plan required in the *California Marine Life Protection Act Master Plan for Marine Protected Areas* (section 4.0).

As with design considerations, the NCRSG will have the opportunity to describe, in more detail, implementation considerations during its work sessions and under the "other design considerations" field in MarineMap.

1. Provide opportunities for interested parties to help develop a long-term monitoring plan that includes standardized biological and socioeconomic monitoring protocols, and a strategy for MPA evaluation.

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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.

2. Develop a process to inform adaptive management which includes stakeholder involvement for regional review and evaluation of management effectiveness to determine if regional MPAs are an effective component of a statewide network.
3. Provide opportunities to coordinate with MLPA regional stakeholder groups in other regions to ensure that the statewide MPA network meets the goals of the act.
4. Improve public outreach related to MPAs through the use of docents, improved signage, and educational brochures for north coast MPAs.
5. When appropriate, phase the implementation of north coast MPAs to ensure their effective management, monitoring, and enforcement.
6. Ensure adequate funding for monitoring, management, and enforcement is available for implementing new MPAs.
7. 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.
8. Incorporate volunteer monitoring and/or cooperative research, where appropriate.