Design and Implementation Considerations

Introduction

The members of the Central Coast Regional Stakeholder Group (CCRSG) 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. Regional goals are statements of what the regional MPAs are ultimately trying to achieve (Pomeroy et al. 2004). The Regional goals are largely taken directly from the Marine Life Protection Act (MLPA) itself. Regional objectives are more specific measurable statements of what must be accomplished to attain a related goal (Pomeroy et al. 2004).

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 act’s goals and guidelines. Design considerations will be applied as the location, category (reserve, park or conservation area), size and other characteristics of potential MPAs are being developed (Kirlin Memo, 8/22/05). Design considerations are cross cutting (they apply to all MPAs) and are not necessarily measurable (Kirlin Memo, 8/22/05). MPA alternatives developed by the CCRSG should include analysis of how the proposal addresses both regional goals and objectives and design guidelines. (Kirlin Memo, 8/22/05).

Design Considerations

In developing regional goals and objectives for the central coast, the CCRSG identified several 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 Master Plan Framework, 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 provisional goals and objectives and provided to the Master Plan Science Advisory Team, the Blue Ribbon Task Force, and the 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.

1. In evaluating the siting of MPAs, considerations shall include the needs and interests of all users.

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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\(^2\) and the draft Abalone Recovery and Management Plan.\(^3\)

5. In developing MPA proposals, consider how existing state and federal programs address the goals and objectives of the MLPA and the central 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.

\(\text{Design considerations from Nearshore Fishery Management Plan:}\)

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.

\(\text{Design considerations from draft Abalone and Recovery and Management Plan:}\)

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.
9. To the extent possible, design MPA boundaries that facilitate ease of public recognition and ease of enforcement.

**Implementation Considerations**

Implementation considerations arise after the design of MPAs as 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 central coast MPAs.

2. When appropriate, phase the implementation of central 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. [In addition to approving this language, the BRTF also adopted three statements related to funding[^4]]

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.

**Provisional Regional Objectives**

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

1. Protect areas of high species diversity and maintain species diversity and abundance, consistent with natural fluctuations, of populations in 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.

[^4]: 1. The MLPA requires development of a plan of protected areas, while implementing the program of protected areas occurs as resources are available (Section 2855[a]).
2. The adopted MLPA Master Plan Framework includes a feasibility analysis of proposed MPAs contingent upon funds reasonably expected to be available during implementation (Activity 3.4).
3. A lack of funding for implementation does not preclude designing and adopting MPAs.
5. Protect ecosystem structure, function, integrity and ecological processes to facilitate 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, depleted, or overfished species, where identified, and the habitats and ecosystem functions upon which they rely.

2. Protect larval sources and enhance reproductive capacity of species most likely to benefit from MPAs through retention of large, mature individuals.

3. Protect selected species and the habitats on which they depend while allowing the 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. Ensure some MPAs are close to population centers and research and education institutions and include areas of traditional non-consumptive recreational use and are accessible for recreational, educational, and study opportunities.

2. To enhance the likelihood of scientifically valid studies, replicate appropriate MPA designations, habitats or control areas (including areas open to fishing) to the extent possible.

3. Develop collaborative scientific monitoring and research projects evaluating MPAs that link with classroom science curricula, volunteer dive programs, and fishermen of all ages, and identify participants.

4. Protect or enhance recreational experience by ensuring natural size and age structure of marine populations.

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

1. Include within MPAs the following habitat types: estuaries, heads of submarine canyons, and pinnacles.
2. Protect, and replicate to the extent possible, representatives of all marine habitats identified in the MLPA or the Master Plan Framework across a range of depths.

**Goal 5. To ensure that 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, to the extent possible, and if consistent with the Marine Life Protection Act and its goals and guidelines.

2. For all MPAs in the region, 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.

3. To the extent possible, effectively use scientific guidelines in the Master Plan Framework.

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

1. Develop a process for regional review and evaluation of implementation effectiveness that includes stakeholder involvement to determine if regional MPAs are an effective component of a statewide network.

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.