

**California Marine Life Protection Act Initiative:  
Proposed Outline of Information Required for Proposals  
for Alternative Networks of Marine Protected Areas**

The Marine Life Protection Act (MLPA) requires the development and evaluation of alternative network proposals for marine protected areas in the various regions of the state. There are several sources of guidance regarding the contents and evaluation of proposals for alternative networks:

- € The MLPA,
- € Discussions of the Master Plan Team established under the MLPA,
- € Criteria developed by the State Interagency Coordinating Committee for Marine Managed Areas pursuant to the Marine Managed Areas Improvement Act, and
- € Experience with establishing MPA networks in California and elsewhere.

Distillation of this guidance will assist in developing and evaluating MPA network proposals by identifying early in the process the required or desirable information, synthesis, analysis, and evaluation. The current limited capacity of state agencies to carry out all of these functions argues for encouraging the private sector to take on more of these activities. The more the information and analytical requirements of the MLPA are met by MPA network proposals from the private sector, the more likely it will be that responsible agencies can carry out due diligence review of these proposals.

The proposed outline of information required for proposals for alternative networks of MPAs is based on the guidance identified above. Whether prepared by a public agency or by a private organization, a proposal for a regional network of MPAs should aim at addressing most, if not all, of the requirements listed below.

The outline is organized in four sections:

- € A summary
- € The setting
- € The proposed alternative networks
- € Individual MPAs within the preferred network

## **Proposed Outline**

### **Summary**

- ∅ Objectives of network
- ∅ How the proposal addresses the requirements of the MLPA and other relevant law

### **The Setting**

- ∅ Description of region
  - Legal description of the boundaries of study area
    - § Rationale for boundaries
  - Species or groups of species likely to benefit from MPAs (FGC §2856[a]2[B]). (See list of species at <http://www.dfg.ca.gov/mrd/mlpa/species.html>).
    - § Distribution of these species in the region and beyond
    - § Status of these species in the region and beyond
  - Representative or unique marine ecosystems in the region (FGC §2853[b]1)
    - § Distribution of these ecosystems
    - § Status of these ecosystems (principally “function” and “integrity”)
  - Distribution of representative and unique habitats in the region generally, and specifically for species likely to benefit:
    - § Rocky reefs
    - § Intertidal zones
    - § Sandy or soft ocean bottoms,
    - § Submerged pinnacles,
    - § Kelp forests,
    - § Submarine canyons,
    - § Seagrass beds.
  - Distribution of oceanic features that may influence target species, including currents and upwelling zones (FGC §2856[a]2[B])
  - Current and anticipated distribution of human uses
    - § Aquatic
      - ∅ Commercial fishing
      - ∅ Recreational fishing
      - ∅ Diving
      - ∅ Etc
    - § Terrestrial
      - ∅ Discharges
      - ∅ Recreation
      - ∅ esthetics
      - ∅ other
  - Current management of human activities affecting target species, ecosystems, and habitats

The Proposed Network

- € Process used to develop the proposal
  - Participants and their roles
  - Sources of information
  
- € Gap analysis
  - Description of existing MPAs
  - Adequacy of existing management plans and funding
  - Target habitats and ecosystems entirely unrepresented or insufficiently protected
  - Target habitats and ecosystems insufficiently protected, without replicates in the region or with replicates too widely spaced.
  
- € Framework for regional network of MPAs
  
- € Regional goals and objectives for a network of MPAs
  - Relation of goals and objectives to the MLPA generally and to resource problems and opportunities in the region specifically
  
- € General description of preferred network (and alternatives)
  - Spacing of MPAs and overall regional level of protection
  - Proposed management measures
  - Proposed monitoring for evaluating the effectiveness of the site in achieving its goals
  - Proposed research programs,
  - Proposed education programs,
  - Enforcement needs and means of meeting those needs,
  - Funding requirements and sources,
  - Proposed mechanisms for coordinating existing regulatory and management authority,
  - Opportunities for cooperative state, federal, and local management,
  - Name of network.
  
- € Evaluation of the proposed network:
  - How does the network emphasize (*much of this is from the MPT*):
    - š areas where habitat quality does (or potentially can) support diverse and high-density populations,
    - š benthic habitats and non-pelagic species,
    - š hard bottom as opposed to soft bottom, because fishing activities within state waters have had the greatest impact on fishes associated with hard bottom, and because soft bottom habitat is interspersed within areas containing rocky habitat,
    - š habitats associated with those species that are officially designated as overfished, with threatened or endangered species, and productive habitats such as kelp forests and seagrass beds?
  - How does the network include
    - š unique habitats,
    - š a variety of ocean conditions such as upwelling centers, upwelling shadows, byas, estuaries, and exposed and semi-protected coastlines?
  - How does the network incorporate or expand upon existing MPAs that are considered to be effective?

- How does the network include a variety of sizes and types of MPAs that are dispersed in a network that does the following?
    - § Provide enough space within individual MPAs for the movement of juveniles and adults of many species.
    - § Achieve beneficial ratios of edge to area,
    - § Help to include a variety of habitats,
    - § Facilitate analysis of the effects of different-sized MPAs,
    - § Facilitate analysis of the effects of different types of MPAs,
    - § Provide a network of sources for larval dispersal that are interconnected,
    - § Enable the use of MPAs as reference sites to evaluate the effects of climate change and other factors on marine ecosystems, without the effects of fishing,
    - § Enable the use of MPAs as reference sites for fisheries management,
    - § Minimize the likelihood that catastrophic events will impact all replicate MPAs within a biogeographic region.
    - § If an MPA is less restrictive than a reserve, how do different uses and restrictions affect achieving the objectives immediately above?
  - How does the network use simple and easily recognizable boundaries to facilitate identification and enforcement of MPA regulations?
  - Where feasible, how does the network locate MPAs in areas where there is onsite presence to facilitate enforcement?
  - How does the network consider non-extractive uses, cultural resources, and existing fisheries and fishing regulations?
  - How does the network consider proximity to ports, safe anchorage sites, and points of access, to minimize negative impacts on people and increase benefits?
  - How does the network facilitate monitoring of MPA effectiveness by including well-studied sites, both in MPAs and unprotected areas?
  - How does the network consider positive and negative socioeconomic consequences?
- € What are the socio-economic impacts of the proposed networks?
- Current uses:
    - § What are the current uses of the site that are likely to be affected?
    - § What are the likely impacts of the site upon these uses?
  - Future uses:
    - § How are current uses expected to change in response to the site?
    - § What are the socio-economic impacts of these changes?
  - Costs and benefits:
    - § What uses are likely to benefit from the site, and how?
    - § What uses are likely to suffer from the site, and how?
- € What is the improved marine life reserve component of the preferred network? (FGC §2857[c])
- Which regional habitat types are represented in two or more marine reserves in this network?
    - § Do these reserves include these habitat types and communities across different depth ranges?
    - § Do these reserves include these habitat types and communities across different environmental conditions?
    - § Is each of these habitat types and communities represented in two or more reserves in this region?

- € Which species will benefit from the proposed network and how? (See list of species at <http://www.dfg.ca.gov/mrd/mlpa/species.html>.)
- € How does this network meet the goals and guidelines of the MLPA (FGC § 2853[b]), viz:
  - Protect the natural diversity and abundance of marine life, and the structure, function, and integrity of marine ecosystems;
  - Help sustain, conserve, and protect marine life populations, including those of economic value, and rebuild those that are depleted;
  - Improve recreational, educational, and study opportunities provided by marine ecosystems that are subject to minimal human disturbance, and to manage these uses in a manner consistent with protecting biodiversity;
  - Protect marine natural heritage, including protection of representative and unique marine life habitats in California waters for their intrinsic value;
  - Ensure that California's MPAs have clearly defined objectives, effective management measures, and adequate enforcement, and are based on sound scientific guidelines;
  - Ensure that the State's MPAs are designed and managed, to the extent possible, as a network.
- € Information necessary for fulfilling required CEQA analysis requirements of network alternatives.

Individual MPAs within the Preferred Network

- € What are the boundaries of this MPA?
- € What is the total area of the MPA?
- € What is the total shoreline length of the MPA?
- € Does this MPA expand upon an existing MPA?
- € What is the overall goal of this MPA?
- € What are the objectives that serve this goal?
- € What species, populations, habitats, or ecosystem functions are of most concern in this area?
  - What are the chief threats to these features?
    - š Which of these threats are amenable to management?
  - What restrictions are proposed that address these threats?
  - What additional restrictions or designations (e.g. water quality protection areas) would help address these threats?
- € Many of the general design issues identified for the regional network apply here as well.
- € What features does the site display among those identified for different types of MPAs by the State Interagency Coordinating Committee for Marine Managed Areas? (See Attachment A.)

**ATTACHMENT A**

**Excerpted from California State Interagency Coordinating Committee for MMAs  
CRITERIA FOR DESIGNATING MARINE MANAGED AREAS**

Pursuant to statute, these designation criteria have been developed by the State Interagency Coordinating Committee for Marine Managed Areas to assist individuals or groups in developing site proposals. While the criteria are based on language in California law, it is not required that a site meet all of the criteria listed for a specific classification. Because different MMAs will have different goals and purposes, some of the criteria listed overlap or are mutually exclusive. All the criteria are presented here to help applicants prepare appropriate documentation. Site proposals need only address those criteria that apply to the specific site and classification being proposed (see item #6 on the application form).

**I. STATE MARINE RESERVE**

**A. Biological Criteria**

1. The proposed site will protect or restore rare, threatened, or endangered native species or habitats.
2. The proposed site will protect outstanding, representative, or imperiled marine species, communities, habitats, or ecosystems.
3. The proposed site will protect populations of one or more fish species that have been declared “overfished” by the National Marine Fisheries Service. [see [www.nmfs.noaa.gov](http://www.nmfs.noaa.gov) for list]
4. The proposed site will protect populations of harvested species that are of concern to state or federal fishery managers.
5. One or more habitats within the proposed site is/are designated as essential fish habitat (EFH) by the National Marine Fisheries Service. [see [www.nmfs.noaa.gov](http://www.nmfs.noaa.gov) for list]
6. The proposed site will protect habitat, or biological communities, populations, species or gene pools that are under-represented or not replicated in the existing network of state marine managed areas.
7. The proposed site will protect connections between geographic areas and/or habitat types, including estuarine and marine, wetland and intertidal, intertidal and subtidal, and deep and shallow water.
8. The proposed site is biologically highly productive.
9. The proposed site contains multiple habitat types.
10. The proposed site has historically received relatively heavy fishing effort, it is likely that some populations of fished species are locally depleted, and populations of fished species are expected to rebound if protected.

**B. Socio-Economic Criteria**

1. The proposed site currently or potentially provides public access, consistent with resource protection goals.
2. The proposed site currently or potentially provides educational and interpretive activities for the public.
3. The proposed site has historically received relatively little fishing effort.
4. Designation of the proposed site is not likely to have a significant negative socio-economic impact on those who have traditionally used the area.
5. Designation of the proposed site is likely to have a positive socio-economic impact.
6. The proposed site is bordered by similar habitat in which spillover effects from protecting one or more species could benefit those fishing adjacent to the site.

**C. Management and Enforcement Criteria**

1. The proposed site overlaps or is adjacent to an existing protected or managed area, thus facilitating enforcement.
2. The proposed site is adjacent to a populated area in which public stewardship would facilitate enforcement.
3. The proposed site has boundaries that are practical and enforceable.
4. Designating this site would lessen the impact of human uses on sensitive populations of marine or estuarine organisms.
5. The proposed site has little or no direct access from land, or the access is controlled.
6. The proposed site has or will have funding sources and/or in-kind resources for enforcement.
7. The proposed site has or will have funding sources and/or in-kind resources for management activities.

**D. Evaluation and Research Criteria**

1. The proposed site will provide an opportunity for scientific research or monitoring in outstanding, representative, or imperiled marine habitats or ecosystems.
2. The proposed site has or will have funding for scientific research or monitoring.
3. The proposed site has been the site of previous scientific research or monitoring studies.
4. Seafloor habitat within the proposed site has been partially or totally mapped using side-scan sonar or equivalent technology.

## **II. STATE MARINE PARK**

### **A. Biological Criteria**

1. The proposed site will protect a spacious natural system.
2. The proposed site will protect outstanding, representative, or imperiled marine species, communities, habitats, or ecosystems.
3. The proposed site will afford some protection to populations of harvested species that are of concern to state or federal fishery managers.
4. One or more habitats within the proposed site are designated as essential fish habitat (EFH) by the National Marine Fisheries Service. [see [www.nmfs.noaa.gov](http://www.nmfs.noaa.gov) for list]
5. The proposed site will protect habitat, or biological communities, populations or species that are under-represented or not replicated in the existing network of state marine managed areas.
6. The proposed site will protect connections between geographic areas and/or habitat types, including estuarine and marine, wetland and intertidal, intertidal and subtidal, and deep and shallow water.
7. The proposed site is biologically highly productive.
8. The proposed site contains multiple habitat types.
9. The proposed site has historically received relatively heavy fishing effort, it is likely that some populations of fished species are locally depleted, and populations of fished species are expected to increase if protected.
10. The proposed site will protect populations of one or more fish species that have been declared "overfished" by the National Marine Fisheries Service. [see [www.nmfs.noaa.gov](http://www.nmfs.noaa.gov) for list]

### **B. Cultural Criteria**

1. The proposed site has cultural objects or sites of historical, archaeological or scientific interest.

### **C. Socio-Economic Criteria**

2. The proposed site currently or potentially provides public access, consistent with resource protection goals.
3. The proposed site currently or potentially provides educational and interpretive activities for the public.
4. The proposed site will provide sustainable recreational opportunities in the absence of conflicting uses.
5. The proposed site will provide recreational opportunities to meet other than purely local needs.
6. The proposed site has historically received relatively little fishing effort.



7. Designation of the proposed site is not likely to have a significant negative socio-economic impact on those who have traditionally used the area.
8. Designation of the proposed site is likely to have a positive socio-economic impact.
9. The proposed site is bordered by similar habitat in which spillover effects from protecting one or more species could benefit those fishing adjacent to the area.

**D. Geological Criteria**

1. The proposed site has outstanding or unique geological features that contribute to the biological productivity of the area.
2. The proposed site has geological features that are critical to the lifecycle of native marine or estuarine species.

**E. Management and Enforcement Criteria**

1. The proposed site overlaps or is adjacent to an existing protected or managed area, thus facilitating enforcement.
2. The proposed site is adjacent to a populated area in which public stewardship would facilitate enforcement.
3. The proposed site has boundaries that are practical and enforceable.
4. Designating this site would lessen the impact of human activities on sensitive populations of marine or estuarine organisms.
5. The proposed site has or will have funding sources and/or in-kind resources for enforcement.
6. The proposed site has or will have funding sources and/or in-kind resources for management activities.

**F. Evaluation and Research Criteria**

1. The proposed site will provide an opportunity for scientific research or monitoring in outstanding, representative, or imperiled marine habitats or ecosystems.
2. The proposed site has or will have funding for scientific research or monitoring.
3. The proposed site has been the site of previous scientific research or monitoring studies.
4. Seafloor habitat within the proposed site has been partially or totally mapped using side-scan sonar or equivalent technology.

**III. STATE MARINE CONSERVATION AREA**

**A. Biological Criteria**

1. The proposed site will protect or restore rare, threatened, or endangered native species or habitats.

2. The proposed site will protect outstanding, representative, or imperiled marine species, communities, habitats, or ecosystems.
3. The proposed site will protect populations of one or more fish species that have been declared “overfished” by the National Marine Fisheries Service. [see [www.nmfs.noaa.gov](http://www.nmfs.noaa.gov) for list]
4. The proposed site will protect populations of harvested species that are of concern to state or federal fishery managers.
5. One or more habitats within the proposed site are designated as essential fish habitat (EFH) by the National Marine Fisheries Service. [see [www.nmfs.noaa.gov](http://www.nmfs.noaa.gov) for list]
6. The proposed site will protect habitat, or biological communities, populations, species or gene pools that are under-represented or not replicated in the existing network of state marine managed areas.
7. The proposed site will protect connections between geographic areas and/or habitat types, including estuarine and marine, wetland and intertidal, intertidal and subtidal, and deep and shallow water.
8. The proposed site is biologically highly productive.
9. The proposed site contains multiple habitat types.
10. The proposed site has historically received relatively heavy fishing effort, it is likely that some populations of fished species are locally depleted, and populations of fished species are expected to rebound significantly if protected.

**B. Socio-Economic Criteria**

1. The proposed site currently or potentially provides public access, consistent with resource protection goals.
2. The proposed site currently or potentially provides educational and interpretive activities for the public.
3. The proposed site has historically received relatively little fishing effort.
4. Designation of the proposed site is not likely to have a significant negative socio-economic impact on those who have traditionally used the area.
5. Designation of the proposed site is likely to have a positive socio-economic impact.
6. The proposed site is bordered by similar habitat in which spillover effects from protecting one or more species could benefit those fishing adjacent to the area.

**C. Geological Criteria**

1. The proposed site has outstanding or unique geological features that contribute to the biological productivity of the area.
2. The proposed site has geological features that are critical to the lifecycle of native marine or estuarine species.

**D. Management and Enforcement Criteria**

1. The proposed site overlaps or is adjacent to an existing protected or managed area, thus facilitating enforcement.
2. The proposed site is adjacent to a populated area in which public stewardship would facilitate enforcement.
3. The proposed site has boundaries that are practical and enforceable.
4. Designating this site would lessen the impact of human activities on sensitive populations of marine or estuarine organisms.
5. The proposed site has living marine resources that if managed properly will allow for sustainable harvest.
6. The proposed site has or will have funding sources and/or in-kind resources for enforcement.
7. The proposed site has or will have funding sources and/or in-kind resources for management activities.

**E. Evaluation and Research Criteria**

1. The proposed site will provide an opportunity for scientific research or monitoring in outstanding, representative, or imperiled marine habitats or ecosystems.
2. The proposed site has or will have funding for scientific research or monitoring.
3. The proposed site has been the site of previous scientific research or monitoring studies.
4. Seafloor habitat within the proposed site has been partially or totally mapped using side-scan sonar or equivalent technology.